State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
2501 Golf Course Road
Ashland WI 54806

Tony Evers, Governor Preston D. Cole, Secretary

Telephone 608-266-2621 Toll Free 1-888-936-7463 TTY Access via relay - 711



April 8, 2020

MR MARK DARBY SUPERIOR REFINING COMPANY INC 2407 STINSON AVE SUPERIOR WI 54880

KEEP THIS DOCUMENT WITH YOUR PROPERTY RECORDS

SUBJECT: Final Case Closure with Continuing Obligations

Superior Refining – Nemadji Switch Station, 2407 Stinson Avenue, Superior, Wisconsin

DNR BRRTS Activity #02-16-585474

FID #816009590

Dear Mr. Darby:

The Department of Natural Resources (DNR) considers the Superior Refining - Nemadji Switch Station site closed, with continuing obligations. No further investigation or remediation is required at this time. However, you, future property owners and occupants must comply with the continuing obligations as explained in the conditions of closure in this letter. Please read over this letter closely to ensure that you comply with all conditions and other on-going requirements. Provide this letter to anyone who purchases, rents or leases this property from you.

This final closure decision is based on the correspondence and data provided and is issued under Wis. Admin. Code chs. NR 726 and 727. The DNR's Northern Region Closure Committee reviewed the request for closure on April 2, 2020. The Closure Committee reviewed this environmental remediation case for compliance with state laws and standards.

The investigative and remedial activities completed at this site were conducted for the discharge of hazardous substances, environmental pollution, or both (hereinafter referred to as contamination) at this site, which was historically undeveloped and used for storage and laydown activities. Case closure under Wis. Admin. Code chs. NR 726 and NR 727 is granted for the contaminants analyzed during the site investigation, as documented in the DNR case file. Petroleum contamination was found in soil on this site during constructions activities. Response included contaminated soil removal. The conditions of closure and continuing obligations required were based on the property being used for industrial purposes.

Continuing Obligations

The continuing obligations for this site are summarized below. Further details on actions required are found in the section <u>Closure Conditions.</u>

Residual soil contamination exists that must be properly managed should it be excavated or removed.

The attached DNR fact sheet "Continuing Obligations for Environmental Protection," RR-819, helps to explain a property owner's responsibility for continuing obligations on their property. The fact sheet may be obtained at http://dnr.wi.gov/files/PDF/pubs/rr/RR819.pdf.



DNR Database

This site will be included on the Bureau for Remediation and Redevelopment Tracking System (BRRTS) on the Web (BOTW) at dnr.wi.gov and search "WRRD", to provide public notice of residual contamination and of any continuing obligations. The site can also be viewed on the Remediation and Redevelopment Sites Map (RRSM), a map view, at dnr.wi.gov and search "RRSM".

The DNR's approval prior to well construction or reconstruction is required in accordance with Wis. Admin. Code § NR 812.09 (4) (w). This requirement applies to private drinking water wells and high capacity wells. To obtain approval, complete and submit Form 3300-254 to the DNR Drinking and Groundwater program's regional water supply specialist. This form can be obtained on-line at dnr.wi.gov and search "3300-254".

All site information is also on file at the DNR's Northern Region office, 107 Sutliff Avenue, Rhinelander, Wisconsin. This letter and information that was submitted with your closure request application, including any maps, can be found as a PDF on BOTW.

Closure Conditions

Compliance with the requirements of this letter is a responsibility to which the current property owner, and any subsequent property owners must adhere. DNR staff will conduct periodic prearranged inspections to ensure that the conditions included in this letter are met. If these requirements are not followed, the DNR may take enforcement action under Wisconsin Statutes § 292.11, to ensure compliance with the specified requirements, limitations or other conditions related to the property.

Please send written notifications in accordance with the following requirements to:

Department of Natural Resources Attn: Remediation and Redevelopment Program Environmental Program Associate 107 Sutliff Avenue Rhinelander, WI 54501

Residual Soil Contamination (Wis. Admin. Code ch. NR 718, chs. NR 500 to 536, or Wis. Stat. ch. 289) Soil contamination remains in the area of soil boring SB-6 as indicated on the attached map, Figure B.2.b, Residual Soil Contamination, prepared by Barr Engineering and dated March 27, 2020. If soil in the specific locations described above is excavated in the future, the property owner at the time of excavation must sample and analyze the excavated soil to determine if contamination remains. If sampling confirms that contamination is present, the property owner at the time of excavation will need to determine whether the material is considered solid or hazardous waste and ensure that any storage, treatment or disposal is in compliance with applicable standards and rules. Contaminated soil may be managed in accordance with Wis. Admin. Code ch. NR 718, with prior DNR approval.

In addition, all current and future owners and occupants of the property need to be aware that excavation of the contaminated soil may pose an inhalation or other direct contact hazard and as a result special precautions may need to be taken to prevent a direct contact health threat to humans.

Depending on site-specific conditions, construction over contaminated soils or groundwater may result in vapor migration of contaminants into enclosed structures or migration along newly placed underground utility lines. The potential for vapor inhalation and means of mitigation should be evaluated when planning any future redevelopment, and measures should be taken to ensure the continued protection of public health, safety, welfare and the environment at the site.

In Closing

Please be aware that the case may be reopened pursuant to Wis. Admin. Code § NR 727.13, for any of the following situations:

- if additional information regarding site conditions indicates that contamination on or from the site poses a threat to public health, safety, or welfare or to the environment,
- if the property owner does not comply with the conditions of closure, with any deed restrictions applied to the property, or with a certificate of completion issued under Wis. Stat. § 292.15, or
- a property owner fails to maintain or comply with a continuing obligation (imposed under this closure approval letter).

The DNR appreciates your efforts to restore the environment at this site. If you have any questions regarding this closure decision or anything outlined in this letter, please contact John Sager at (715) 490-0123, or at john.sager@wisconsin.gov. You can also contact me at (715) 685-2920, or by email at christopher.saari@wisconsin.gov.

Sincerely,

Christopher A. Saari

Northern Region Team Supervisor

Remediation and Redevelopment Program

Relesan

Attachments:

- Figure B.2.b, Residual Soil Contamination, Barr Engineering, March 27, 2020
- Continuing Obligations for Environmental Protection, DNR Publication RR-819

cc: Lynette Carney – Barr Engineering Company (via email) John Sager – DNR Superior (via email)

Case Closure

Form 4400-202 (R 8/16)

Page 1 of 13

SUBMIT AS UNBOUND PACKAGE IN THE ORDER SHOWN

Notice: Pursuant to ch. 292, Wis. Stats., and chs. NR 726 and 746, Wis. Adm. Code, this form is required to be completed for case closure requests. The closure of a case means that the Department of Natural Resources (DNR) has determined that no further response is required at that time based on the information that has been submitted to the DNR. All sections of this form must be completed unless otherwise directed by the Department. DNR will consider your request administratively complete when the form and all sections are completed, all attachments are included, and the applicable fees required under ch. NR 749, Wis. Adm. Code, are included, and sent to the proper destinations. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31 - 19.39, Wis. Stats.). Incomplete forms will be considered "administratively incomplete" and processing of the request will stop until required information is provided.

Site Information										
BRRTS No.	VPLE No.									
02-16-585474										
Parcel ID No.	*									
018010333900										
FID No.	WTM Coo	ordinates								
R1 (000500	X 261726	Y 602621								
816009590 BRRTS Activity (Site) Name	361726 WTM Coordinates Represent:	692621								
Reported Contamination at Superior Refining	Source Area	Parcel Center								
Site Address	City	State ZIP Code								
2407 Stinson Avenue	Superior	WI 54880								
Acres Ready For Use	5									
Responsible Party (RP) Name										
Superior Refining Company LLC										
Company Name										
Attn: Mark Darby, Environmental Manager	4-									
Mailing Address	City	State ZIP Code								
2407 Stinson Avenue	Superior	WI 54880								
Phone Number	Email									
(715) 398-8453	mark.darby@huskyenergy.com									
Check here if the RP is the owner of the source prop	perty.									
Environmental Consultant Name										
Lynette Carney										
Consulting Firm										
Barr Engineering Company	lav.	la l								
Mailing Address	City	State ZIP Code								
325 South Lake Avenue	Duluth	MN 55802								
Phone Number	Email									
(218) 529-7141	lcarney@barr.com									
Fees and Mailing of Closure Request										
 Send a copy of page one of this form and the app (Environmental Program Associate) at http://dnr.w 	licable ch. NR 749, Wis. Adm. Code, fee(s) to t i.gov/topic/Brownfields/Contact.html#tabx3	he DNR Regional EPA Check all fees that apply:								
	\$300 Database Fee for S	oil								
\$350 Database Fee for Groundwater or	Total Amount of Payment \$ \$1,350.00									
Monitoring Wells (Not Abandoned)	Resubmittal, Fees Previo	usly Paid								
2. Send one paper copy and one e-copy on compa	ct disk of the entire closure package to the l	Regional Project Manager								

assigned to your site. Submit as unbound, separate documents in the order and with the titles prescribed by this form. For

electronic document submittal requirements, see http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf.

Activity (Site) Name

Form 4400-202 (R 8/16)

Page 2 of 13

Site Summary

If any portion of the Site Summary Section is not relevant to the case closure request, you must fully explain the reasons why in the relevant section of the form. All information submitted shall be legible. Providing illegible information will result in a submittal being considered incomplete until corrected.

1. General Site Information and Site History

- A. Site Location: Describe the physical location of the site, both generally and specific to its immediate surroundings. The site consists of approximately 5 acres located in an area between the operating Husky Refinery and the Enbridge pipeline terminal facility in the NW 1/4 of Section 36 of T49 North, Range 14 West at 2407 Stinson Avenue, Superior, Wisconsin.
- B. Prior and current site usage: Specifically describe the current and historic occupancy and types of use. Currently the site is under lease by Superior Refining Company LLC (SRC) to Superior Water Light & Power (SWL&P) for construction of an electrical substation (Nemadji Substation). Historically the site has been used as a storage/laydown area associated with the adjacent refinery.
- C. Current zoning (e.g., industrial, commercial, residential) for the site and for neighboring properties, and how verified (Provide documentation in Attachment G).
 The City of Superior Planning and Development Department indicated that the Property is zoned M2 (Manufacturing District Heavy).
- D. Describe how and when site contamination was discovered. During substation construction earthwork activities in November 2019, SWL&P contractors encountered shallow contaminated soil (described as oily soil with debris) in two separate locations at the site. These areas are shown on Figure B.2.a.
- E. Describe the type(s) and source(s) or suspected source(s) of contamination.
 Petroleum hydrocarbons and metals were detected at low levels. The source is likely related to historic site use as a laydown area for refinery activities or related to historical fill materials.
- F. Other relevant site description information (or enter Not Applicable).

 Prior to leasing the property to SWL&P, SRC performed a Phase I Environmental Site Assessment and a Phase II Site Investigation to document the pre-lease site conditions. No actionable levels of contamination were found at that time (2018). SWL&P encountered stained soil with a petroleum odor during excavation work related to preparation of the site for substation construction. Contaminated soil was excavated to construction limits, characterized, and transported off-site for landfill disposal by SWL&P. No field screening or analytical confirmation samples were collected from the excavation extents. Approximately 1,000 tons of soil was removed by SWL&P from the two separate areas and transported to Shamrock Landfill. A subsequent Phase II Investigation was performed by SRC in 2020 to evaluate soil conditions near the limits of the SWL&P excavations and to supplement site characterization data. Results from the 2020 investigation indicate that soils remaining at the site do not pose a risk to human health or the environment.
- G. List BRRTS activity/site name and number for BRRTS activities at this source property, including closed cases. None.
- H. List BRRTS activity/site name(s) and number(s) for all properties immediately adjacent to (abutting) this source property.

216220009 LAKEHEAD PIPELINE - CRUDE OIL TANK 22

216222650 MURPHY OIL - FUEL LOADING AREA

216176579 LAKEHEAD PIPELINE CO L P

216222670 MURPHY OIL - TANK S-1, S-2

216178165 LAKEHEAD PIPELINE - TANK 21 CRUDE OIL

216275100 LAKEHEAD PIPELINE - TANK 24

216242301 MURPHY OIL - VAPOR RECOVERY UNIT 216222638 MURPHY OIL - CRUDE UNIT PROCESS AREA

216558992 ENBRIDGE ENERGY - TANK 20 VALVE

216222628 MURPHY OIL - PROPANE/BUTANE LOADING AREA

216558988 ENBRIDGE ENERGY - OFFICE EXCAVATION

216560841 ENBRIDGE ENERGY TERMINAL - LINE 5 PIG TRAP

216558987 ENBRIDGE ENERGY - TANK 9

216279246 LAKEHEAD PIPELINE CO L P

216183249 LAKEHEAD PIPELINE - MANIFOLD 3

216000522 MURPHY OIL - TANK #34

216000161 MURPHY OIL - LAKEHEAD TANK FAC

216221525 MURPHY OIL - TANK #59

216000507 MURPHY OIL - 24TH

216000523 MURPHY OIL - TANK #67

216000563 MURPHY OIL - TANK #102

216112803 HUSKY OIL LTD TANK 28

216221534 MURPHY OIL - TANK #29 & 30

316000168 LAKEHEAD PIPE LINE CO

216222617 MURPHY OIL - TANK #65 & 66

BRRTS No.

Activity (Site) Name

216246715 MURPHY OIL - SLOP OIL MANIFOLD AREA 216000508 MURPHY OIL - BARDON AVE (TANK 25) 216190549 MURPHY OIL - TANK #1 & 2 (FORMER) 216221920 MURPHY OIL - TANK #47 216221941 MURPHY OIL - TANK #39 316000736 MURPHY OIL - WAREHOUSE 216222701 MURPHY OIL - TANK BASIN #51 & 52 216558989 ENBRIDGE ENERGY - TANK 23 216275090 ENBRIDGE SUPERIOR TERMINAL 216550859 MURPHY OIL - S OF GREEN GAS UNIT 216226861 MURPHY OIL - CONTAMINATED SOIL UNDER ROADWAY 216222721 MURPHY OIL - TANK #32 & 33 216000506 MURPHY OIL - STINSON #3 216000512 LAKEHEAD PIPELINE - PUMP ST 216221947 MURPHY OIL - TANK #8 216221988 MURPHY OIL - TANK #81 216221908 MURPHY OIL - TANK #79 216513788 ENBRIDGE ENERGY - NEMADJI RIVER 216552700 ENBRIDGE ENERGY - TANK 9 PRESSURE LINE 216221933 MURPHY OIL - TANK #31 216000027 LAKEHEAD PIPELINE - PLM TOOL SHOP 216556786 ENBRIDGE ENERGY - TANK 22 216275130 LAKEHEAD PIPELINE - TANK 23 216221811 MURPHY OIL - UNDERGROUND PIPELINE 216000571 MURPHY OIL - TANK #34 & 35 216118396 MURPHY OIL USA 216558990 ENBRIDGE ENERGY - TANK 19 216577548 ENBRIDGE SUPERIOR TERMINAL- LINE 5 VALVE 553 216579604 ENBRIDGE SUPERIOR - FIELD BOOSTER 23 216526812 MURPHY OIL - TANK BASIN #68 216223154 MURPHY OIL - TANK #70 216222712 MURPHY OIL - TANK #40 216515749 MURPHY OIL - LOADING DOCK AREA 216581317 SUPERIOR REFINING COMPANY LLC

2. General Site Conditions

A. Soil/Geology

- Describe soil type(s) and relevant physical properties, thickness of soil column across the site, vertical and lateral variations in soil types.
 - Surficial geology in the region consists of glacial-lacustrine clay deposits estimated to be over 100 feet thick. This clay unit overlies sandy glacial till interbedded with sand and gravel. Soil boring data collected at the site indicates this homogenous layer of red-brown lean to fat clay till is present across the site overlain by approximately 0 to 4 feet of fill material.
- ii. Describe the composition, location and lateral extent, and depth of fill or waste deposits on the site.
 Fill at the site ranges from 0 to 4 feet deep and consists of silty gravel and/or poorly graded sand. The SWL&P substation development area was excavated to a depth of 3-4 feet in the fall of 2019 and backfilled with engineered fill. Outside of this area, fill soils appear to be reworked with native material.
- iii. Describe the depth to bedrock, bedrock type, competency and whether or not it was encountered during the investigation. The regional bedrock geology consists of sandstone of the Precambrian-age Bayfield Formation. Depth to bedrock in the area is greater than 150 feet. Bedrock was not encountered in any boreholes during the investigation.
- Describe the nature and locations of current surface cover(s) across the site (e.g., natural vegetation, landscaped areas, gravel, hard surfaces, and buildings).
 - The site is currently being developed for an electrical substation. The new surface cover at the site consists of 2-4 feet of engineered backfill overlain by gravel.

B. Groundwater

- i. Discuss depth to groundwater and piezometric elevations. Describe and explain depth variations, including high and low water table elevation and whether free product affects measurement of water table elevation. Describe the stratigraphic unit(s) where water table was found or which were measured for piezometric levels.
 - Based on the Facility-Wide Groundwater Monitoring Reports provided by SRC for the refinery facility, the recent depth to groundwater in nearby monitoring wells (one located in the southeast corner of the Property and one located approximately 50 feet northeast) is between 0.5 and 2.9 feet bgs.

BRRTS No.

Activity (Site) Name

 Discuss groundwater flow direction(s), shallow and deep. Describe and explain flow variations, including fracture flow if present.

Based on groundwater monitoring at the refinery, which includes groundwater monitoring wells located on and near the Property, shallow groundwater flow direction at the Property is expected to the northeast towards Newton Creek, ultimately discharging into Lake Superior approximately 1.7 miles northeast of the Site.

 Discuss groundwater flow characteristics: hydraulic conductivity, flow rate and permeability, or state why this information was not obtained.

Based on facility-wide groundwater monitoring program data provided by SRC for the adjacent refinery, the hydraulic conductivity of the native clay is on the order of 10E-7 centimeters per second. Assuming a horizontal hydraulic gradient of 0.003 and effective porosity of 0.06, the estimated horizontal groundwater flow velocity is approximately 0.4 cm/yr or 0.013 feet per year (ft/yr).

iv. Identify and describe locations/distance of potable and/or municipal wells within 1200 feet of the site. Include general summary of well construction (geology, depth of casing, depth of screened or open interval).
No potable and/or municipal wells were identified within 1,200 feet of the site.

3. Site Investigation Summary

A. General

 Provide a brief summary of the site investigation history. Reference previous submittals by name and date. Describe site investigation activities undertaken since the last submittal for this project and attach the appropriate documentation in Attachment C, if not previously provided.

Phase II Investigation Results - Future ALLETE Substation Site (August 2018) - A soil boring investigation was conducted in June 2018 where five borings (SB-1 through SB-5) were advanced to characterize soil at the site. Soil and groundwater samples were collected. Soil was analyzed for 8 RCRA metals, polycyclic aromatic hydrocarbons (PAHs), and volatile organic compounds (VOCs). Groundwater was analyzed for PAHs and VOCs. Based on comparisons to the WDNR residual contaminant levels (RCLs) and groundwater quality standards the isolated low concentrations or parameters detected in the samples did not pose a risk to human health or the environment.

SWL&P Nemadji Substation Phase III Investigation Results (March 2020) - Following the discovery, excavation, and off-site disposal of impacted soils by SWL&P in 2019, SRC initiated another site investigation. In January 2020, twenty-four soil borings were advanced across the site. Fifteen "remedial action delineation" borings were advanced to evaluate the effectiveness of the remedial excavation efforts performed by SWL&P. Nine additional "site characterization" borings were advanced across the site to further assess baseline conditions at the site.

Site investigation reports that summarize the 2018 and 2020 investigations are included in Attachment C.1.

- ii. Identify whether contamination extends beyond the source property boundary, and if so describe the media affected (e.g., soil, groundwater, vapors and/or sediment, etc.), and the vertical and horizontal extent of impacts. The 2018 and 2020 investigation results indicate that the impacted soil areas were isolated, contained within the limits of the site and/or have been removed.
- iii. Identify any structural impediments to the completion of site investigation and/or remediation and whether these impediments are on the source property or off the source property. Identify the type and location of any structural impediment (e.g., structure) that also serves as the performance standard barrier for protection of the direct contact or the groundwater pathway.

No structural impediments were present that prevented completion of investigation activities.

B. Soil

 Describe degree and extent of soil contamination. Relate this to known or suspected sources and known or potential receptors/migration pathways.

Contaminated soil was removed during response action activities by SWL&P in November 2019. Two areas were excavated to a depth of two to three feet; an area in the northern corner of the Property measuring approximately 50 feet by 150 feet and an area in the western corner of the Property measuring approximately 25 feet by 50 feet. A sample of from the removed soil was collected by SWL&P for disposal characterization and waste profile approval at the Shamrock Landfill.

Other areas of site were also excavated to depths of 3-4 feet during construction for the placement of engineered fill. Soil conditions below and outside of the excavation limits were not documented by SWL&P in 2019. Soil samples collected from borings in 2020 indicate that remaining soils do not pose a risk to human health or the environment.

An ongoing source of contamination has not been identified. Soils were likely impacted by historical fill and/or storage activities.

ii. Describe the concentration(s) and types of soil contaminants found in the upper four feet of the soil column. The remedial excavation performed by SWL&P removed the impacted soil from the source area. Soil samples collected in 2020 (post-excavation action) from the site were analyzed for PVOCs+Naphthalene and DRO. Benzene was detected Activity (Site) Name

Case Closure

Form 4400-202 (R 8/16)

Page 5 of 13

in one sample of native soil directly beneath fill (observed staining and sample interval from 1.5-2 feet bgs) at a concentration of 0.0399 mg/kg, exceeding the groundwater RCL but less than the RCLs for direct contact. Naphthalene and toluene were detected in the same sample at concentrations less than groundwater RCLs. DRO was detected in eight samples with concentrations ranging from 8.2 to 121 mg/kg. During the initial investigation in 2018 benzo(a)pyrene was detected in one sample at a concentration of 128 ug/kg, exceeding then non-industrial direct contact RCL but did not exceed the industrial RCL or groundwater RC, however, the soil from this area was removed during construction activities. Arsenic was detected in ten samples with concentrations ranging from 2.8 to 5.1 mg/kg. Although the arsenic detections exceed both the groundwater and direct contract RCLs, there are thought to be naturally occurring as they are below the WDNR background threshold values. Several additional metals were detected in samples from 2018 including: barium, lead, selenium and silver. With the exception of a lead detection in one surficial sample, these metal detections were below established WDNR background threshold values (background values have not been established for selenium and silver). The selenium and silver detections were flagged by the laboratory as estimated values. In addition soil from 3-4' was removed by SWL&P through the majority of the substation construction site.

iii. Identify the ch. NR 720, Wis. Adm. Code, method used to establish the soil cleanup standards for this site. This includes a soil performance standard established in accordance with s. NR 720.08, a Residual Contaminant Level (RCL) established in accordance with s. NR 720.10 that is protective of groundwater quality, or an RCL established in accordance with s. NR 720.12 that is protective of human health from direct contact with contaminated soil. Identify the land use classification that was used to establish cleanup standards. Provide a copy of the supporting calculations/ information in Attachment C.

Soil sample analytical results were compared to the groundwater and direct contact (both industrial and non-industrial) RCLs. With the exception of naturally occurring metals, metals flagged as estimated values, and detections from soil samples collected in 2018 which was removed during construction, only one benzene concentration exceeded the groundwater RCL.

C. Groundwater

 Describe degree and extent of groundwater contamination. Relate this to known or suspected sources and known or potential receptors/migration pathways. Specifically address any potential or existing impacts to water supply wells or interception with building foundation drain systems.

Not applicable. A refinery-wide groundwater monitoring program is in place and groundwater contamination has not been identified at this site.

 Describe the presence of free product at the site, including the thickness, depth, and locations. Identify the depth and location of the smear zone.

Not applicable. No evidence of the presence of free product was encountered at the site.

D. Vapor

 Describe how the vapor migration pathway was assessed, including locations where vapor, soil gas, or indoor air samples were collected. If the vapor pathway was not assessed, explain reasons why.
 Not applicable. A source of potential vapor issues has not been identified.

 Identify the applicable DNR action levels and the land use classification used to establish them. Describe where the DNR action levels were reached or exceeded (e.g., sub slab, indoor air or both).

The site is in an industrial area and has been undeveloped until now. An electrical substation is under construction.

E. Surface Water and Sediment

 Identify whether surface water and/or sediment was assessed and describe the impacts found. If this pathway was not assessed, explain why.

Not applicable. Surface water/sediment features are not present at the site.

ii. Identify any surface water and/or sediment action levels used to assess the impacts for this pathway and how these were derived. Describe where the DNR action levels were reached or exceeded. Not applicable.

4. Remedial Actions Implemented and Residual Levels at Closure

A. General: Provide a brief summary of the remedial action history. List previous remedial action report submittals by name and date. Identify remedial actions undertaken since the last submittal for this project and provide the appropriate documentation in Attachment C.

During site development in November 2019 impacted soils were excavated and transported off-site for disposal. Documentation of soil characterization and disposal are provided in Attachment C.2.

B. Describe any immediate or interim actions taken at the site under ch NR 708, Wis. Adm. Code. The actions described above were taken as part of an interim action to address the impacted soils encountered during construction. The investigation results provided in this closure request are being used to document the effectiveness of the interim action completed by SWL&P.

- C. Describe the active remedial actions taken at the source property, including: type of remedial system(s) used for each media affected; the size and location of any excavation or in-situ treatment; the effectiveness of the systems to address the contaminated media and substances; operational history of the systems; and summarize the performance of the active remedial actions. Provide any system performance documentation in Attachment A.7.
 Not applicable.
- D. Describe the alternatives considered during the Green and Sustainable Remediation evaluation in accordance with NR 722.09 and any practices implemented as a result of the evaluation. Not applicable.
- E. Describe the nature, degree and extent of residual contamination that will remain at the source property or on other affected properties after case closure.
 Benzene was detected in one sample exceeding the groundwater RCL at a concentration of 0.0399 mg/kg. Naphthalene
 (0.166 mg/kg) and toluene (0.0512 mg/kg) were detected in this same sample at concentrations less than the groundwater.

(0.166 mg/kg) and toluene (0.0512 mg/kg) were detected in this same sample at concentrations less than the groundwater and direct contact RCLs. DRO was detected in eight samples with concentrations ranging from 8.2 to 121 mg/kg. Other naturally occurring metals (arsenic, barium, lead, selenium, silver) were also detected in the 2018 samples with concentrations either below the WDNR background threshold values or flagged by the laboratory as estimated values.

- F. Describe the residual soil contamination within four feet of ground surface (direct contact zone) that attains or exceeds RCLs established under s. NR 720.12, Wis. Adm. Code, for protection of human health from direct contact.
 Naturally occurring arsenic was detected in ten samples with concentrations ranging from 2.8 to 5.1 mg/kg.
- G. Describe the residual soil contamination that is above the observed low water table that attains or exceeds the soil standard(s) for the groundwater pathway.

Benzene was detected in one sample (SB-6, 1.5-2 feet) exceeding the groundwater RCL at a concentration of 0.0399 mg/kg. Additional naturally occurring metals were also detected above the groundwater RCL including: arsenic, barium, lead, selenium and silver but were either below the WDNR background threshold value or were flagged by the laboratory as estimated values,

H. Describe how the residual contamination will be addressed, including but not limited to details concerning: covers, engineering controls or other barrier features; use of natural attenuation of groundwater; and vapor mitigation systems or measures.

The site is being developed as an electrical substation. The majority of the site has been excavated and covered with new compacted fill material and substation facilities. As a result, residual contamination levels do not require remediation or controls to limit exposure. The clay soil which has been documented across the site along with the compacted and relatively impervious gravel surface designed to divert surface water flow away from the site will limit infiltration and potential of migration of residual soil contamination to groundwater. Additionally, it has been demonstrated through the documented groundwater flow velocities and annual groundwater monitoring completed as part of the SRC facility-wide groundwater monitoring program that petroleum compounds have not been detected in groundwater in the vicinity of this historical release.

- If using natural attenuation as a groundwater remedy, describe how the data collected supports the conclusion that natural attenuation is effective in reducing contaminant mass and concentration (e.g., stable or receding groundwater plume).
 Not applicable.
- J. Identify how all exposure pathways (soil, groundwater, vapor) were removed and/or adequately addressed by immediate, interim and/or remedial action(s).
 - Contaminated soils were removed and transported to an off-site disposal facility. The source has been removed and groundwater impacts have not been identified.
- K. Identify any system hardware anticipated to be left in place after site closure, and explain the reasons why it will remain. Not applicable.
- L. Identify the need for a ch. NR 140, Wis. Adm. Code, groundwater Preventive Action Limit (PAL) or Enforcement Standard (ES) exemption, and identify the affected monitoring points and applicable substances. Not applicable.
- M. If a DNR action level for vapor intrusion was exceeded (for indoor air, sub slab, or both) describe where it was exceeded and how the pathway was addressed.
 Not applicable.

Case Closure

Activity (Site) Name

Form 4400-202 (R 8/16)

Page 7 of 13

- N. Describe the surface water and/or sediment contaminant concentrations and areas after remediation. If a DNR action level was exceeded, describe where it was exceeded and how the pathway was addressed.
 Not applicable.
- 5. Continuing Obligations: Includes all affected properties and rights-of-way (ROWs). In certain situations, maintenance plans are also required, and must be included in Attachment D.
 Directions: For each of the 3 property types below, check all situations that apply to this closure request.
 (NOTE: Monitoring wells to be transferred to another site are addressed in Attachment E.)

Π		on applies to the or Right of Way			
	Property Ty	pe:		Case Closure Situation - Continuing Obligation (database fees will apply, ii xiv.)	Maintenance Plan
	Source Property	Affected Property (Off-Source)	ROW	(addeddd fed fill spp.), ii- yarry	Required
i.		\boxtimes	\boxtimes	None of the following situations apply to this case closure request.	NA
ii.				Residual groundwater contamination exceeds ch. NR 140 ESs.	NA
iii.	\boxtimes			Residual soil contamination exceeds ch. NR 720 RCLs.	NA
iv.				Monitoring Wells Remain:	
				Not Abandoned (filled and sealed)	NA
				Continued Monitoring (requested or required)	Yes
V,				Cover/Barrier/Engineered Cover or Control for (soil) direct contact pathways (includes vapor barriers)	Yes
vi.				Cover/Barrier/Engineered Cover or Control for (soil) groundwater infiltration pathway	Yes
vii,				Structural Impediment: impedes completion of investigation or remedial action (not as a performance standard cover)	NA
/iii.				Residual soil contamination meets NR 720 industrial soil RCLs, land use is classified as industrial	NA
ix.			NA	Vapor Mitigation System (VMS) required due to exceedances of vapor risk screening levels or other health based concern	Yes
X.			NA	Vapor: Dewatering System needed for VMS to work effectively	Yes
xi.			NA.	Vapor: Compounds of Concern in use: full vapor assessment could not be completed	NA
xìi			NA	Vapor: Commercial/industrial exposure assumptions used.	NA
xiii.				Vapor: Residual volatile contamination poses future risk of vapor intrusion	NA
xiv.				Site-specific situation: (e. g., fencing, methane monitoring, other) (discuss with project manager before submitting the closure request)	Site specific
P	or remed	ial action?	or other ass		Yes No
E					Yes No
(. If the ans	wer to question	1 6.B. is yes	s, is the leak detection system currently being monitored?	Yes O No

Activity (Site) Name

Case Closure

Form 4400-202 (R 8/16)

Page 8 of 13

General Instructions

All information shall be legible. Providing illegible information will result in a submittal being considered incomplete until corrected. For each attachment (A-G), provide a Table of Contents page, listing all 'applicable' and 'not applicable' items by Closure Form titles (e.g., A.1. Groundwater Analytical Table, A.2. Soil Analytical Results Table, etc.). If any item is 'not applicable' to the case closure request, you must fully explain the reasons why.

Data Tables (Attachment A)

Directions for Data Tables:

- Use bold and italics font for information of importance on tables and figures. Use bold font for ch. NR 140, Wis. Adm. Code ES attainments or exceedances, and italicized font for ch. NR 140, Wis. Adm. Code, PAL attainments or exceedances
- Use bold font to identify individual ch. NR 720 Wis. Adm. Code RCL exceedances. Tables should also include the corresponding groundwater pathway and direct contact pathway RCLs for comparison purposes. Cumulative hazard index and cumulative cancer risk exceedances should also be tabulated and identified on Tables A.2 and A.3.
- Do not use shading or highlighting on the analytical tables.
- Include on Data Tables the level of detection for results which are below the detection level (i.e., do not just list as no detect (ND)).
- Include the units on data tables.
- Summaries of all data must include information collected by previous consultants.
- Do not submit lab data sheets unless these have not been submitted in a previous report. Tabulate all data required in s. NR 716.15 (3)(c), Wis. Adm. Code, in the format required in s. NR 716.15(4)(e), Wis. Adm. Code.
- Include in Attachment A all of the following tables, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: A.1. Groundwater Analytical Table; A.2. Soil Analytical Results Table, etc.).
- For required documents, each table (e.g., A.1., A.2., etc.) should be a separate Portable Document Format (PDF).

Data Tables

- Groundwater Analytical Table(s): Table(s) showing the analytical results and collection dates for all groundwater sampling points (e.g., monitoring wells, temporary wells, sumps, extraction wells, potable wells) for which samples have been collected.
- Soil Analytical Results Table(s): Table(s) showing all soil analytical results and collection dates. Indicate if sample was collected above or below the observed low water table (unsaturated versus saturated).
- Residual Soil Contamination Table(s): Table(s) showing the analytical results of only the residual soil contamination at the time of closure. This table shall be a subset of table A.2 and should include only the soil sample locations that exceed an RCL. Indicate if sample was collected above or below the observed low water table (unsaturated versus saturated). Table A.3 is optional only if a total of fewer than 15 soil samples have been collected at the site.
- Vapor Analytical Table(s): Table(s) showing type(s) of samples, sample collection methods, analytical method, sample results, date of sample collection, time period for sample collection, method and results of leak detection, and date, method and results of communication testing
- Other Media of Concern (e.g., sediment or surface water): Table(s) showing type(s) of sample, sample collection method, analytical method, sample results, date of sample collection, and time period for sample collection.
- Water Level Elevations: Table(s) showing all water level elevation measurements and dates from all monitoring wells. If present, free product should be noted on the table.
- Other: This attachment should include: 1) any available tabulated natural attenuation data; 2) data tables pertaining to engineered remedial systems that document operational history, demonstrate system performance and effectiveness, and display emissions data; and (3) any other data tables relevant to case closure not otherwise noted above. If this section is not applicable, please explain the reasons why.

Maps, Figures and Photos (Attachment B)

Directions for Maps, Figures and Photos:

- Provide on paper no larger than 11 x 17 inches, unless otherwise directed by the Department. Maps and figures may be submitted in a larger electronic size than 11 x 17 inches, in a PDF readable by the Adobe Acrobat Reader. However, those larger-size documents must be legible when printed.
- Prepare visual aids, including maps, plans, drawings, fence diagrams, tables and photographs according to the applicable portions of ss. NR 716.15(4), 726.09(2) and 726.11(3), (5) and (6), Wis. Adm. Code.
- Include all sample locations.
- Contour lines should be clearly labeled and defined.
- Include in Attachment B all of the following maps and figures, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: B.1. Location Map; B.2. Detailed Site Map, etc).
- For the electronic copies that are required, each map (e.g., B.1.a., B.2.a, etc.,) should be a separate PDF.
- Maps, figures and photos should be dated to reflect the most recent revision.

Location Maps

- B.1.a. Location Map: A map outlining all properties within the contaminated site boundaries on a United States Geological Survey (U.S.G.S.) topographic map or plat map in sufficient detail to permit easy location of all affected and/or adjacent parcels. If groundwater standards are exceeded, include the location of all potable wells, including municipal wells, within 1200 feet of the area of contamination.
- B.1.b. Detailed Site Map: A map that shows all relevant features (buildings, roads, current ground surface cover, individual property boundaries for all affected properties, contaminant sources, utility lines, monitoring wells and potable wells) within the contaminated area. This map is to show the location of all contaminated public streets, and highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination attaining or exceeding a ch. NR 140 ES, and/or in relation to the boundaries of soil contamination attaining or exceeding a RCL. Provide parcel identification numbers for all affected properties.
- RR Sites Map: From RR Sites Map (http://dnrmaps.wi.gov/sl/?Viewer=RR Sites) attach a map depicting the source property, and all open and closed BRRTS sites within a half-mile radius or less of the property.

BRRTS No.

Activity (Site) Name

B.2. Soil Figures

- B.2.a. Soil Contamination: Figure(s) showing the location of all identified unsaturated soil contamination. Use a single contour to show the horizontal extent of each area of contiguous soil contamination that exceeds a soil to groundwater pathway RCL as determined under ch. NR 720.Wis. Adm. Code. A separate contour line should be used to indicate the horizontal extent of each area of contiguous soil contamination that exceeds a direct contact RCL exceedances (0-4 foot depth).
- B.2.b. Residual Soil Contamination: Figure(s) showing only the locations of soil samples where unsaturated soil contamination remains at the time of closure (locations represented in Table A.3). Use a single contour to show the horizontal extent of each area of contiguous soil contamination that exceeds a soil to groundwater pathway RCL as determined under ch. NR 720 Wis. Adm. Code. A separate contour line should be used to indicate the horizontal extent of each area of contiguous soil contamination that exceeds a direct contact RCL exceedence (0-4 foot depth).

B.3. Groundwater Figures

B.3.a. Geologic Cross-Section Figure(s): One or more cross-section diagrams showing soil types and correlations across the site, water table and piezometric elevations, and locations and elevations of geologic rock units, if encountered. Display on one or more figures all of the following:

 Source location(s) and vertical extent of residual soil contamination exceeding an RCL. Distinguish between direct contact and the groundwater pathway RCLs.

Source location(s) and lateral and vertical extent if groundwater contamination exceeds ch. NR 140 ES.

Surface features, including buildings and basements, and show surface elevation changes.

Any areas of active remediation within the cross section path, such as excavations or treatment zones.

- Include a map displaying the cross-section location(s), if they are not displayed on the Detailed Site Map (Map B.1.b.)
- B.3.b. Groundwater Isoconcentration: Figure(s) showing the horizontal extent of the post-remedial groundwater contamination exceeding a ch. NR 140, Wis. Adm. Code, PAL and/or an ES. Indicate the date and direction of groundwater flow based on the most recent sampling data.
- B.3.c. Groundwater Flow Direction: Figure(s) representing groundwater movement at the site. If the flow direction varies by more than 20° over the history of the site, submit two groundwater flow maps showing the maximum variation in flow direction.
- B.3.d. Monitoring Wells: Figure(s) showing all monitoring wells, with well identification number. Clearly designate any wells that: (1) are proposed to be abandoned; (2) cannot be located; (3) are being transferred; (4) will be retained for further sampling, or (5) have been abandoned.

B.4. Vapor Maps and Other Media

- B.4.a. Vapor Intrusion Map: Map(s) showing all locations and results for samples taken to investigate the vapor intrusion pathway in relation to residual soil and groundwater contamination, including sub-slab, indoor air, soil vapor, soil gas, ambient air, and communication testing. Show locations and footprints of affected structures and utility corridors, and/or where residual contamination poses a future risk of vapor intrusion.
- B.4.b. Other media of concern (e.g., sediment or surface water): Map(s) showing all sampling locations and results for other media investigation. Include the date of sample collection and identify where any standards are exceeded.
- B.4.c. Other: Include any other relevant maps and figures not otherwise noted above. (This section may remain blank).
- B.5. Structural Impediment Photos: One or more photographs documenting the structural impediment feature(s) which precluded a complete site investigation or remediation at the time of the closure request. The photographs should document the area that could not be investigated or remediated due to a structural impediment. The structural impediment should be indicated on Figures B.2.a and B.2.b.

Documentation of Remedial Action (Attachment C)

Directions for Documentation of Remedial Action:

- Include in Attachment C all of the following documentation, in the order prescribed below, with the specific Closure Form titles noted
 on the separate attachments (e.g., Title: C.1. Site Investigation Documentation; C.2. Investigative Waste, etc.).
- If the documentation requested below has already been submitted to the DNR, please note the title and date of the report for that
 particular document requested.
 - C.1. Site investigation documentation, that has not otherwise been submitted with the Site Investigation Report.

C.2. Investigative waste disposal documentation.

- C.3. Provide a description of the methodology used along with all supporting documentation if the RCLs are different than those contained in the Department's RCL Spreadsheet available at: http://dnr.wi.gov/topic/Brownfields/Professionals.html.
- C.4. Construction documentation or as-built report for any constructed remedial action or portion of, or interim action specified in s. NR 724.02(1), Wis. Adm. Code.
- C.5. Decommissioning of Remedial Systems. Include plans to properly abandon any systems or equipment.
- C.6. Other. Include any other relevant documentation not otherwise noted above (This section may remain blank).

Maintenance Plan(s) and Photographs (Attachment D)

Directions for Maintenance Plans and Photographs:

Attach a maintenance plan for each affected property (source property, each off-source affected property) with continuing obligations requiring future maintenance (e.g., direct contact, groundwater protection, vapor intrusion). See Site Summary section 5 for all affected property(s) requiring a maintenance plan. Maintenance plan guidance and/or templates for: 1) Cover/barrier systems; 2) Vapor intrusion; and 3) Monitoring wells, can be found at: http://dnr.wi.gov/topic/Brownfields/Professionals.html#tabx3

- D.1. Descriptions of maintenance action(s) required for maximizing effectiveness of the engineered control, vapor mitigation system, feature or other action for which maintenance is required:
 - Provide brief descriptions of the type, depth and location of residual contamination.

02-16-585474	
BRRTS No.	

Reported Contamination at Superior Refining

Activity (Site) Name

Case Closure Form 4400-202 (R 8/16)

Page 10 of 13

- Provide a description of the system/cover/barrier/monitoring well(s) to be maintained.
- Provide a description of the maintenance actions required for maximizing effectiveness of the engineered control, vapor mitigation system, feature or other action for which maintenance is required.
- Provide contact information, including the name, address and phone number of the individual or facility who will be conducting the maintenance.
- D.2. Location map(s) which show(s): (1) the feature that requires maintenance; (2) the location of the feature(s) that require(s) maintenance - on and off the source property; (3) the extent of the structure or feature(s) to be maintained, in relation to other structures or features on the site; (4) the extent and type of residual contamination; and (5) all property boundaries.
- D.3. Photographs for site or facilities with a cover or other performance standard, a structural impediment or a vapor mitigation system, include one or more photographs documenting the condition and extent of the feature at the time of the closure request. Pertinent features shall be visible and discernible. Photographs shall be submitted with a title related to the site name and location, and the date on which it was taken.
- Inspection log, to be maintained on site, or at a location specified in the maintenance plan or approval letter. The inspection and maintenance log is found at: http://dnr.wi.gov/files/PDF/forms/4400/4400-305.pdf

Monitoring Well Information (Attachment E)

Directions for Monitoring Well Information:

For all wells that will remain in use, be transferred to another party, or that could not be located; attach monitoring well construction and development forms (DNR Form 4400-113 A and B: http://dnr.wl.gov/topic/groundwater/documents/forms/4400 113 1 2.pdf)

Sel	ect (One:
•	No	monitoring wells were installed as part of this response action.
0	Allr	monitoring wells have been located and will be properly abandoned upon the DNR granting conditional closure to the site
0	Sele	ect One or More:
		Not all monitoring wells can be located, despite good faith efforts. Attachment E must include a description of efforts made to locate the wells.
		One or more wells will remain in use at the site after this closure. Attachment E must include documentation as to the reason (s) the well(s) will remain in use. When one or more monitoring wells will remain in use this is considered a continuing
		obligation and a maintenance plan will be required and must be included in Attachment D. One or more monitoring wells will be transferred to another owner upon case closure being granted. Attachment E should include documentation identifying the name, address and email for the new owner(s). Provide documentation from the party accepting future responsibility for monitoring well(s).

Source Legal Documents (Attachment F)

Directions for Source Legal Documents:

Label documents with the specific closure form titles (e.g., F.1. Deed, F.2. Certified Survey Map, etc.). Include all of the following documents, in the order listed:

- Deed: The most recent deed with legal description clearly listed.
 - Note: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.
- Certified Survey Map: A copy of the certified survey map or the relevant section of the recorded plat map for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map. In cases where the certified survey map or recorded plat map are not legible or are unavailable, a copy of a parcel map from a county land information office may be substituted. A copy of a parcel map from a county land information office shall be legible, and the parcels identified in the legal description shall be clearly identified and labeled with the applicable parcel identification number.
- Verification of Zoning: Documentation (e.g., official zoning map or letter from municipality) of the property's or properties' current zoning status.
- Signed Statement: A statement signed by the Responsible Party (RP), which states that he or she believes that the attached legal description(s) accurately describe(s) the correct contaminated property or properties. This section applies to the source property only. Signed statements for Other Affected Properties should be included in Attachment G.

Reported Contamination at Superior Refining

Activity (Site) Name

Case Closure

Form 4400-202 (R 8/16)

Page 11 of 13

Notifications to Owners of Affected Properties (Attachment G)

Directions for Notifications to Owners of Affected Properties:

Complete the table on the following page for sites which require notification to owners of affected properties pursuant to ch. 292, Wis. Stats, and ch. NR 725 and 726, Wis. Adm. Code. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31–19.39, Wis. Stats.]. The DNR's "Guidance on Case Closure and the Requirements for Managing Continuing Obligations" (PUB-RR-606) lists specific notification requirements http://dnr.wi.gov/files/PDF/pubs/rr/RR606.pdf.

State law requires that the responsible party provide a 30-day, written advance notification to certain persons prior to applying for case closure. This requirement applies if: (1) the person conducting the response action does not own the source property; (2) the contamination has migrated onto another property; and/or (3) one or more monitoring wells will not be abandoned. Use form 4400-286, Notification of Continuing Obligations and Residual Contamination, at http://dnr.wl.gov/files/PDF/forms/4400/4400-286.pdf

Include a copy of each notification sent and accompanying proof of delivery, i.e., return receipt or signature confirmation.

Include the following documents for each property, keeping each property's documents grouped together and labeled with the letter G and the corresponding ID number from the table on the following page. (Source Property documents should only be included in Attachment F):

- Deed: The most recent deed with legal descriptions clearly listed for all affected properties.
 Note: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.
- Certified Survey Map: A copy of the certified survey map or the relevant section of the recorded plat map for those properties where
 the legal description in the most recent deed refers to a certified survey map or a recorded plat map. In cases where the certified
 survey map or recorded plat map are not legible or are unavailable, a copy of a parcel map from a county land information office may
 be substituted. A copy of a parcel map from a county land information office shall be legible, and the parcels identified in the legal
 description shall be clearly identified and labeled with the applicable parcel identification number.
- Verification of Zoning: Documentation (e.g., official zoning map or letter from municipality) of the property's or properties' current zoning status.
- Signed Statement: A statement signed by the Responsible Party (RP), which states that he or she believes the attached legal description(s) accurately describe(s) the correct contaminated property or properties.

Case Closure Form 4400-202 (R 8/16)

Page 12 of 13

Reported Contamination at Superior Refining Activity (Site) Name

										Reas	ons	Not	ifica	tion	Lette	er S	ent:		
ID	Address of Affected Property	Parcel ID No.	Date of Receipt of Letter	Type of Property Owner	WTMX	WTMY	Residual Groundwater Contamination = or > ES	Residual Soil Contamination Exceeds RCLs	Monitoring Wells: Not Abandoned	Monitoring Wells: Continued Monitoring	Cover/Barrier/Engineered Control	Structural Impediment	Industrial RCLs Met/Applied	Vapor Mitigation System(VMS)	Dewatering System Needed for VMS	Compounds of Concern in Use	Commercial/Industrial Vapor Exposure Assumptions Applied	Residual Volatile Contamination Poses Future Risk of Vapor Intrusion	Site Specification Situation
А																			
В														Ī					
С																			
D																			

02-16-5	5854	74
BRRTS	No.	

Reported Contamination at Superior Refining

Case Closure Form 4400-202 (R 8/16) Activity (Site) Name

Page 13 of 13

Signatures and Findings for Closure Determination

This page has been updated as of February 2019 to comply with the requirements of Wis. Admin. Code ch. NR 712.

Check the correct box for this case closure request and complete the corresponding certification statement(s) listed below to

demonstrate that the requirements of Wis. Admin. Code ch. NR 712 have been mot be delegated per Wis. Admin. Code § NR 712.09 (1). Per Wis. Admin. Code § supervised by the person certifying.	et. The responsibility	for signing the certification may
The investigation and/or response action(s) for this site evaluated and/or a remedies). Both a professional engineer and a hydrogeologist must sign the		
The investigation and the response action(s) for this site did not evaluate of sign this document per Wis. Admin. Code ch. NR 712.	or address groundwat	er. A professional engineer must
Engineering Certification	- 2 2 2 2	
State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. all information contained in this document is correct and the document was prepared by the NR 700 to 726, Wis. Adm. Code. Signature Title Sr. Civil Engineer	Wis. Adm. Code; that Adm. Code; and that	t, to the best of my knowledge, hall applicable requirements in 34139
Hydrogeologist Certification		- Contraction
I, Lynette Carney , hereby certis. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the contained in this document is correct and the document was prepared in compliant 726, Wis. Adm. Code. Signature	nents of ch. GHSS 2, ne best of my knowled	dge, all of the information
Title Sr. Geologist	Date	03/26/2020

Attachment A – Data Tables

- A.1 Groundwater Analytical Table
- A.2 Soil Analytical Results Tables
- A.3 Residual Soil Contamination Table
- A.4 Vapor Analytical Table (Not Applicable)
- A.5 Other Media of Concern (Not Applicable)
- A.6 Water Level Elevations (Not Applicable)
- A.7 Other (Not Applicable)

Table A.1 Groundwater Analytical Table (2018) Nemadji Substation Phase II Investigation Superior, WI

	ugauc	on Superior, WI	Location	SB-3
			Date	6/22/2018
	1		Depth	14.5 - 19.5 ft
		Wisconsin	Wisconsin	
Parameter	Units	Groundwater Public	Groundwater	
		Health Enforcement Standards	Preventive Action Limits	
Effective Date	+	07/01/2015	07/01/2015	
Exceedance Key		No Exceedances	No Exceedances	
Semivolatile Organic Compounds		NO Exceedances	NO Exceedances	
Acenaphthene	ug/l			< 0.0043 U
Acenaphthylene	ug/l			< 0.0063 U
Anthracene	ug/l	3000	600	< 0.0083 U
Benz(a)anthracene	ug/l			< 0.0053 U
Benzo(a)pyrene	ug/l	0.2	0.02	< 0.0054 U
Benzo(b)fluoranthene	ug/l	0.2	0.02	< 0.017 U
Benzo(g,h,i)perylene	ug/l			< 0.013 U
Benzo(k)fluoranthene	ug/l			< 0.014 U
Chrysene	ug/l	0.2	0.02	< 0.012 U
Dibenz(a,h)anthracene	ug/l			< 0.012 U
Fluoranthene	ug/l	400	80	< 0.025 U
Fluorene	ug/l	400	80	< 0.0080 U
Indeno(1,2,3-cd)pyrene	ug/l	465		< 0.018 U
Naphthalene	ug/l	100	10	< 0.0092 U
Phenanthrene	ug/l	050	50	< 0.014 U
Pyrene	ug/l	250	50	< 0.020 U
Volatile Organic Compounds	//	70	7	< 0.00 H
1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane	ug/l ug/l	70 200	7 40	< 0.20 U < 0.14 U
1.1.2.2-Tetrachloroethane	ug/l	0.2	0.02	< 0.14 U
1,1,2-Trichloroethane	ug/l	5	0.5	< 0.17 U
1.1-Dichloroethane	ug/l	850	85	< 0.17 U
1,1-Dichloroethylene	ug/l	7	0.7	< 0.16 U
1,1-Dichloropropene	ug/l	•	J.,	< 0.20 U
1,2,3-Trichlorobenzene	ug/l			< 0.21 U
1,2,3-Trichloropropane	ug/l	60	12	< 0.26 U
1,2,4-Trichlorobenzene	ug/l	70	14	< 0.20 U
1,2,4-Trimethylbenzene	ug/l	480 c	96 c	< 0.20 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/l	0.2	0.02	< 1.7 U
1,2-Dibromoethane (EDB)	ug/l	0.05	0.005	< 0.24 U
1,2-Dichlorobenzene	ug/l	600	60	< 0.14 U
1,2-Dichloroethane	ug/l	5	0.5	< 0.22 U
1,2-Dichloroethylene, cis	ug/l	70	7	< 0.15 U
1,2-Dichloroethylene, trans	ug/l	100	20	< 0.12 U
1,2-Dichloropropane	ug/l	5	0.5	< 0.16 U
1,3,5-Trimethylbenzene	ug/l	480 c	96 c	< 0.12 U
1,3-Dichlorobenzene	ug/l	600	120	< 0.16 U
1,3-Dichloropropane 1,3-Dichloropropene, cis	ug/l ug/l	0.4	0.04	< 0.070 U < 0.20 U
1,3-Dichloropropene, cis	ug/I ug/I	0.4	0.04	< 0.20 U
1,4-Dichlorobenzene	ug/l	75	15	< 0.17 U
2,2-Dichloropropane	ug/l	7.5	10	< 0.17 U
Acetone	ug/l	9000	1800	< 9.2 U
Allyl chloride	ug/l			< 0.29 U
Benzene	ug/l	5	0.5	< 0.10 U
Bromobenzene	ug/l			< 0.21 U
Bromochloromethane	ug/l			< 0.27 U
Bromodichloromethane	ug/l	0.6	0.06	< 0.22 U
Bromoform	ug/l	4.4	0.44	< 0.80 U
Bromomethane	ug/l	10	1	< 1.8 U
Butylbenzene	ug/l			< 0.24 U
Butylbenzene, sec	ug/l			< 0.15 U
Butylbenzene, tert	ug/l			< 0.15 U

Table A.1 Groundwater Analytical Table (2018) Nemadji Substation Phase II Investigation Superior, WI

			Location	SB-3
			Date	6/22/2018
			Depth	14.5 - 19.5 ft
		Wisconsin	Wisconsin	
Parameter	Units	Groundwater Public	Groundwater	
Parameter	Units	Health Enforcement	Preventive Action	
		Standards	Limits	
Effective Date		07/01/2015	07/01/2015	
Exceedance Key		No Exceedances	No Exceedances	
Carbon tetrachloride	ug/l	5	0.5	< 0.19 U
Chlorobenzene	ug/l	100	20	< 0.17 U
Chlorodibromomethane	ug/l	60	6	< 0.12 U
Chloroethane	ug/l	400	80	< 0.49 U
Chloroform	ug/l	6	0.6	< 0.45 U
Chloromethane	ug/l	30	3	< 0.16 U
Chlorotoluene, o	ug/l			< 0.16 U
Chlorotoluene, p	ug/l			< 0.13 U
Cumene (isopropyl benzene)	ug/l			< 0.18 U
Cymene p- (toluene isopropyl p-)	ug/l			< 0.15 U
Dibromomethane (methylene bromide)	ug/l			< 0.16 U
Dichlorodifluoromethane (Freon-12)	ug/l	1000	200	< 0.23 U
Dichlorofluoromethane (Freon-21)	ug/l	7000		< 0.14 U
Ethyl benzene	ug/l	700	140	< 0.14 U
Ethyl ether	ug/l	1000	100	< 0.095 U
Hexachlorobutadiene	ug/l			< 0.31 U
Methyl ethyl ketone (2-butanone)	ug/l	4000	800	< 0.99 U
Methyl isobutyl ketone (MIBK)	ug/l	500	50	< 0.42 U
Methyl tertiary butyl ether (MTBE)	ug/l	60	12	< 0.16 U
Methylene chloride	ug/l	5	0.5	< 0.98 U
Naphthalene	ug/l	100	10	< 0.48 U
Propylbenzene	ug/l			< 0.10 U
Styrene	ug/l	100	10	< 0.19 U
Tetrachloroethylene	ug/l	5	0.5	< 0.17 U
Tetrahydrofuran	ug/l	50	10	< 2.2 U
Toluene	ug/l	800	160	2.1
Trichloroethylene (TCE)	ug/l	5	0.5	< 0.15 U
Trichlorofluoromethane (Freon-11)	ug/l	3490	698	< 0.23 U
Trichlorotrifluoroethane (Freon 113)	ug/l			< 0.22 U
Vinyl chloride	ug/l	0.2	0.02	< 0.092 U
Xylene, total	ug/l	2000 (4)	400 (4)	< 0.31 U

⁽⁴⁾ Xylene includes meta-, ortho-, and para-xylene combined.

c Value represents the criteria for Trimethylbenzes (1,2,4- and 1,3,5- combined).

U The analyte was analyzed for, but was not detected.

Table A.2.a Soil Analytical Results Table (2020) Nemadji Substation Phase II Investigation Superior, WI

				Location	SB-6	SB-6	SB-7	SB-7	SB-8	SB-8	SB-9	SB-10	SB-10	SB-10	SB-11	SB-11	SB-12	SB-13	SB-14	SB-15	SB-16	SB-17	SB-18
															-	-						_	
				Date	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/07/2020	1/07/2020
				Depth	1.5 - 2 ft	5 - 6 ft	2 - 4 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	5 - 6 ft	1 - 2 ft	2 - 4 ft	6 - 8 ft	2 - 4 ft						
			Wisconsin Not to	Wisconsin Not to																			
		Wisconsin	Exceed Direct	Exceed Direct																			
		Groundwater	Contact Industrial	Contact Non-																			
Parameter	Units	RCLs, DF=2	RCLs	Industrial RCLs																			
Effective Date		12/01/2018	12/01/2018	12/01/2018																			
Exceedance Key		Bold	No Exceedances	No Exceedances																			
General Parameters																							
Moisture	%				24.1	26.4	23.0	27.2	26.6	27.3	27.3	26.4	27.7	23.1	36.3	27.7	23.9	24.7	33.9	35.5	25.4	26.2	24.8
Volatile Organic Compounds																							
1,2,4-Trimethylbenzene	mg/kg	1.3787 (1)	219	219	< 0.0133 U	< 0.0141 U	< 0.0131 U	< 0.0143 U	< 0.0142 U	< 0.0137 U	< 0.0143 U	< 0.0140 U	< 0.0142 U	< 0.0132 U	< 0.0189 U	< 0.0138 U	< 0.0137 U	< 0.0137 U	< 0.0174 U	< 0.0155 U	< 0.0139 U	< 0.0136 U	< 0.0134 U
1,3,5-Trimethylbenzene	mg/kg	1.3787 (1)	182	182	< 0.0106 U	< 0.0112 U	< 0.0104 U	< 0.0114 U	< 0.0113 U	< 0.0109 U	< 0.0114 U	< 0.0112 U	< 0.0113 U	< 0.0105 U	< 0.0150 U	< 0.0110 U	< 0.0109 U	< 0.0109 U	< 0.0138 U	< 0.0124 U	< 0.0111 U	< 0.0109 U	< 0.0107 U
Benzene	mg/kg	0.0051	7.07	1.6	0.0399	< 0.0040 U	< 0.0037 U	< 0.0040 U	< 0.0040 U	< 0.0039 U	< 0.0040 U	< 0.0039 U	< 0.0040 U	< 0.0037 U	< 0.0053 U	< 0.0039 U	< 0.0039 U	< 0.0039 U	< 0.0049 U	< 0.0044 U	< 0.0039 U	< 0.0038 U	< 0.0038 U
Ethyl benzene	mg/kg	1.57	35.4	8.02	< 0.0036 U	< 0.0038 U	< 0.0036 U	< 0.0039 U	< 0.0039 U	< 0.0037 U	< 0.0039 U	< 0.0038 U	< 0.0039 U	< 0.0036 U	< 0.0051 U	< 0.0038 U	< 0.0037 U	< 0.0037 U	< 0.0047 U	< 0.0042 U	< 0.0038 U	< 0.0037 U	< 0.0036 U
Methyl tertiary butyl ether (MTBE)	mg/kg	0.027	282	63.8	< 0.0079 U	< 0.0084 U	< 0.0078 U	< 0.0085 U	< 0.0084 U	< 0.0081 U	< 0.0085 U	< 0.0083 U	< 0.0085 U	< 0.0078 U	< 0.0112 U	< 0.0082 U	< 0.0081 U	< 0.0081 U	< 0.0103 U	< 0.0092 U	< 0.0083 U	< 0.0081 U	< 0.0080 U
Naphthalene	mg/kg	0.6582	24.1	5.52	0.166 J	< 0.0658 U	< 0.0613 U	< 0.0670 U	< 0.0663 U	< 0.0639 U	< 0.0668 U	< 0.0655 U	< 0.0665 U	< 0.0615 U	< 0.0884 U	< 0.0646 U	< 0.0639 U	< 0.0640 U	< 0.0812 U	< 0.0726 U	< 0.0652 U	< 0.0639 U	< 0.0628 U
Toluene	mg/kg	1.1072	818	818	0.0512 J	< 0.0172 U	< 0.0160 U	< 0.0175 U	< 0.0173 U	< 0.0167 U	< 0.0174 U	< 0.0171 U	< 0.0173 U	< 0.0160 U	< 0.0230 U	< 0.0168 U	< 0.0167 U	< 0.0167 U	< 0.0212 U	< 0.0189 U	< 0.0170 U	< 0.0167 U	< 0.0164 U
Xylene, total	mg/kg	3.96	260	260	< 0.0155 U	< 0.0163 U	< 0.0152 U	< 0.0166 U	< 0.0164 U	< 0.0158 U	< 0.0166 U	< 0.0162 U	< 0.0165 U	< 0.0153 U	< 0.0219 U	< 0.0160 U	< 0.0158 U	< 0.0159 U	< 0.0201 U	< 0.0180 U	< 0.0162 U	< 0.0158 U	< 0.0156 U
Total Petroleum Hydrocarbons																							
Diesel Range Organics, C10-C28	mg/kg				23.6	< 4.9 U	< 4.8 U	< 5.1 U	8.2 J	< 4.8 U	< 5.1 U	< 5.3 U	< 5.4 U	121 J	19.5 J	< 5.3 U	< 5.0 U	< 4.8 U	6.0 J	< 5.0 U	26.5	< 5.1 U	< 5.1 U
Barr Calculated Comparison - Industrial																							
Exceedance Count	no unit		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazard Index	no unit		≤ 1.0		0.00028	0.00010	0.000095	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.000096	0.00014	0.00010	0.00010	0.00010	0.00013	0.00011	0.00010	0.000099	0.000098
Cumulative Cancer Risk	no unit		≤ 1E-0.5		1.30E-08	3.40E-09	3.20E-09	3.50E-09	3.50E-09	3.30E-09	3.50E-09	3.40E-09	3.50E-09	3.20E-09	4.60E-09	3.40E-09	3.30E-09	3.30E-09	4.20E-09	3.80E-09	3.40E-09	3.30E-09	3.30E-09
Barr Calculated Comparison -Non-Industrial																							
Exceedance Count	no unit			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazard Index	no unit			≤ 1.0	0.0014	0.00050	0.00047	0.00051	0.00051	0.00049	0.00051	0.00050	0.00051	0.00047	0.00067	0.00049	0.00049	0.00049	0.00062	0.00055	0.00050	0.00049	0.00048
Cumulative Cancer Risk	no unit			≤ 1E-05	5.60E-08	1.50E-08	1.40E-08	1.50E-08	1.50E-08	1.50E-08	1.50E-08	1.50E-08	1.50E-08	1.40E-08	2.00E-08	1.50E-08	1.50E-08	1.50E-08	1.90E-08	1.70E-08	1.50E-08	1.50E-08	1.40E-08

⁽¹⁾ Representing the criteria for combined Trimethylbenzenes.J Estimated detected value. Either certain QC criteria were not met or the concentration is between the laboratory's detection and quanitation limits.

U The analyte was analyzed for, but was not detected.

Table A.2.a Soil Analytical Results Table (2020) Nemadji Substation Phase II Investigation Superior, WI

				Laastian	OD 40	05.40	27.00	00.04	OD 04	00.00	00.00	00.00	00.04	00.05	OD 00	00.00	00.00	00.00	00.00	00.00	20.00
				Location	SB-18	SB-19	SB-20	SB-21	SB-21	SB-22	SB-22	SB-23	SB-24	SB-25	SB-26	SB-26	SB-27	SB-27	SB-28	SB-29	SB-29
				Date	1/07/2020	1/07/2020	1/07/2020	1/06/2020	1/06/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020
				Depth	6 - 8 ft	6 - 8 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft			
			Wisconsin Not to	Wisconsin Not to																	
		Wisconsin	Exceed Direct	Exceed Direct																	
		Groundwater	Contact Industrial	Contact Non-																	
Parameter	Units	RCLs, DF=2	RCLs	Industrial RCLs																	
Effective Date		12/01/2018	12/01/2018	12/01/2018																	
Exceedance Key		Bold	No Exceedances	No Exceedances																	
General Parameters																					
Moisture	%				27.2	24.5	25.7	24.8	25.2	24.3	25.2	23.4	23.6	34.5	25.5	29.5	25.8	26.4	27.1	24.0	29.3
Volatile Organic Compounds																					
1,2,4-Trimethylbenzene	mg/kg	1.3787 (1)	219	219	< 0.0138 U	< 0.0138 U	< 0.0132 U	< 0.0129 U	< 0.0136 U	< 0.0130 U	< 0.0132 U	< 0.0133 U	< 0.0132 U	< 0.0162 U	< 0.0139 U	< 0.0138 U	< 0.0131 U	< 0.0133 U	< 0.0131 U	< 0.0128 U	< 0.0137 U
1,3,5-Trimethylbenzene	mg/kg	1.3787 (1)	182	182	< 0.0110 U	< 0.0110 U	< 0.0105 U	< 0.0103 U	< 0.0108 U	< 0.0104 U	< 0.0105 U	< 0.0106 U	< 0.0106 U	< 0.0129 U	< 0.0111 U	< 0.0110 U	< 0.0104 U	< 0.0106 U	< 0.0104 U	< 0.0102 U	< 0.0109 U
Benzene	mg/kg	0.0051	7.07	1.6	< 0.0039 U	< 0.0039 U	< 0.0037 U	< 0.0036 U	< 0.0038 U	< 0.0037 U	< 0.0037 U	< 0.0037 U	< 0.0037 U	< 0.0046 U	< 0.0039 U	< 0.0039 U	< 0.0037 U	< 0.0038 U	< 0.0037 U	< 0.0036 U	< 0.0039 U
Ethyl benzene	mg/kg	1.57	35.4	8.02	< 0.0037 U	< 0.0037 U	< 0.0036 U	< 0.0035 U	< 0.0037 U	< 0.0035 U	< 0.0036 U	< 0.0036 U	< 0.0036 U	< 0.0044 U	< 0.0038 U	< 0.0038 U	< 0.0036 U	< 0.0036 U	< 0.0036 U	< 0.0035 U	< 0.0037 U
Methyl tertiary butyl ether (MTBE)	mg/kg	0.027	282	63.8	< 0.0082 U	< 0.0082 U	< 0.0078 U	< 0.0077 U	< 0.0081 U	< 0.0077 U	< 0.0078 U	< 0.0079 U	< 0.0079 U	< 0.0097 U	< 0.0083 U	< 0.0082 U	< 0.0078 U	< 0.0079 U	< 0.0078 U	< 0.0076 U	< 0.0082 U
Naphthalene	mg/kg	0.6582	24.1	5.52	< 0.0644 U	< 0.0644 U	< 0.0617 U	< 0.0605 U	< 0.0636 U	< 0.0609 U	< 0.0617 U	< 0.0621 U	< 0.0620 U	< 0.0759 U	< 0.0649 U	< 0.0647 U	< 0.0613 U	< 0.0624 U	< 0.0612 U	< 0.0600 U	< 0.0641 U
Toluene	mg/kg	1.1072	818	818	< 0.0168 U	< 0.0168 U	< 0.0161 U	< 0.0158 U	< 0.0166 U	< 0.0159 U	< 0.0161 U	< 0.0162 U	< 0.0162 U	< 0.0198 U	< 0.0169 U	< 0.0169 U	< 0.0160 U	< 0.0163 U	< 0.0160 U	< 0.0156 U	< 0.0167 U
Xylene, total	mg/kg	3.96	260	260	< 0.0160 U	< 0.0160 U	< 0.0153 U	< 0.0150 U	< 0.0158 U	< 0.0151 U	< 0.0153 U	< 0.0154 U	< 0.0154 U	< 0.0188 U	< 0.0161 U	< 0.0160 U	< 0.0152 U	< 0.0155 U	< 0.0152 U	< 0.0149 U	< 0.0159 U
Total Petroleum Hydrocarbons																					
Diesel Range Organics, C10-C28	mg/kg				< 5.1 U	< 5.0 U	< 4.9 U	< 6.0 U	< 4.9 U	< 4.5 U	< 5.6 U	< 4.4 U	< 4.9 U	15.5 J	< 4.8 U	< 5.3 U	< 5.0 U	< 4.8 U	< 5.1 U	14.0 J	< 5.3 U
Barr Calculated Comparison - Industrial																					
Exceedance Count	no unit		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazard Index	no unit		≤ 1.0		0.00010	0.00010	0.000096	0.000094	0.000099	0.000095	0.000096	0.000097	0.000096	0.00012	0.00010	0.00010	0.000095	0.000097	0.000095	0.000093	0.00010
Cumulative Cancer Risk	no unit		≤ 1E-0.5		3.40E-09	3.40E-09	3.20E-09	3.10E-09	3.30E-09	3.20E-09	3.20E-09	3.20E-09	3.20E-09	4.00E-09	3.40E-09	3.40E-09	3.20E-09	3.30E-09	3.20E-09	3.10E-09	3.30E-09
Barr Calculated Comparison -Non-Industrial																					
Exceedance Count	no unit			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazard Index	no unit			≤ 1.0	0.00049	0.00049	0.00047	0.00046	0.00049	0.00047	0.00047	0.00047	0.00047	0.00058	0.00050	0.00049	0.00047	0.00048	0.00047	0.00046	0.00049
Cumulative Cancer Risk	no unit			≤ 1E-05	1.50E-08	1.50E-08	1.40E-08	1.70E-08	1.50E-08	1.50E-08	1.40E-08	1.40E-08	1.40E-08	1.40E-08	1.50E-08						

Representing the criteria for combined Trimethylbenzenes.
 Estimated detected value. Either certain QC criteria were not met or the concentration is between the laboratory's detection and quanitation limits.

U The analyte was analyzed for, but was not detected.

Table A.2.b Soil Analytical Results Table (2018) Nemadji Substation Phase II Investigation Superior, WI

Location SB-1 SB-2 SB-2 SB-3 SB-3															
					Location				SB-2			SB-4	SB-4	SB-5	SB-5
					Date	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/22/2018	6/22/2018	6/22/2018	6/22/2018
					Depth	2 - 3 ft	12 - 13 ft	0 - 1 ft	6 - 7 ft	0 - 2 ft	8 - 9 ft	0 - 2 ft	6 - 7 ft	0 - 1 ft	8 - 9 ft
		\\/iooonoin	Wisconsin Not to	Wisconsin Not to	WDND										
Parameter	Units	Wisconsin Groundwater	Exceed Direct	Exceed Direct	WDNR Background										
i didilietei	Units	RCLs, DF=2	Contact Industrial	Contact Non-	Threshold Values										
		NOES, DI Z	RCLs	Industrial RCLs											
Effective Date		12/01/2018	12/01/2018	12/01/2018	12/01/2018										
Exceedance Key		Bold	<u>Underlined</u>	Italics	Reference Only										
General Parameters															
Moisture	%					27.6	35.3	20.3	24.5	24.5	31.6	26.7	29.4	23.3	28.1
Metals															
Arsenic	mg/kg	0.584	<u>3</u>	0.677	8	<u>3.1</u>	<u>3.8</u>	<u>3.0</u>	<u>3.3</u>	<u>3.5</u>	2.8	<u>3.0</u>	<u>3.0</u>	<u>5.1 J</u>	<u>3.4</u>
Barium	mg/kg	164.8	100000	15300 71.1	364 1	245	193	145	150	174	176	191	160	287	173
Changelium	mg/kg	0.752	985 100000 CR3	71.1 100000 CR3	•	< 0.075 U 49.6	< 0.082 U 42.9	< 0.065 U 37.0	< 0.070 U 39.5	< 0.069 U	0.11 J 42.6	< 0.071 U	0.097 J 39.4	0.56 J 1850	< 0.073 U 42.0
Chromium Lead	mg/kg	360000 27	800	400	44 52	10.5	9.5	7.6	8.1	41.7 9.0	7.8	48.6 9.1	7.7	88.2	8.4
	mg/kg	0.208	3.13	3.13	52	0.023 J	0.026 J	0.022 J	0.020 J	0.026 J	0.021 J	0.023 J	0.021 J	0.10	0.017 J
Mercury Selenium	mg/kg mg/kg	0.208	5840	391		0.023 J 0.56 J*	< 0.61 U	< 0.49 U	< 0.52 U	< 0.51 U	< 0.58 U	< 0.53 U	< 0.56 U	< 5.2 U	< 0.54 U
Silver	mg/kg	0.8491	5840	391		< 0.11 U	< 0.01 U	< 0.49 U	< 0.32 U	< 0.31 U	< 0.38 U	< 0.33 U	< 0.30 U	1.1 J	< 0.34 U
Semivolatile Organic Compounds	mg/kg	0.0731	0070	001		- 0.110	- 0.12 0	- 0.000 0	- 0.11 0	- 0.10 0	- 0.12 0	- 0.11 0	- 0.110		- 0.110
Acenaphthene	mg/kg		45200	3590		< 0.00056 U	< 0.00063 U	< 0.00051 LI	< 0.00054 U	< 0.0005411	< 0.00060 11	< 0.00056 11	< 0.0005811	0.0069	< 0.00057 U
Acenaphthylene	mg/kg		10200	0000			< 0.00076 U		< 0.00066 U						< 0.00069 U
Anthracene	mg/kg	196.9492	100000	17900			< 0.00072 U		< 0.00062 U				< 0.00066 U		< 0.00065 U
Benz(a)anthracene	mg/kg		20.8	1.14		< 0.0015 U			< 0.0014 U		< 0.0016 U	< 0.0015 U		0.0778	< 0.0015 U
Benzo(a)pyrene	mg/kg	0.47	2.11	0.115		< 0.00095 U	< 0.0011 U		< 0.00091 U		0.0012 J	< 0.00094 U	< 0.00097 U	0.128	< 0.00095 U
Benzo(b)fluoranthene	mg/kg	0.4781	21.1	1.15		0.0011 J	< 0.00057 U	< 0.00047 U	< 0.00049 U	< 0.00049 U	0.0022	< 0.00051 U	< 0.00053 U	0.162	< 0.00052 U
Benzo(g,h,i)perylene	mg/kg					< 0.00087 U	< 0.00097 U	< 0.00079 U	< 0.00084 U	< 0.00083 U	0.0023 J	< 0.00086 U	< 0.00090 U	0.116	< 0.00088 U
Benzo(k)fluoranthene	mg/kg		211	11.5		< 0.0012 U	< 0.0013 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	0.0022 J	< 0.0012 U	< 0.0012 U	0.0557	< 0.0012 U
Chrysene	mg/kg	0.1442	2110	115		< 0.0019 U	< 0.0021 U	< 0.0017 U	< 0.0018 U	< 0.0018 U	< 0.0020 U	< 0.0019 U	< 0.0019 U	0.0981	< 0.0019 U
Dibenz(a,h)anthracene	mg/kg		2.11	0.115		< 0.00064 U	< 0.00071 U	< 0.00058 U	< 0.00061 U	< 0.00061 U	0.0022 J	< 0.00063 U	< 0.00065 U	0.0325	< 0.00064 U
Fluoranthene	mg/kg	88.8778	30100	2390		0.0018 J	< 0.00066 U	< 0.00054 U	< 0.00057 U	< 0.00056 U	0.0019 J	< 0.00058 U	< 0.00061 U	0.0904	< 0.00059 U
Fluorene	mg/kg	14.8299	30100	2390		< 0.00043 U	< 0.00048 U	< 0.00039 U	< 0.00041 U	< 0.00041 U	< 0.00046 U	< 0.00043 U	< 0.00044 U	0.0025	< 0.00043 U
Indeno(1,2,3-cd)pyrene	mg/kg		21.1	1.15		< 0.00093 U			< 0.00089 U		0.0022 J	< 0.00091 U			< 0.00093 U
Naphthalene	mg/kg	0.6582	24.1	5.52		< 0.0011 U	< 0.0012 U	< 0.00097 U		< 0.0010 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	0.0043	< 0.0011 U
Phenanthrene	mg/kg					< 0.0027 U	< 0.0030 U	< 0.0024 U	< 0.0025 U	< 0.0025 U	< 0.0028 U	< 0.0026 U	< 0.0027 U	0.0391	< 0.0027 U
Pyrene	mg/kg	54.5455	22600	1790		< 0.0021 U	< 0.0024 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0022 U	< 0.0021 U	< 0.0022 U	0.0752	< 0.0021 U
Volatile Organic Compounds															
1,1,1-Trichloroethane	mg/kg	0.1402	640	640		< 0.0250 U			< 0.0250 U		< 0.0250 U	< 0.0250 U		< 0.0250 U	
1,1,2,2-Tetrachloroethane	mg/kg	0.0002	3.6	0.81		< 0.0250 U		< 0.0250 U							
1,1,2-Trichloroethane	mg/kg	0.0032	7.01	1.59		< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U		< 0.0250 U	< 0.0250 U		< 0.0250 U	
1,1-Dichloroethane	mg/kg	0.4834	22.2	5.06		< 0.0250 U			< 0.0250 U		< 0.0250 U			< 0.0250 U	
1,1-Dichloroethylene	mg/kg	0.005	1190 2.87	320 0.652		< 0.0250 U < 0.0250 U		< 0.0250 U < 0.0250 U							
1,2-Dichloroethane	mg/kg	0.0028 0.0412	2340	156		< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U		< 0.0250 U	< 0.0250 U		< 0.0250 U	
1,2-Dichloroethylene, cis 1,2-Dichloroethylene, trans	mg/kg	0.0412	1850	1560		< 0.0250 U		< 0.0250 U							
1,2-Dichloropethylene, trans	mg/kg mg/kg	0.0626	15	3.4		< 0.0250 U		< 0.0250 U							
1,3-Dichloropropene, cis	mg/kg	0.0000	1210	1210		< 0.0250 U		< 0.0250 U							
1,3-Dichloropropene, cis	mg/kg		1510	1510		< 0.0250 U		< 0.0250 U							
2-Hexanone	mg/kg		1760	237		< 0.0520 U		< 0.0520 U		< 0.0520 U					
Acetone	mg/kg	3.6766	100000	63400		< 0.0320 U		< 0.0320 U							
Benzene	mg/kg	0.0051	7.07	1.6		< 0.0250 U		< 0.0250 U							
Bromodichloromethane	mg/kg	0.0003	1.83	0.418		< 0.0250 U		< 0.0250 U							
Bromoform	mg/kg	0.0023	113	25.4		< 0.0250 U		< 0.0250 U							
Bromomethane	mg/kg	0.0051	43	9.6		< 0.0699 U		< 0.0699 U							
Carbon disulfide	mg/kg	0.5919	738	738		< 0.0250 U		< 0.0250 U							
Carbon tetrachloride	mg/kg	0.0039	4.03	0.916		< 0.0250 U		< 0.0250 U		< 0.0250 U					
Chlorobenzene	mg/kg	0.1358	761	370		< 0.0250 U		< 0.0250 U							
Chlorodibromomethane	mg/kg	0.032	38.9	8.28		< 0.0250 U		< 0.0250 U							
Chloroethane	mg/kg	0.2266	2120	2120		< 0.0670 U	< 0.0670 U	< 0.0670 U	< 0.0670 U						
Chloroform	mg/kg	0.0033	1.98	0.454		< 0.0464 U	< 0.0464 U	< 0.0464 U	< 0.0464 U						
Chloromethane	mg/kg	0.0155	669	159		< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U						
Ethyl benzene	mg/kg	1.57	35.4	8.02		< 0.0250 U	< 0.025011	< 0.0250 U	< 0.0250 U						
	99		00.1	0.02		V 0.0230 O	₹ 0.0230 0	0.0200	10.0200 0	1 0.0200 0	10.0200	0.0200	V 0.0230 O	0.0200	

Table A.2.b Soil Analytical Results Table (2018) Nemadji Substation Phase II Investigation Superior, WI

					Location	SB-1	SB-1	SB-2	SB-2	SB-3	SB-3	SB-4	SB-4	SB-5	SB-5
					Date	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/22/2018	6/22/2018	6/22/2018	6/22/2018
					Depth	2 - 3 ft	12 - 13 ft	0 - 1 ft	6 - 7 ft	0 - 2 ft	8 - 9 ft	0 - 2 ft	6 - 7 ft	0 - 1 ft	8 - 9 ft
Parameter	Units	Wisconsin Groundwater RCLs, DF=2	Wisconsin Not to Exceed Direct Contact Industrial RCLs	Wisconsin Not to Exceed Direct Contact Non- Industrial RCLs	WDNR Background Threshold Values										
Effective Date		12/01/2018	12/01/2018	12/01/2018	12/01/2018										
Exceedance Key		Bold	<u>Underline</u>	Italics	Reference Only										
Methyl isobutyl ketone (MIBK)	mg/kg	0.2252	3360	3360		< 0.0411 U				< 0.0411 U	< 0.0411 U	< 0.0411 U	< 0.0411 U		
Methyl tertiary butyl ether (MTBE)	mg/kg	0.027	282	63.8		< 0.0250 U									
Methylene chloride	mg/kg	0.0026	1150	61.8		< 0.0250 U									
Styrene	mg/kg	0.22	867	867		< 0.0250 U									
Tetrachloroethylene	mg/kg	0.0045	145	33		< 0.0250 U									
Toluene	mg/kg	1.1072	818	818		< 0.0250 U	0.0388 J	< 0.0250 U							
Trichloroethylene (TCE)	mg/kg	0.0036	8.41	1.3		< 0.0250 U									
Vinyl chloride	mg/kg	0.0001	2.08	0.067		< 0.0250 U									
Xylene, m & p	mg/kg	3.96 XYL	260 XYL	260 XYL		< 0.0500 U									
Xylene, o	mg/kg	3.96 XYL	434	434		< 0.0250 U									
Xylene, total (Barr Calculation)	mg/kg	3.96	260	260		ND									
Barr Calculated Comparison - Industrial ¹															
Exceedance Count	no unit		0			0	0	0	0	0	0	0	0	0	0
Hazard Index	no unit		≤ 1.0			0.0065	0.0066	0.0065	0.0065	0.0066	0.0065	0.0065	0.0065	0.12	0.0064
Cumulative Cancer Risk	no unit		≤ 1E-0.5			8.70E-08	8.70E-08	8.70E-08	8.70E-08	8.70E-08	8.80E-08	8.70E-08	8.70E-08	1.80E-07	8.70E-08
Barr Calculated Comparison - Non-Industrial ¹															
Exceedance Count	no unit			0		0	0	0	0	0	0	0	0	1	0
Hazard Index	no unit			≤ 1.0		0.031	0.031	0.03	0.03	0.031	0.031	0.031	0.03	0.29	0.03
Cumulative Cancer Risk	no unit			≤ 1E-05		7.20E-07	7.20E-07	7.20E-07	7.20E-07	7.20E-07	7.40E-07	7.20E-07	7.20E-07	2.40E-06	7.20E-07

¹ Comparision calculated using the reported value for Xylene, m & p in replace for "Xylenes" and the reported value for Chromium in replace of "Chromium(III), Insoluble Salts" in the RCL calculator

CR3 Value represents the criteria for Chromium(III).

ND Not detected.

XYL Value represents the criteria for Xylene, total (m-,o-,p- combined).

^{*} Estimated value, QA/QC criteria not met.

J Estimated detected value. Either certain QC criteria were not met or the concentration is between the laboratory's detection and quanitation limits.

U The analyte was analyzed for, but was not detected.

Table A.3 Residual Soil Contamination Table (2020) Nemadji Substation Phase II Investigation Superior, WI

				Location	SB-6	SB-8	SB-10	SB-11	SB-14	SB-16	SB-25	SB-29
				Date	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/07/2020	1/07/2020
				Depth	1.5 - 2 ft	2 - 4 ft	1 - 2 ft	2 - 4 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	2 - 4 ft
			Wisconsin Not to	Wisconsin Not to								
		Wisconsin	Exceed Direct	Exceed Direct								
		Groundwater	Contact Industrial	Contact Non-								
Parameter	Units	RCLs, DF=2	RCLs	Industrial RCLs								
Effective Date		06/01/2018	06/01/2018	06/01/2018								
Exceedance Key		Bold	No Exceedances	No Exceedances								
Volatile Organic Compounds												
Benzene	mg/kg	0.0051	7.07	1.6	0.0399	< 0.0040 U	< 0.0037 U	< 0.0053 U	< 0.0049 U	< 0.0039 U	< 0.0046 U	< 0.0036 U
Naphthalene	mg/kg	0.6582	24.1	5.52	0.166 J	< 0.0663 U	< 0.0615 U	< 0.0884 U	< 0.0812 U	< 0.0652 U	< 0.0759 U	< 0.0600 U
Toluene	mg/kg	1.1072	818	818	0.0512 J	< 0.0173 U	< 0.0160 U	< 0.0230 U	< 0.0212 U	< 0.0170 U	< 0.0198 U	< 0.0156 U
Total Petroleum Hydrocarbons												
Diesel Range Organics, C10-C28	mg/kg				23.6	8.2 J	121 J	19.5 J	6.0 J	26.5	15.5 J	14.0 J
Barr Calculated Comparison - Industrial												
Exceedance Count	no unit		0		0	0	0	0	0	0	0	0
Hazard Index	no unit		≤ 1.0		0.00028	0.00010	0.000096	0.00014	0.00013	0.00010	0.00012	0.000093
Cumulative Cancer Risk	no unit		≤ 1E-0.5		1.30E-08	3.50E-09	3.20E-09	4.60E-09	4.20E-09	3.40E-09	4.00E-09	3.10E-09
Barr Calculated Comparison -Non-Industrial												
Exceedance Count	no unit			0	0	0	0	0	0	0	0	0
Hazard Index	no unit			≤ 1.0	0.0014	0.00051	0.00047	0.00067	0.00062	0.00050	0.00058	0.00046
Cumulative Cancer Risk	no unit			≤ 1E-05	5.60E-08	1.50E-08	1.40E-08	2.00E-08	1.90E-08	1.50E-08	1.70E-08	1.40E-08

J Estimated detected value. Either certain QC criteria were not met or the concentration is between the laboratory's detection and quanitation limits.

DF Dilution Factor.

RCLs Residual Contaminant Levels.

U The analyte was analyzed for, but was not detected.

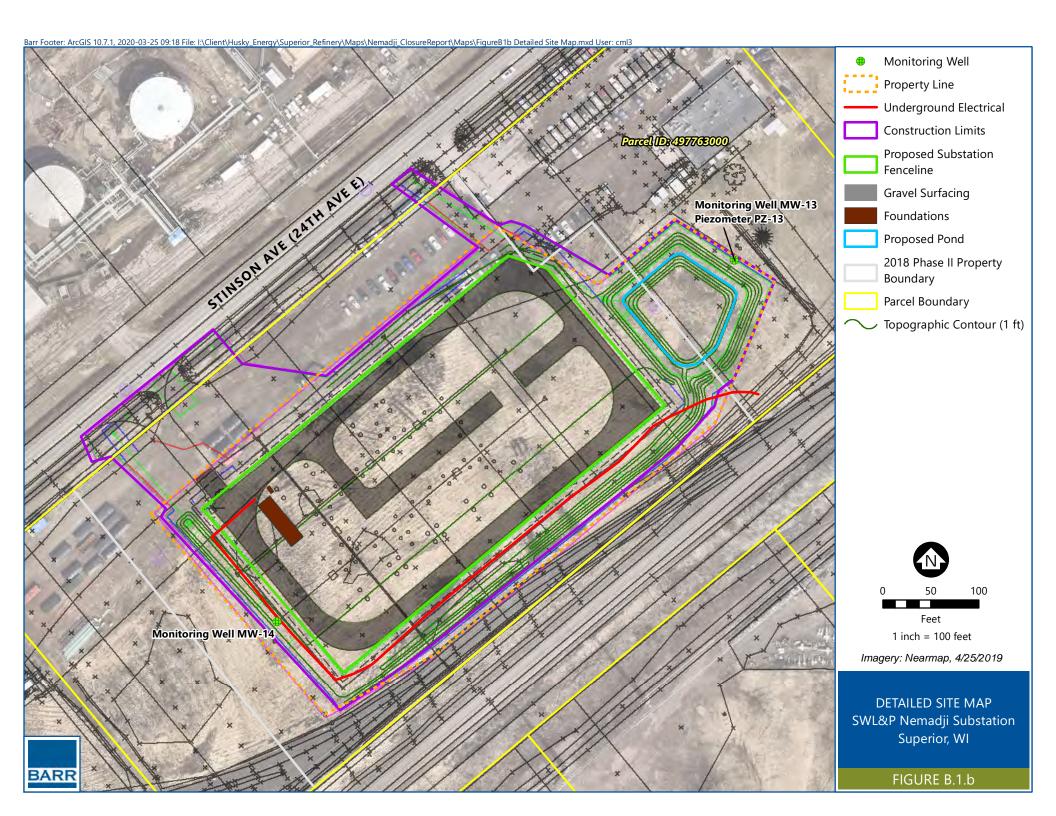
Table A.3.b Residual Soil Contamination Table (2018) nemadji Substation Phase II Investigation Superior, WI

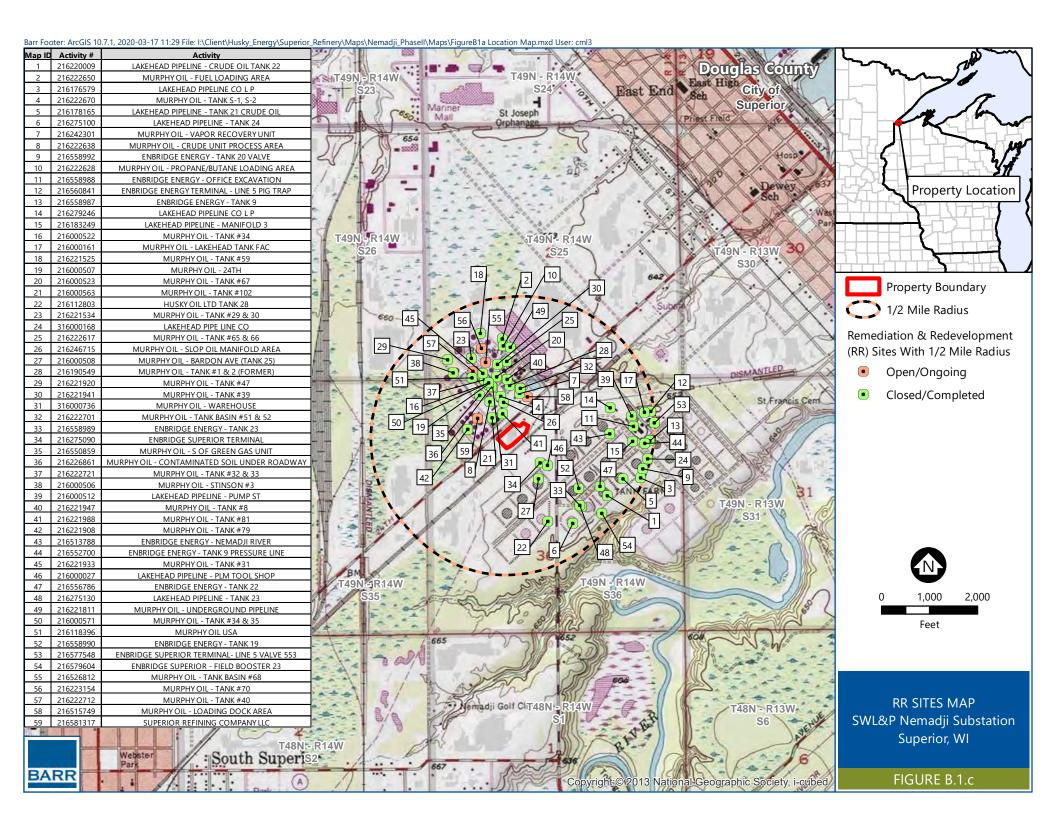
				•	superior,	VVI								
				Location	SB-1	SB-1	SB-2	SB-2	SB-3	SB-3	SB-4	SB-4	SB-5	SB-5
				Date	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/22/2018	6/22/2018	6/22/2018	6/22/2018
				Depth		12 - 13 ft	0 - 1 ft	6 - 7 ft	0 - 2 ft	8 - 9 ft	0 - 2 ft	6 - 7 ft	0 - 1 ft	8 - 9 ft
	1 1	Wisconsin Not	Wisconsin Not to	WDNR	2 - 3 10	12 - 13 10	0 - 110	0 - 7 10	0 - 2 10	0-310	0 - Z It	0 - 7 10	0 - 110	0-310
		to Exceed	Exceed Non-	Background										
Parameter	Units	Industrial RCLs	Industrial RCLs	Threshold Values										
Effective Date	Units	06/01/2018	06/01/2018	06/01/2018										
Exceedance Kev		Underlined	Italics	Reference Only										
General Parameters		Orideriiried	rianos	Reference Only										
Moisture	%				27.6	35.3	20.3	24.5	24.5	31.6	26.7	29.4	23.3	28.1
Metals	/0				21.0	33.3	20.3	24.5	24.5	31.0	20.7	25.4	23.3	20.1
Mercury	malka	3.13	3.13		0.023 j	0.026 j	0.022 j	0.020 j	0.026 j	0.021 j	0.023 j	0.021 j	0.10	0.017 j
Arsenic	mg/kg mg/kg	3.13	0.677	8	3.1	3.8	3.0	3.3	3.5	2.8	3.0	3.0	5.1 j	3.4
Barium	mg/kg	100000	15300	364	3. <i>1</i> 245	<u>3.8</u> 193	3.0 145	<u>3.3</u> 150	3.5 174	176	191	160	287	173
Cadmium	mg/kg	985	71.1	1						0.11 j		0.097 j	0.56 j	
Chromium	mg/kg	100000 CR3	100000 CR3	44	49.6	42.9	37.0	39.5	41.7	42.6	48.6	39.4	1850	42.0
Lead	mg/kg	800	400	52	10.5	9.5	7.6	8.1	9.0	7.8	9.1	7.7	88.2	8.4
Selenium	mg/kg	5840	391	52	0.56 j	9.0 	7.0		3.0	7.0	J. 1			
Silver	mg/kg	5840	391		0.50 j 								1.1 j	
Semivolatile Organic Compounds	ilig/kg	3040	331										1.1]	
Acenaphthene	ug/kg	45200000	3590000										6.9	
Acenaphthylene	ug/kg	43200000	3330000									-	3.4	
Anthracene	ug/kg	100000000	17900000										11.0	
Benz(a)anthracene	ug/kg	20800	1140									-	77.8	
Benzo(a)pyrene	ug/kg	2110	115							1.2 j		-	128	
Benzo(b)fluoranthene	ug/kg	21100	1150		1.1 i					2.2			162	
Benzo(g,h,i)perylene	ug/kg	21100	1100							2.3 j			116	
Benzo(k)fluoranthene	ug/kg	211000	11500							2.2 j			55.7	
Chrysene	ug/kg	2110000	115000										98.1	
Dibenz(a,h)anthracene	ug/kg	2110	115							2.2 j			32.5	
Fluoranthene	ug/kg	30100000	2390000		1.8 i					1.9 j			90.4	
Fluorene	ug/kg	30100000	2390000										2.5	
Indeno(1,2,3-cd)pyrene	ug/kg	21100	1150							2.2 j			94.4	
Naphthalene	ug/kg	24100	5520										4.3	
Phenanthrene	ug/kg												39.1	
Pyrene	ug/kg	22600000	1790000										75.2	
Volatile Organic Compounds **	3.3												-	
Toluene	ug/kg	818000	818000										38.8 j	
Barr Calculated Comparison - Non-Industria		0.000	0.0000										55.5]	
Exceedance Count	no unit	0	0		0	0	0	0	0	0	0	0	1	0
ZASSSGGSO GOGIN	. IO GITIE	<u> </u>	<u> </u>				·	Ü	Ŭ	Ŭ	, ,		-	Ŭ

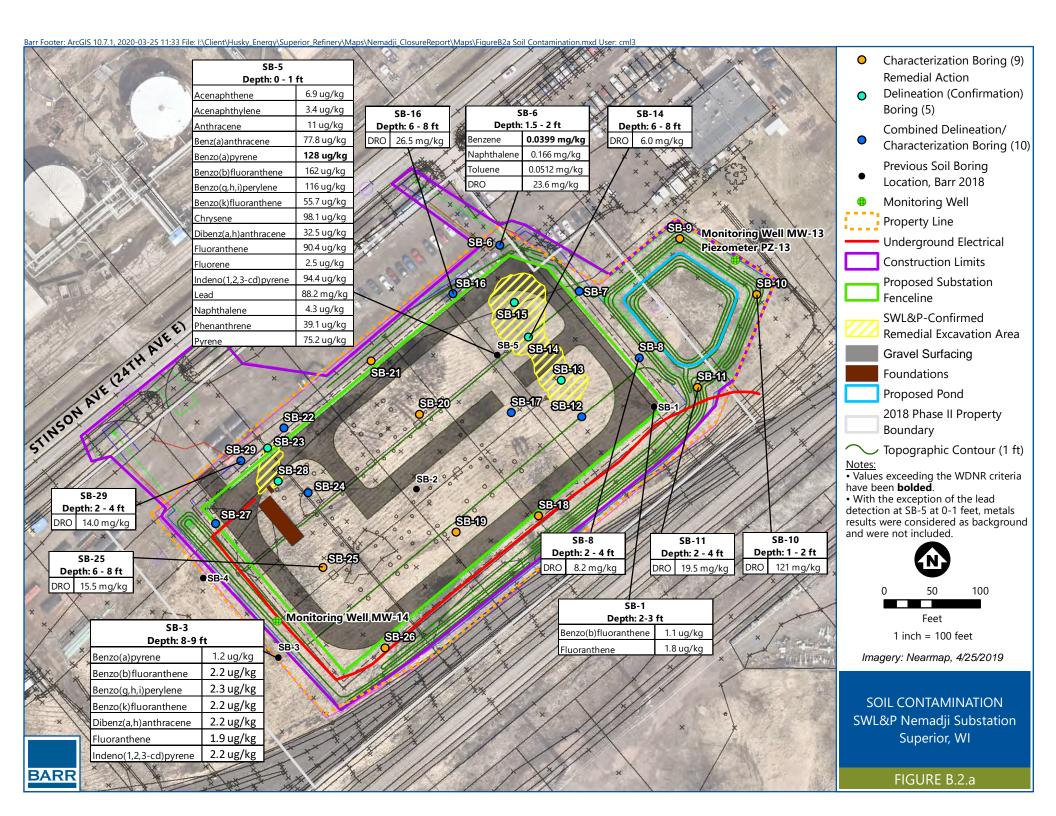
Note
** Non-detect VOC compounds reported on a wet weight basis per WIDNR

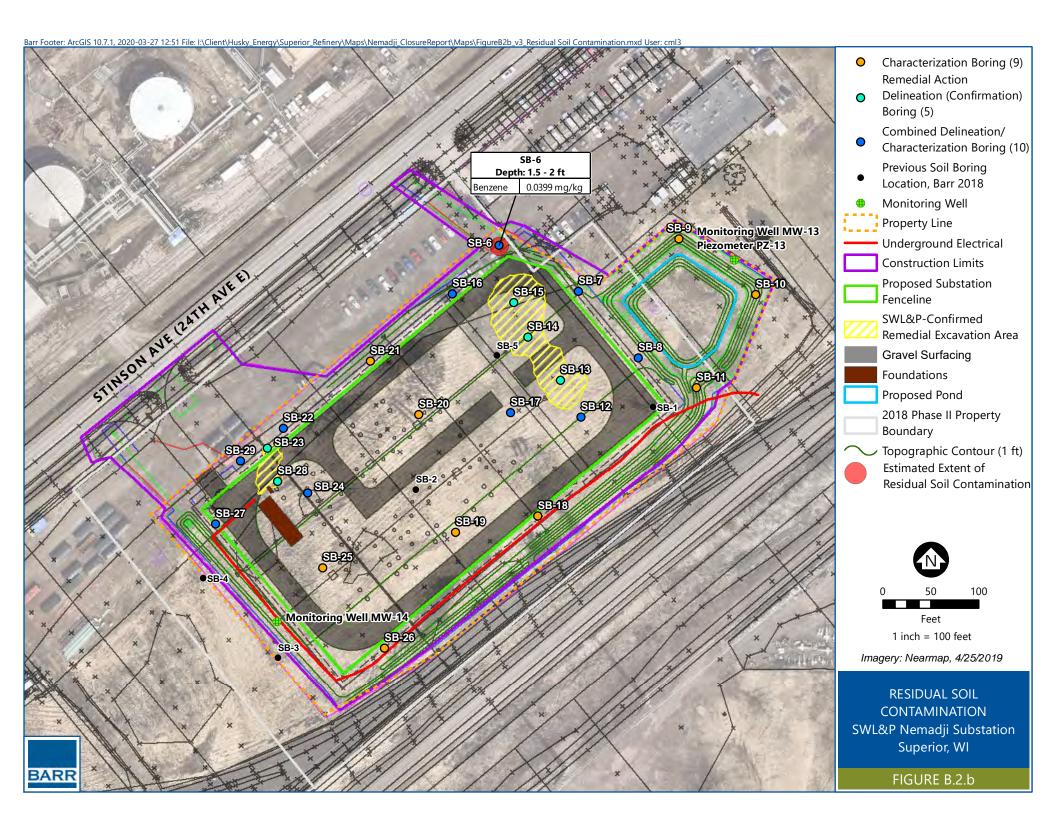
Attachment B – Maps, Figures, and Photos

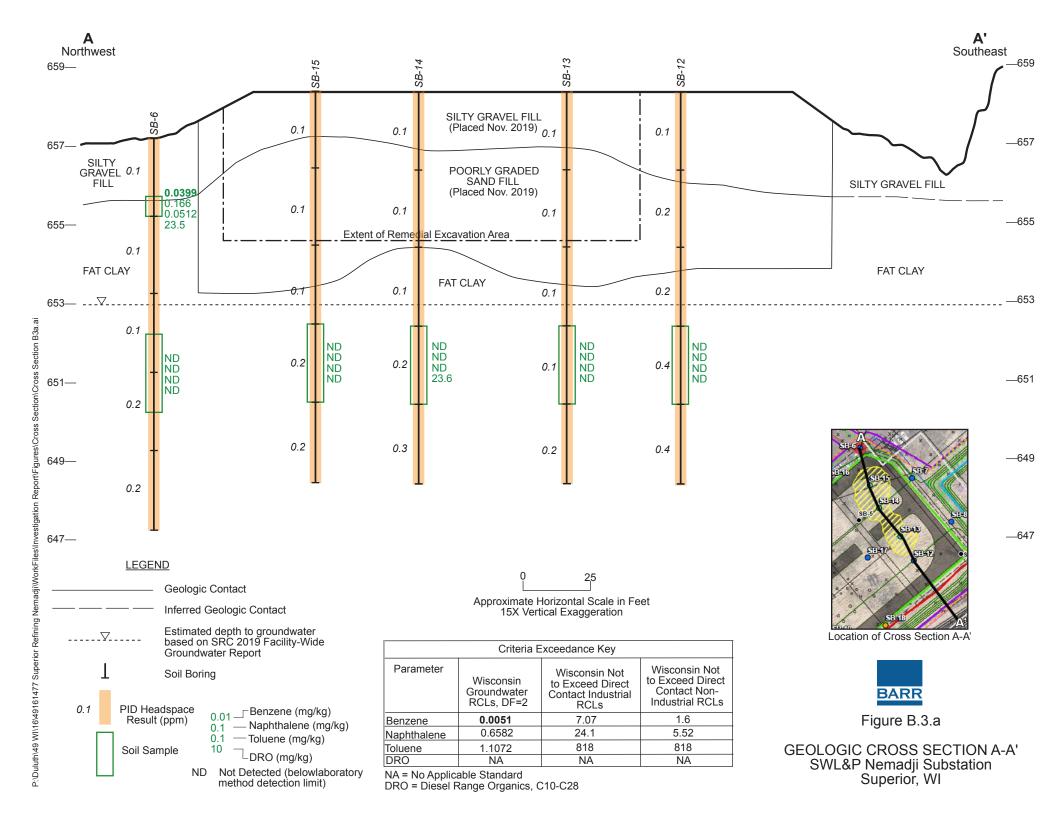
- **B.1** Location Maps
- **B.2** Soil Figures
- **B.3** Groundwater Figures
- B.4 Vapor Maps and Other Media (Not Applicable)
- **B.5** Structural Impediment Photos (Not Applicable)

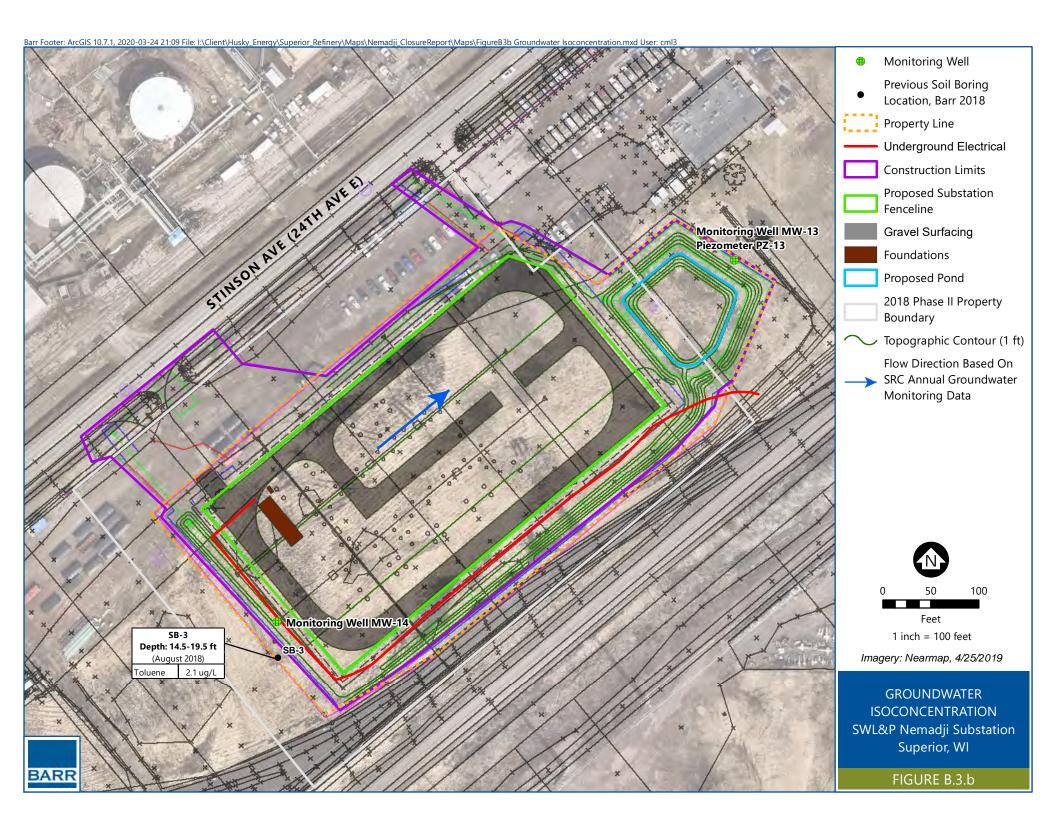












Attachment C - Documentation of Remedial Action

- C.1 Site Investigation Documentation
- C.2 Investigative Waste
- C.3 Description of the Methodology (Not Applicable)*
- C.4 Construction Documentation (Not Applicable)*
- C.5 Decommissioning of Remedial System (Not Applicable)*
- C.6 Other (Not Applicable)

^{*}Remedial action was not implemented at the site

C.1 – Site Investigation Documentation

SWL&P Nemadji Substation Limited Phase III Investigation Results

Technical Memorandum

To: John Sager, Wisconsin Department of Natural ResourcesFrom: Lynette Carney and Christina Sehrt, Barr Engineering Co.Subject: SWL&P Nemadji Substation Phase III Investigation Results

Date: March 26, 2020 **Project**: 49161477.00 **BRRTS No**.02-16-585474

c: Mark Darby, Superior Refining Company LLC

Barr Engineering Co. (Barr) was retained by Superior Refining Company LLC (SRC) to complete a Phase III Investigation of a property owned by SRC and leased to Superior Water, Light & Power (SWL&P) for the construction and operation of a new electrical substation (Nemadji Substation). The property is located at 2407 Stinson Ave, Superior, Wisconsin in the NW ¼ of Section 36, T49N, R14W (Property). The Property location is shown on Figure 1.

A Phase I Environmental Site Assessment and a Phase II Investigation were completed by Barr in 2018 to characterize soil and groundwater and to assess baseline conditions at the Property prior to leasing. Field screening and laboratory analytical results from five soil borings completed in 2018 did not identify soil or groundwater conditions that required further action prior to development of the site. The 2018 Phase II Investigation Report is included as Attachment A.

In November 2019, as part of the Nemadji Substation site development, SWL&P excavated the majority of the site to a depth of 3-4 feet for the placement of engineered fill. During earthwork activities, SWL&P encountered hydrocarbon contaminated soil in two separate locations (Figure 2). According to SWL&P, approximately 1,000 tons of hydrocarbon contaminated soil encountered within the extent of their construction footprint was segregated, characterized and transported off-site for disposal at Shamrock Landfill. Field screening was not performed and analytical confirmation samples were not collected from the excavation extent to document remaining site conditions.

Phase III Project Objectives

The objectives of this Phase III investigation are to evaluate the condition of remaining soils beneath and surrounding SWL&P's hydrocarbon contaminated soil excavations, to supplement the site characterization data collected during the 2018 investigation, and to document final site conditions at the Property under the requirements of NR 716.15.

This report summarizes the results, opinions, and conclusions of the Phase III Investigation. Descriptions of the Property background, investigation activities, sample locations and analytical results are summarized below. Additional background information is included in the 2018 Phase II Investigation Results Report (Attachment A).

To: John Sager, Wisconsin Department of Natural Resources
 From: Lynette Carney and Christina Sehrt, Barr Engineering Co.
 Subject: SWL&P Nemadji Substation Phase III Investigation Results

Date: March 26, 2020

Page: 2

General Information

Figure 1 provides a location map showing the SWL&P Nemadji Substation and the surrounding area using the USGS 7.5-minute topographic map.

Site Information: BRRTs Number: 02-16-585474

Facility Identification Numbers: 816009590

Superior Refining Company LLC

2407 Stinson Avenue Superior, Wisconsin

Douglas County, Wisconsin

NW 1/4 of Section 36, T49N, R14W

Latitude / Longitude: 46.68842 / -92.06988 (Site Center) WTM91 Coordinates: X: 361726, Y: 692621 (Site Center)

Responsible Party: Superior Refining Company LLC

Attn: Mark Darby, Environmental Manager

2407 Stinson Avenue Superior, WI 54880 Phone: (715) 398-8453

Email: mark.darby@huskyenergy.com

Environmental Consultant: Barr Engineering Co.

Attn: Lynette Carney, Project Manager 325 South Lake Avenue, Suite 700

Duluth, MN 55802 Phone: (218) 529-7141 Email: lcarney@barr.com

Physical Setting

The Property consists of approximately 5.18 acres located in an area between the operating Superior Refinery and a large pipeline terminal facility as shown on Figure 1. The Property is currently leased to SWL&P for construction of an electrical substation.

Topography of the Property is relatively flat, with a gentle slope down to the east. The property is underlain by clayey till and glaciolacustrine sediment planed by waves of proglacial Lake Duluth (Clayton, 1985). Based on facility-wide groundwater monitoring at the refinery, which includes groundwater monitoring wells located on and near the Property, shallow groundwater flow direction at the Property is to the northeast towards Newton Creek, ultimately discharging into Lake Superior approximately 1.7 miles northeast of the Property. Groundwater is typically encountered at less than 10 feet below ground surface (bgs) with estimated groundwater flow velocity of 0.4 cm/year (or 0.013 feet per year) (Gannett Fleming, 2014).

To: John Sager, Wisconsin Department of Natural Resources From: Lynette Carney and Christina Sehrt, Barr Engineering Co. Subject: SWL&P Nemadji Substation Phase III Investigation Results

Date: March 26, 2020

Page: 3

The Property is accessible via Stinson Avenue (24th Avenue East) and an approximately 80-foot-wide gravel parking lot/equipment laydown area is located along the northwest Property boundary. Historically the Property has been used as a storage/laydown area associated with the adjacent refinery. A warehouse was previously located on the Property and has since been demolished.

The current use of adjoining properties includes Superior Refinery to the north/northwest, unoccupied grassy/forested land and rail lines to the southwest, Superior Refinery laboratory building and grassy area to the east/northeast, and rail lines and a petroleum pipeline terminal facility to the south/southeast.

Investigation Activities

On December 19, 2019, Barr submitted a *Site Investigation Work Plan* (Work Plan) to the Wisconsin Department of Natural Resources (WDNR), which included rationale for boring placement, sampling and analysis, and additional investigation details. The Work Plan is provided in Attachment B.

The investigation approach was developed to define the extent of remaining contamination, if any, associated with the November 2019 excavation activities and to further characterize site conditions to obtain baseline information of the Property. A total of fifteen "remedial action delineation" borings were advanced to evaluate the effectiveness of the remedial excavation efforts performed by SWL&P. Nine additional "site characterization" borings were advanced across the site to further assess baseline conditions at the Property following completion of the remedial activities.

On January 6 and 7, 2020, Barr and its subcontractor, Twin Ports Testing (TPT), advanced a total of 24 direct-push borings (SB-6 through SB-29) to depths of 10 feet bgs at the locations shown on Figure 2. The boring locations were selected based on site features and previous 2018 Phase II boring locations, as summarized in the Work Plan. Photographs capturing site conditions during the Phase III Investigation are included in Attachment C.

One or two representative soil samples collected from each soil boring were submitted for laboratory analyses. Where possible, one sample was collected from 2-4 feet bgs to intersect remaining native soils below the Nemadji Substation construction fill and one from 6-8 feet bgs. Soil samples were field-screened for organic vapors using headspace sample screening procedures as per the Work Plan. Additional evidence of contamination such as staining, odor, discoloration, and sheen was documented in the field at each location. Soils were described according to ASTM D-2488, *Standard Practice for Description and Identification of Soils (Visual/Manual Method)*. Boring locations were surveyed using global positioning system (GPS) equipment. Soil boring logs are provided in Attachment D.

Soil borings SB-18 and SB-26 were offset 16 and 15 feet, respectively, from the original locations identified in the Work Plan to avoid drilling through unfrozen standing water contained by the berm at the Property's edge. The borings were offset perpendicular to the Property fence where the ground was confirmed to be solid.

To: John Sager, Wisconsin Department of Natural Resources From: Lynette Carney and Christina Sehrt, Barr Engineering Co. Subject: SWL&P Nemadji Substation Phase III Investigation Results

Date: March 26, 2020

Page: 4

Barr submitted soil samples to Pace Analytical Laboratories (PACE) in Minneapolis, Minnesota for analysis of the following:

- petroleum volatile organic compounds (PVOCs) and naphthalene by method EPA 8260B
- diesel range organic compounds (DRO) by method WI MOD DRO 8015D (C10-C28)

Soil analytical results were compared to WDNR generic residual contaminant level (RCL) criteria for the direct contact and groundwater pathways.

Phase III Investigation Results

Soil boring stratigraphy generally consisted of one to two feet of silty gravel and/or poorly graded sand fill material overlying fat clay. The fill materials encountered were placed during the site development for the Nemadji Substation. The native fat clay was typically of high plasticity, stiff consistency, moist, and red-brown in color. Headspace sample organic vapor screening in the field, including background, produced total headspace readings less than 2.5 parts per million (ppm) across the Property. Headspace readings for all samples can be found in Table 1. There was no staining, odor, discoloration, sheen or other indications of contamination observed in the field, except in soil borings SB-6 and SB-10.

Soil boring SB-6 is located north of the main remedial excavation area and had discoloration and a faint odor in the 1.5-2 foot interval. Soil boring SB-10 is located at the northeast edge of the Property and had slag-like material in the 0.6-2 foot interval. Borings were advanced eight feet past the deepest observed impact and soil samples were collect from the interval where potential impacts were observed or anticipated and from a lower interval beneath the potential impact zone.

Tables 2 and 3 summarize the soil samples collected, analyses performed, and analytical results. Table 2 presents the analytical results for samples with detections of compounds at concentrations equal to or greater than laboratory method detection limits (MDLs). Included for comparison are the generic RCLs developed by the WDNR according to the procedures in NR 720.10 and NR 720.12, Wis. Adm. Code for the groundwater pathway and direct contact pathway.

Table 3 presents all analytical results, including those results below the MDLs. Copies of the laboratory analytical reports are included in Attachment E. The following provides a summary of the soil analytical laboratory results.

PVOCs + Naphthalene

Benzene was detected in one soil sample from soil boring SB-6 (1.5-2 feet) at a concentration of 0.4 milligrams per kilogram (mg/kg) and is the only compound and the only sample that exceeded a WDNR groundwater RCL. Naphthalene and toluene were also detected in soil boring SB-6 (1.5-2 feet), but concentrations were below the laboratory practical quantitation limit (PQL). The direct contract RCL was not exceeded by any compounds.

To: John Sager, Wisconsin Department of Natural Resources From: Lynette Carney and Christina Sehrt, Barr Engineering Co. Subject: SWL&P Nemadji Substation Phase III Investigation Results

Date: March 26, 2020

Page: 5

DRO

DRO was detected in the following soil samples: SB-6 (1.5-2 feet), SB-8 (2-4 feet), SB-10 (1-2 feet), SB-11 (2-4 feet), SB-14 (6-8 feet), SB-16 (6-8 feet), SB-25 (6-8 feet), and SB-29 (2-4 feet). The only detections reported above the laboratory PQL were SB-6 (1.5-2 feet) with a concentration of 23.6 parts per million (ppm and SB-16 (6-8 feet) with a concentration of 26.5 ppm. A DRO concentration of 121 ppm was reported (but below the PQL) in sample SB-10 (1-2 feet). Although the WDNR does not have RCL criteria for DRO, these samples were collected as an additional screening tool and to support landfill soil characterization sampling requirements should additional soil remediation be required.

Cumulative

The combined PVOC + Naphthalene detections for each sample interval were also compared to the WDNR cumulative direct contract hazard index. No samples exceeded the Hazard Index or Cumulative Cancer Risk Sample standards.

Quality Assurance and Quality Control

The sample results were reviewed in accordance with Barr's standard operating procedures for organic data review. Sample results greater than the MDL and below the PQL are flagged with a "J" indicating estimated concentrations. The non-detect concentrations are presented as "<MDL" in the data tables. Sample SB-10 (1-2 feet) was analyzed at a 10 times dilution which yielded a J-flagged result at 121 mg/kg for DRO because the result was detected above the MDL and below the PQL. The remaining DRO and PVOC + Naphthalene samples analyzed during this soil investigation were not diluted. Samples SB-11 (2-4 feet), SB-10 (1-2 feet) and SB-6 (1.5-2 feet) had high boiling point hydrocarbons present in the sample.

The method, trip and field blank samples had no detections of target analytes above the laboratory reporting limits. The quality control samples (e.g. laboratory control sample, laboratory control sample duplicate, matrix spike, matric spike duplicate, surrogate spike, and laboratory duplicate samples) were within the laboratory established limits for accuracy and precision with the following notable exceptions. One laboratory control sample/laboratory control sample duplicate relative percent difference exceeded the laboratory acceptance limit for DRO; however, no results were qualified because the associated spike recoveries displayed acceptable accuracy.

The laboratory analytical data were evaluated for quality assurance/quality control purposes and were determined to be acceptable for the evaluation conducted for this Phase III Investigation. Qualifiers, as appropriate, were added to the data as indicated in the comprehensive data tables.

Phase III Investigation Conclusions

Based on the proposed land use, native soil types, groundwater flow rate, and result comparisons to the WDNR risk-based Industrial, Non-Industrial and Groundwater RCLs, the isolated low concentrations of compounds detected in site soil samples do not appear to present a risk to human health or the environment.

To: John Sager, Wisconsin Department of Natural Resources
 From: Lynette Carney and Christina Sehrt, Barr Engineering Co.
 Subject: SWL&P Nemadji Substation Phase III Investigation Results

Date: March 26, 2020

Page: 6

Recommendation

Additional investigation or remedial actions are not necessary to further delineate or remediate the soil impacts encountered by SWL&P. It is recommended that SRC submit a Case Closure Request for this Property for consideration by the WDNR Closure Committee.

Limitations

The scope of this Phase III Investigation was intended to evaluate the areas of contaminated soil identified during construction activities in 2019 and to further assess the Property for the presence of petroleum-related contaminants. Laboratory analysis were performed for those parameters which were identified as potential contaminants prior to conducting this investigation.

Attachments

Table 1 Headspace Screening Summary

Table 2 Soil Analytical Summary – Detected Values Only

Table 3 Soil Analytical Summary - All Results

Figure 1 Property Location Map

Figure 2 Soil Boring Locations

Attachment A 2018 Phase II Investigation Report (with sub-Attachments)

Attachment B 2019 Site Investigation Work Plan

Attachment C 2020 Phase III Investigation Representative Photographs

Attachment D 2020 Phase III Investigation Soil Boring Logs

Attachment E 2020 Phase III Investigation Soil Laboratory Analytical Reports

To: John Sager, Wisconsin Department of Natural Resources
 From: Lynette Carney and Christina Sehrt, Barr Engineering Co.
 Subject: SWL&P Nemadji Substation Phase III Investigation Results

Date: March 26, 2020

Page:

References

ASTM, 2009. *D-2488-09a, Standard Practice for Description and Identification of Soils* (*Visual/Manual Method*) ASTM International, West Conshohocken, PA; 2009.

Clayton, Lee, 1985. *Pleistocene Geology of the Superior Region, Wisconsin*, Wisconsin Geological and Natural History Survey Information Circular 46, Plate 1; 1985.

Gannett Fleming, 2014. Final Site Investigation and Remedial Action Plan, Calumet Superior LLC Refinery, Superior, Wisconsin, prepared for Calumet Superior LLC; April 30, 2014.

Tables

Table 1 Headspace Screening Summary (PID Headspace Readings) Nemadji Substation Phase III Investigation Superior, WI

Location Depth (feet)	SB-6	SB-7	SB-8	SB-9	SB-10	SB-11	SB-12	SB-13	SB-14	SB-15	SB-16	SB-17	SB-18	SB-19	SB-20	SB-21	SB-22	SB-23	SB-24	SB-25	SB-26	SB-27	SB-28	SB-29
0-2	0.1 ¹	0.4	0.1	0.3	0.6 ²	0.1	0.1	0.1	0.1	0.1	0.4	0.2	0.7	0.6	0.3	0.4	0.4	0.1	0.6	0.9	1.0	1.2	0.6	0.9
2-4	0.1	0.4	0.4	0.3	0.7	0.3	0.2	0.1	0.1	0.1	0.5	0.3	1.0	0.7	0.4	0.3	0.4	0.1	0.7	1.1	1.0	1.2	0.9	0.8
4-6	0.1	0.4	0.6	0.3	0.6	0.3	0.2	0.1	0.1	0.1	1.2	0.2	1.1	0.7	0.6	0.4	0.6	0.2	0.9	1.2	1.1	2.5	1.1	0.8
6-8	0.2	0.5	0.8	0.4	0.5	0.4	0.4	0.1	0.2	0.2	1.7	0.4	1.1	0.5	0.6	0.4	0.5	0.2	0.9	1.1	1.0	2.5	1.2	1.0
8-10	0.2	0.5	1.1	0.4	0.3	0.6	0.4	0.2	0.3	0.2	1.8	0.3	1.1	0.7	0.6	0.4	0.4	0.3	1.0	1.2	1.1	1.4	1.0	0.9
Completion Depth (feet)	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

Soil borings were completed January 6-7, 2020.

Intervals are presented in depth of feet below ground surface. Relative differences in ground surface elevations are not represented. Ground surface elevations are included on individual boring logs in appendices. Headspace readings are presented in parts per million (ppm) and include background values that range from 0.0 to 0.4 ppm.

Field observations:

¹ Black discoloration, faint odor, trace wood chips and fibers.

² Gray, metallic, vesicular slag like material.

For additional detail regarding discoloration, odor, and sheen, see boring logs.

Table 2 Soil Analytical Data Results - Detections Only Nemadji Substation Phase III Investigation Superior, WI

				Location	SB-6	SB-8	SB-10	SB-11	SB-14	SB-16	SB-25	SB-29
				Date	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/07/2020	1/07/2020
				Depth	1.5 - 2 ft	2 - 4 ft	1 - 2 ft	2 - 4 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	2 - 4 ft
			Wisconsin Not to	Wisconsin Not to								
		Wisconsin	Exceed Direct	Exceed Direct								
		Groundwater	Contact Industrial	Contact Non-								
Parameter	Units	RCLs, DF=2	RCLs	Industrial RCLs								
Effective Date		06/01/2018	06/01/2018	06/01/2018								
Exceedance Key		Shade	No Exceedances	No Exceedances								
Volatile Organic Compounds												
Benzene	mg/kg	0.0051	7.07	1.6	0.0399	< 0.0040 U	< 0.0037 U	< 0.0053 U	< 0.0049 U	< 0.0039 U	< 0.0046 U	< 0.0036 U
Naphthalene	mg/kg	0.6582	24.1	5.52	0.166 J	< 0.0663 U	< 0.0615 U	< 0.0884 U	< 0.0812 U	< 0.0652 U	< 0.0759 U	< 0.0600 U
Toluene	mg/kg	1.1072	818	818	0.0512 J	< 0.0173 U	< 0.0160 U	< 0.0230 U	< 0.0212 U	< 0.0170 U	< 0.0198 U	< 0.0156 U
Total Petroleum Hydrocarbons												
Diesel Range Organics, C10-C28	mg/kg				23.6	8.2 J	121 J	19.5 J	6.0 J	26.5	15.5 J	14.0 J
Barr Calculated Comparison - Industrial												
Exceedance Count	no unit		0		0	0	0	0	0	0	0	0
Hazard Index	no unit		≤ 1.0		0.00028	0.00010	0.000096	0.00014	0.00013	0.00010	0.00012	0.000093
Cumulative Cancer Risk	no unit		≤ 1E-0.5		1.30E-08	3.50E-09	3.20E-09	4.60E-09	4.20E-09	3.40E-09	4.00E-09	3.10E-09
Barr Calculated Comparison -Non-Industrial												
Exceedance Count	no unit			0	0	0	0	0	0	0	0	0
Hazard Index	no unit			≤ 1.0	0.0014	0.00051	0.00047	0.00067	0.00062	0.00050	0.00058	0.00046
Cumulative Cancer Risk	no unit			≤ 1E-05	5.60E-08	1.50E-08	1.40E-08	2.00E-08	1.90E-08	1.50E-08	1.70E-08	1.40E-08

J Estimated detected value. Either certain QC criteria were not met or the concentration is between the laboratory's detection and quanitation limits.

DF Dilution Factor.

RCLs Residual Contaminant Levels.

U The analyte was analyzed for, but was not detected.

Table 3 Soil Analytical Data Results - All Results Nemadji Substation Phase III Investigation Superior, WI

				Location	SB-6	SB-6	SB-7	SB-7	SB-8	SB-8	SB-9	SB-10	SB-10	SB-10	SB-11	SB-11	SB-12	SB-13	SB-14	SB-15	SB-16	SB-17	SB-18
															-		-		_			-	
				Date	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/07/2020	1/07/2020
				Depth	1.5 - 2 ft	5 - 6 ft	2 - 4 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	5 - 6 ft	1 - 2 ft	2 - 4 ft	6 - 8 ft	2 - 4 ft						
			Wisconsin Not to	Wisconsin Not to																			
		Wisconsin	Exceed Direct	Exceed Direct																			
		Groundwater	Contact Industrial	Contact Non-																			
Parameter	Units	RCLs, DF=2	RCLs	Industrial RCLs																			
Effective Date		12/01/2018	12/01/2018	12/01/2018																			
Exceedance Key		Shade	No Exceedances	No Exceedances																			
General Parameters																							
Moisture	%				24.1	26.4	23.0	27.2	26.6	27.3	27.3	26.4	27.7	23.1	36.3	27.7	23.9	24.7	33.9	35.5	25.4	26.2	24.8
Volatile Organic Compounds																							
1,2,4-Trimethylbenzene	mg/kg	1.3787 (1)	219	219	< 0.0133 U	< 0.0141 U	< 0.0131 U	< 0.0143 U	< 0.0142 U	< 0.0137 U	< 0.0143 U	< 0.0140 U	< 0.0142 U	< 0.0132 U	< 0.0189 U	< 0.0138 U	< 0.0137 U	< 0.0137 U	< 0.0174 U	< 0.0155 U	< 0.0139 U	< 0.0136 U	< 0.0134 U
1,3,5-Trimethylbenzene	mg/kg	1.3787 (1)	182	182	< 0.0106 U	< 0.0112 U	< 0.0104 U	< 0.0114 U	< 0.0113 U	< 0.0109 U	< 0.0114 U	< 0.0112 U	< 0.0113 U	< 0.0105 U	< 0.0150 U	< 0.0110 U	< 0.0109 U	< 0.0109 U	< 0.0138 U	< 0.0124 U	< 0.0111 U	< 0.0109 U	< 0.0107 U
Benzene	mg/kg	0.0051	7.07	1.6	0.0399	< 0.0040 U	< 0.0037 U	< 0.0040 U	< 0.0040 U	< 0.0039 U	< 0.0040 U	< 0.0039 U	< 0.0040 U	< 0.0037 U	< 0.0053 U	< 0.0039 U	< 0.0039 U	< 0.0039 U	< 0.0049 U	< 0.0044 U	< 0.0039 U	< 0.0038 U	< 0.0038 U
Ethyl benzene	mg/kg	1.57	35.4	8.02	< 0.0036 U	< 0.0038 U	< 0.0036 U	< 0.0039 U	< 0.0039 U	< 0.0037 U	< 0.0039 U	< 0.0038 U	< 0.0039 U	< 0.0036 U	< 0.0051 U	< 0.0038 U	< 0.0037 U	< 0.0037 U	< 0.0047 U	< 0.0042 U	< 0.0038 U	< 0.0037 U	< 0.0036 U
Methyl tertiary butyl ether (MTBE)	mg/kg	0.027	282	63.8	< 0.0079 U	< 0.0084 U	< 0.0078 U	< 0.0085 U	< 0.0084 U	< 0.0081 U	< 0.0085 U	< 0.0083 U	< 0.0085 U	< 0.0078 U	< 0.0112 U	< 0.0082 U	< 0.0081 U	< 0.0081 U	< 0.0103 U	< 0.0092 U	< 0.0083 U	< 0.0081 U	< 0.0080 U
Naphthalene	mg/kg	0.6582	24.1	5.52	0.166 J	< 0.0658 U	< 0.0613 U	< 0.0670 U	< 0.0663 U	< 0.0639 U	< 0.0668 U	< 0.0655 U	< 0.0665 U	< 0.0615 U	< 0.0884 U	< 0.0646 U	< 0.0639 U	< 0.0640 U	< 0.0812 U	< 0.0726 U	< 0.0652 U	< 0.0639 U	< 0.0628 U
Toluene	mg/kg	1.1072	818	818	0.0512 J	< 0.0172 U	< 0.0160 U	< 0.0175 U	< 0.0173 U	< 0.0167 U	< 0.0174 U	< 0.0171 U	< 0.0173 U	< 0.0160 U	< 0.0230 U	< 0.0168 U	< 0.0167 U	< 0.0167 U	< 0.0212 U	< 0.0189 U	< 0.0170 U	< 0.0167 U	< 0.0164 U
Xylene, total	mg/kg	3.96	260	260	< 0.0155 U	< 0.0163 U	< 0.0152 U	< 0.0166 U	< 0.0164 U	< 0.0158 U	< 0.0166 U	< 0.0162 U	< 0.0165 U	< 0.0153 U	< 0.0219 U	< 0.0160 U	< 0.0158 U	< 0.0159 U	< 0.0201 U	< 0.0180 U	< 0.0162 U	< 0.0158 U	< 0.0156 U
Total Petroleum Hydrocarbons																							
Diesel Range Organics, C10-C28	mg/kg				23.6	< 4.9 U	< 4.8 U	< 5.1 U	8.2 J	< 4.8 U	< 5.1 U	< 5.3 U	< 5.4 U	121 J	19.5 J	< 5.3 U	< 5.0 U	< 4.8 U	6.0 J	< 5.0 U	26.5	< 5.1 U	< 5.1 U
Barr Calculated Comparison - Industrial																							
Exceedance Count	no unit		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazard Index	no unit		≤ 1.0		0.00028	0.00010	0.000095	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.000096	0.00014	0.00010	0.00010	0.00010	0.00013	0.00011	0.00010	0.000099	0.000098
Cumulative Cancer Risk	no unit		≤ 1E-0.5		1.30E-08	3.40E-09	3.20E-09	3.50E-09	3.50E-09	3.30E-09	3.50E-09	3.40E-09	3.50E-09	3.20E-09	4.60E-09	3.40E-09	3.30E-09	3.30E-09	4.20E-09	3.80E-09	3.40E-09	3.30E-09	3.30E-09
Barr Calculated Comparison -Non-Industrial																							
Exceedance Count	no unit			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazard Index	no unit			≤ 1.0	0.0014	0.00050	0.00047	0.00051	0.00051	0.00049	0.00051	0.00050	0.00051	0.00047	0.00067	0.00049	0.00049	0.00049	0.00062	0.00055	0.00050	0.00049	0.00048
Cumulative Cancer Risk	no unit			≤ 1E-05	5.60E-08	1.50E-08	1.40E-08	1.50E-08	1.50E-08	1.50E-08	1.50E-08	1.50E-08	1.50E-08	1.40E-08	2.00E-08	1.50E-08	1.50E-08	1.50E-08	1.90E-08	1.70E-08	1.50E-08	1.50E-08	1.40E-08

⁽¹⁾ Representing the criteria for combined Trimethylbenzenes.

 $[\]sf J$ Estimated detected value. Either certain QC criteria were not met or the concentration is between the laboratory's detection and quanitation limits.

U The analyte was analyzed for, but was not detected.

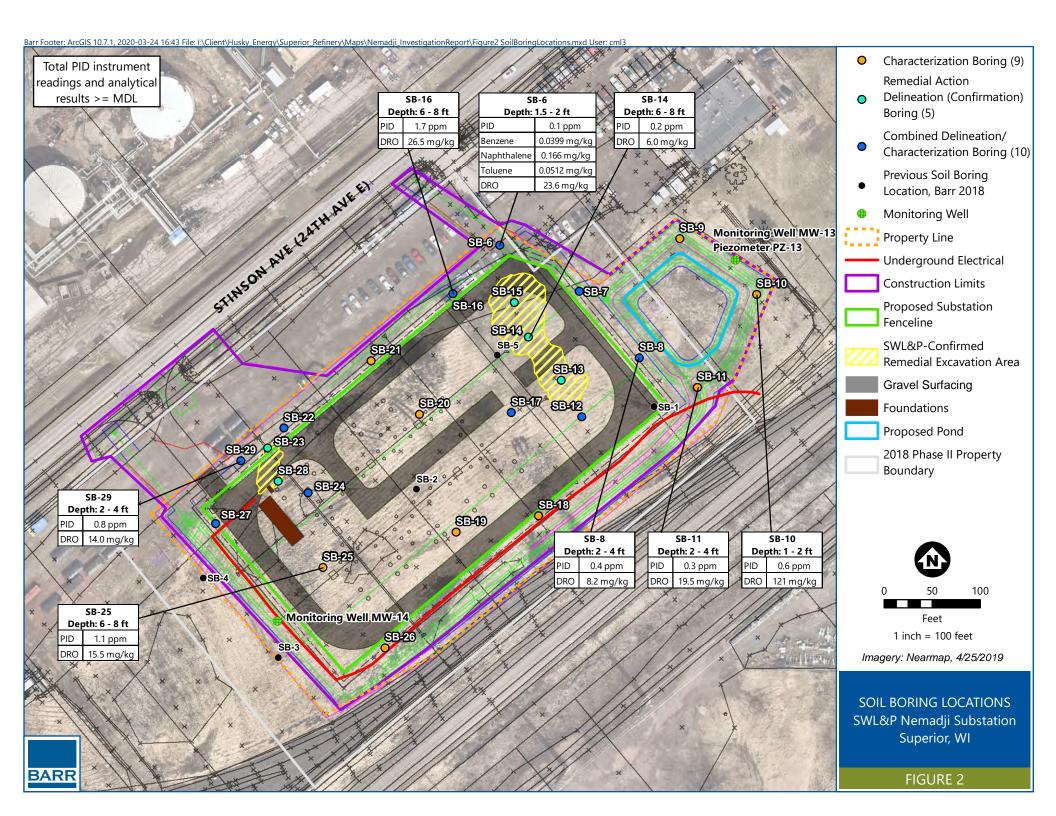
Table 3 Soil Analytical Data Results - All Results Nemadji Substation Phase II Investigation Superior, WI

				Location	SB-18	SB-19	SB-20	SB-21	SB-21	SB-22	SB-22	SB-23	SB-24	SB-25	SB-26	SB-26	SB-27	SB-27	SB-28	SB-29	SB-29
								-									-				1/07/2020
				Date	1/07/2020	1/07/2020	1/07/2020	1/06/2020	1/06/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	
				Depth	6 - 8 ft	6 - 8 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft			
			Wisconsin Not to	Wisconsin Not to																	
		Wisconsin	Exceed Direct	Exceed Direct																	
		Groundwater	Contact Industrial	Contact Non-																	
Parameter	Units	RCLs, DF=2	RCLs	Industrial RCLs																	
Effective Date		12/01/2018	12/01/2018	12/01/2018																	
Exceedance Key		Shade	No Exceedances	No Exceedances																	
General Parameters																					
Moisture	%				27.2	24.5	25.7	24.8	25.2	24.3	25.2	23.4	23.6	34.5	25.5	29.5	25.8	26.4	27.1	24.0	29.3
Volatile Organic Compounds																					
1,2,4-Trimethylbenzene	mg/kg	1.3787 (1)	219	219	< 0.0138 U	< 0.0138 U	< 0.0132 U	< 0.0129 U	< 0.0136 U	< 0.0130 U	< 0.0132 U	< 0.0133 U	< 0.0132 U	< 0.0162 U	< 0.0139 U	< 0.0138 U	< 0.0131 U	< 0.0133 U	< 0.0131 U	< 0.0128 U	< 0.0137 U
1,3,5-Trimethylbenzene	mg/kg	1.3787 (1)	182	182	< 0.0110 U	< 0.0110 U	< 0.0105 U	< 0.0103 U	< 0.0108 U	< 0.0104 U	< 0.0105 U	< 0.0106 U	< 0.0106 U	< 0.0129 U	< 0.0111 U	< 0.0110 U	< 0.0104 U	< 0.0106 U	< 0.0104 U	< 0.0102 U	< 0.0109 U
Benzene	mg/kg	0.0051	7.07	1.6	< 0.0039 U	< 0.0039 U	< 0.0037 U	< 0.0036 U	< 0.0038 U	< 0.0037 U	< 0.0037 U	< 0.0037 U	< 0.0037 U	< 0.0046 U	< 0.0039 U	< 0.0039 U	< 0.0037 U	< 0.0038 U	< 0.0037 U	< 0.0036 U	< 0.0039 U
Ethyl benzene	mg/kg	1.57	35.4	8.02	< 0.0037 U	< 0.0037 U	< 0.0036 U	< 0.0035 U	< 0.0037 U	< 0.0035 U	< 0.0036 U	< 0.0036 U	< 0.0036 U	< 0.0044 U	< 0.0038 U	< 0.0038 U	< 0.0036 U	< 0.0036 U	< 0.0036 U	< 0.0035 U	< 0.0037 U
Methyl tertiary butyl ether (MTBE)	mg/kg	0.027	282	63.8	< 0.0082 U	< 0.0082 U	< 0.0078 U	< 0.0077 U	< 0.0081 U	< 0.0077 U	< 0.0078 U	< 0.0079 U	< 0.0079 U	< 0.0097 U	< 0.0083 U	< 0.0082 U	< 0.0078 U	< 0.0079 U	< 0.0078 U	< 0.0076 U	< 0.0082 U
Naphthalene	mg/kg	0.6582	24.1	5.52	< 0.0644 U	< 0.0644 U	< 0.0617 U	< 0.0605 U	< 0.0636 U	< 0.0609 U	< 0.0617 U	< 0.0621 U	< 0.0620 U	< 0.0759 U	< 0.0649 U	< 0.0647 U	< 0.0613 U	< 0.0624 U	< 0.0612 U	< 0.0600 U	< 0.0641 U
Toluene	mg/kg	1.1072	818	818	< 0.0168 U	< 0.0168 U	< 0.0161 U	< 0.0158 U	< 0.0166 U	< 0.0159 U	< 0.0161 U	< 0.0162 U	< 0.0162 U	< 0.0198 U	< 0.0169 U	< 0.0169 U	< 0.0160 U	< 0.0163 U	< 0.0160 U	< 0.0156 U	< 0.0167 U
Xylene, total	mg/kg	3.96	260	260	< 0.0160 U	< 0.0160 U	< 0.0153 U	< 0.0150 U	< 0.0158 U	< 0.0151 U	< 0.0153 U	< 0.0154 U	< 0.0154 U	< 0.0188 U	< 0.0161 U	< 0.0160 U	< 0.0152 U	< 0.0155 U	< 0.0152 U	< 0.0149 U	< 0.0159 U
Total Petroleum Hydrocarbons																					
Diesel Range Organics, C10-C28	mg/kg				< 5.1 U	< 5.0 U	< 4.9 U	< 6.0 U	< 4.9 U	< 4.5 U	< 5.6 U	< 4.4 U	< 4.9 U	15.5 J	< 4.8 U	< 5.3 U	< 5.0 U	< 4.8 U	< 5.1 U	14.0 J	< 5.3 U
Barr Calculated Comparison - Industrial																					
Exceedance Count	no unit		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazard Index	no unit		≤ 1.0		0.00010	0.00010	0.000096	0.000094	0.000099	0.000095	0.000096	0.000097	0.000096	0.00012	0.00010	0.00010	0.000095	0.000097	0.000095	0.000093	0.00010
Cumulative Cancer Risk	no unit		≤ 1E-0.5		3.40E-09	3.40E-09	3.20E-09	3.10E-09	3.30E-09	3.20E-09	3.20E-09	3.20E-09	3.20E-09	4.00E-09	3.40E-09	3.40E-09	3.20E-09	3.30E-09	3.20E-09	3.10E-09	3.30E-09
Barr Calculated Comparison -Non-Industrial																					
Exceedance Count	no unit			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazard Index	no unit			≤ 1.0	0.00049	0.00049	0.00047	0.00046	0.00049	0.00047	0.00047	0.00047	0.00047	0.00058	0.00050	0.00049	0.00047	0.00048	0.00047	0.00046	0.00049
Cumulative Cancer Risk	no unit			≤ 1E-05	1.50E-08	1.50E-08	1.40E-08	1.70E-08	1.50E-08	1.50E-08	1.40E-08	1.40E-08	1.40E-08	1.40E-08	1.50E-08						

⁽¹⁾ Representing the criteria for combined Trimethylbenzenes.J Estimated detected value. Either certain QC criteria were not met or the concentration is between the laboratory's detection and quanitation limits.

U The analyte was analyzed for, but was not detected.

Figures



Attachment A

Limited Phase II Investigation Results - Future ALLETE Substation Site



Technical Memorandum

To: Mark Darby, Superior Refining Company, LLC (Husky Energy)
 From: Lynette Carney and Martin Bevis, Barr Engineering Co.
 Subject: Phase II Investigation Results – Future ALLETE Substation Site

Date: August 24, 2018 **Project:** 49161423.00

Project Objectives

Barr Engineering Co. (Barr) was retained by Superior Refining Company, LLC (a subsidiary of Husky Energy Inc.) to complete a Phase II investigation of a property owned by Husky Energy Inc. There is historical indication that the property was formerly used as a parking lot and equipment laydown area. Husky intends to lease the Property to ALLETE/Minnesota Power/Superior Water, Light and Power for construction of an electrical substation. The property is located in Section 36 of Township 49 North, Range 14 West in Superior, Douglas County, Wisconsin (Property). The Property location is shown on Figure 1.

In May 2018, Barr performed a Phase I Environmental Site Assessment (ESA) Report (Barr, 2018). No recognized environmental conditions (RECs) were identified, though the report included findings of nine potential sources of hazardous substances or petroleum products near the Property:

- 1. Adjacent Husky Refinery (North);
- 2. Adjacent Husky Refinery fire on April 26, 2018;
- 3. Adjacent Enbridge Energy Terminal site (South);
- 4. Adjoining Husky Refinery laboratory (East);
- 5. Adjoining and upgradient railroads (West and South);
- 6. A small amount of miscellaneous historical debris on the Property;
- 7. Existing electrical power pole transformers;
- 8. Surrounding industrial property use and equipment storage on Property; and
- 9. Various petroleum pipelines located adjacent to the Property.

The objectives of the Phase II investigation were to: characterize soil and groundwater to identify potential impacts and assess baseline conditions at the property prior to leasing.

Date: August 24, 2018

Page: 2

This report summarizes the results, opinions, and conclusions of the Phase II investigation. Descriptions of the Property background, investigation approach, sample locations and analytical results are summarized below. Additional information is included in the Phase I ESA Report (Barr, 2018).

Background Information

The Property consists of approximately 5.18 acres located in an area between the operating Husky Refinery and a large Enbridge pipeline terminal facility as shown on Figure 1. The Property will be leased to ALLETE/Minnesota Power/Superior Water, Light and Power for construction of an electrical substation. Much of the following Property information was summarized from information presented in Barr's Phase I ESA Report (Barr, 2018):

Topography of the Property is relatievly flat, with a gentle slope down to the east. The property is underlain by clayey till and glaciolacustrine sediment planed by waves of proglacial Lake Duluth (Clayton, 1985). Based on groundwater monitoring at the refinery, which includes groundwater monitoring wells located on and near the Property, shallow groundwater flow direction at the Property is to the northeast towards Newton Creek, ultimately discharging into Lake Superior approximately 1.7 miles northeast of the Property. The depth to shallow groundwater in MW-14, which is located on the Property, is typically less than two feet below the ground surface (Gannett Fleming, 2017). Husky's monitoring wells on and near the Property are shown on Figure 2.

No buildings are currently located on the Property. The Property is accessible via Stinson Avenue (24th Avenue East) and an approximately 80-foot-wide gravel parking lot/equipment laydown area is located along the northwest Property boundary. No drinking water or sanitary service is provided to the Property. Historically the Property has been used as a storage/laydown area associated with the adjacent refinery. A warehouse was previously located on the Property and has since been demolished.

The current use of adjoining properties includes Husky Refinery to the north/northwest, unoccupied grassy/forested land and rail lines to the southwest, Husky Refinery laboratory building and grassy area to the east/northeast, and rail lines and Enbridge petroleum pipeline terminal facility to the south/southeast.

Date: August 24, 2018

Page: 3

Investigation Approach and Summary of Activities

A Phase II Investigation was completed to assess for soil and groundwater impacts on the Property and to establish baseline environmental data. On June 22 and 23, 2018, Barr and its subcontractor, Twin Ports Testing, used a Geoprobe to advance five direct-push borings (SB-1 through SB-5) to depths of 20 feet below ground surface (bgs) at the locations shown on Figure 2. The borings locations were selected to provide representative coverage of the Property.

At each of the boring locations, one shallow soil sample was collected from depths between 0 and 3 feet bgs and one deeper sample was collected from intervals between 6 and 13 feet bgs. Soil samples were field-screened for organic vapors using headspace sample screening procedures described in our Standard Operating Procedures (included in Attachment A). Additional evidence of contamination such as staining, odor, discoloration, and sheen were evaluated and/or documented in the field. Soils were described according to ASTM D-2488, *Standard Practice for Description and Identification of Soils (Visual/Manual Method)*. Boring locations were surveyed using global positioning system (GPS) methods.

Temporary monitoring wells, with five-foot PVC well screens, were placed into three borings completed on June 21 (SB-1, SB-2, and SB-3). The wells were left in place over night to allow time for groundwater to equilibrate.

Barr submitted ten soil samples to Pace Analytical Laboratories in Minneapolis, MN. The soil samples were analyzed for the following compounds:

- Resource Conservation and Recovery Act (RCRA) list of 8 metals by methods 6010D and 7471B;
- polycyclic aromatic hydrocarbons (PAHs) by method 8270D; and
- volatile organic compounds (VOCs) by method 8260.

Due to poor recovery, only one groundwater sample (SB-3) was collected and submitted for analysis of VOCs by method 8260B and PAHs by method 8270D.

Results

Representative photographs of the boring locations and soil encountered at each location are included as Attachment B. Logs of each soil boring are included as Attachment C. Boring stratigraphy generally consisted of six inches or less of organic-rich topsoil overlying lean clay. The clay was typically of medium plasticity, stiff consistency, moist, red color, and glaciolacustrine origin. There was no staining, odor, discoloration, sheen or other indications of contamination observed in the field with the exception of SB-5, where the top six inches of soil

Date: August 24, 2018

Page: 4

was composed of 70% angular shiny black sand and gravel – apparent weathered bituminous pavement. Headspace sample organic vapor screening in the field produced headspace readings less than 0.6 parts per million (ppm) across the site, with the exception of the top six inches of SB-5 (described above), where headspace results were 1.2 ppm.

The day following temporary monitoring well installation, approximately 3.5 feet of water was found in SB-1; SB-2 was dry, and SB-3 contained approximately 11 feet of water. Because SB-1 and SB-3 were located in areas of the site with shallow perched water on the ground surface while SB-2 was located in a portion of the site with dry ground, it is possible that water encountered in soil borings SB-1 and SB-3 may have been influenced by perched surface water draining into the open boring holes overnight. Although a small about of water was measured in the SB-1 borehole, an insufficient amount of water remain for sampling after purging only one well volume. Therefore, a groundwater sample was only collected from SB-3.

Tables 1 and 2 summarize the soil samples collected, analyses performed, and analytical results. Table 1 presents the analytical results for detections only or compounds detected at concentrations equal to or greater than laboratory method detection limits (MDLs). Included for comparison are the Wisconsin Department of Natural Resources (WDNR) Remediation & Redevelopment Program Residual Contaminant Levels (RCLs) developed by the WDNR according to the procedures in NR 720.10 and NR 720.12, Wis. Adm. Code. Non-industrial and industrial RCLs are included for comparison.

Table 2 presents all of the analytical results, including those results below the MDLs. Table 3 presents all of the groundwater analytical results compared to enforcement standard (ES) and Preventative Action Limit (PAL) criteria in NR 140.10 Wis. Adm. Code. Copies of the laboratory analytical reports are included in Attachment D.

Soil Analytical Results

<u>Metals Results</u> - Five of the eight RCRA metals were detected in each of the soil samples (Table 1). Arsenic was the only metal detected above the industrial RCLs; and arsenic concentrations exceeded industrial RCLs consistently in all soil samples, except SB-3_8-9 ft., where the concentration was below industrial criteria. Mercury, barium, chromium, and lead were found at concentrations below non-industrial RCLs in each sample. Cadmium, selenium and silver were not found above laboratory quantitation limits in any of the samples.

Date: August 24, 2018

Page: 5

<u>PAHs</u> - Each of the PAHs were detected in SB-5_0-1 ft., but only the concentration of benzo(a)pyrene was in exceedance of non-industrial RCLs (Table 1). The only other detection of PAHs above laboratory quantitation limits was Benzo(b)fluoranthene in SB-3_8-9 ft.

<u>VOCs</u> - There were no VOCs detected above laboratory quantitation limits. Toluene was detected in SB-5_0-1 ft., but the concentration was below the quantitation limit.

<u>Cumulative</u> - The combined detections for each sample interval were also compared to the WDNR cumulative hazard index. No samples exceeded the Hazard Index or Cumulative Cancer Risk Sample standards. Sample SB-5 from 0-1 ft. was the only interval with any exceedances and had an Exceedance Count of one.

Groundwater Analytical Results

The only analyte detected in groundwater from SB-3 was toluene. This detection was below the WDNR NR 140 ES and PAL. Previous annual groundwater monitoring at wells MW-14 (located on the Property near SB-3) and MW-13/PZ-13 (located just northeast of Property) did not identify detectable concentrations of petroleum VOCs/naphthalene over the past 3 years (Gannett Fleming, 2016, 2017, 2018). As previously identified, it is possible that perched surface water observed at the time of sample collection may have migrated into SB-3.

Conclusions

Field screening at the five direct-push boring locations did not identify petroleum impacts or other concerns in soil. Soils generally consisted of lean, red, glaciolacustrine clay overlain by a few inches of organic topsoil.

Perched surface water is believed to have mixed with the groundwater encountered in SB-3. Only one VOC was detected in the groundwater sample from SB-3 (toluene), but the concentration was below the WDNR ES and PAL. This is consistent with the favorable groundwater monitoring results over the past three years from existing groundwater monitoring wells located on and near the subject Property and Refinery.

With the exception of arsenic, soil concentrations for RCRA metals and PAHs were below WDNR non-industrial RCLs. Arsenic was found at concentrations above the industrial RCLs in nine of the ten soil samples collected. However, given the documented baseline for arsenic in the Superior, Wisconsin area, the arsenic concentrations are believed to be naturally occurring and were universally below WDNR background threshold values (BTVs) as published and defined in their

Date: August 24, 2018

Page: 6

RCL Spreadsheet and Publication PUB-RR-890. The three other metals detected above laboratory quantitation limits in each of the soil samples (i.e., barium, chromium, and lead) were found at concentrations below the non-industrial RCLs and below the WDNR background threshold values, with the exception of the result from SB-5 0-1 ft., where asphalt/fill soils were encountered at the surface. Metals detected in soil at the Property are therefore unlikely to be the result of past property uses.

In addition to chromium and lead concentrations above WDNR background threshold values, results from SB-5 0-1 ft. included multiple low-level concentration of PAHs, including a concentration of benzo(a)pyrene in exceedance of non-industrial RCLs; and a trace concentration of toluene. This sample contained pieces of apparent weathered asphalt. The chromium, lead, PAHs, and toluene detected at SB-5_0-1 ft. likely derive from the apparent weathered asphalt contained in the sample, not the underlying soil. No other samples at the property exhibited similar elevated analyte concentrations, including other surface samples and the deeper sample collected from the same boring (SB-5_8-9). Therefore, compounds associated with the apparent weathered asphalt do not appear to have leached into underlying soil or to have been distributed across the site.

Trace concentrations of PAHs were detected in SB-1 from 2-3 ft. and SB-3 from 8-9 ft. A trace concentration of toluene in groundwater was detected in soil boring SB-3, which was screened from 14.5-19.5 ft. bgs. The other PAH and VOC concentrations detected were below the RCLs for soil and the ES and PAL for groundwater. Based on WDNR risk-based industrial and non-industrial RCLs, the isolated low concentrations do not present a risk for human health and the environment.

Limitations

The scope of this Phase II investigation was intended to investigate the potential for the presence of specific contaminants at representative locations. Laboratory analysis was performed for those parameters which were identified as potential contaminants prior to conducting this investigation.

Attachments

Table 1 Soil Analytical Summary – Detected Values Only

Table 2 Soil Analytical Summary - All Results

Table 3 Groundwater Analytical Summary

Date: August 24, 2018

Page: 7

Figure 1 Property Location Map Figure 2 Soil Boring Locations

Attachment A Standard Operating Procedures
Attachment B Representative Photographs

Attachment C Soil Boring Logs

Attachment D Soil and Groundwater Laboratory Analytical Reports

Date: August 24, 2018

Page: 8

References

- ASTM, 2009. *D-2488-09a, Standard Practice for Description and Identification of Soils* (*Visual/Manual Method*) ASTM International, West Conshohocken, PA; 2009.
- Barr, 2018. Phase I Environmental Site Assessment, Future ALLETE Substation Site, Superior Refining Company, LLC (Husky Energy), Superior, Wisconsin, prepared for Superior Refining Company, LLC; July 2018.
- Clayton, Lee, 1985. *Pleistocene Geology of the Superior Region, Wisconsin*, Wisconsin Geological and Natural History Survey Information Circular 46, Plate 1; 1985.
- Gannett Fleming, 2016. Facility-Wide Groundwater Monitoring Report for 2015, Calumet Superior LLC Refinery, Superior WI, prepared for Calumet Superior LLC; January 17, 2016.
- Gannett Fleming, 2017. Facility-Wide Groundwater Monitoring Report for 2016, Calumet Superior LLC Refinery, Superior WI, prepared for Calumet Superior LLC; January 10, 2017.
- Gannett Fleming, 2018. Facility-Wide Groundwater Monitoring Report for 2017, Superior Refining Company LLC, Superior WI, prepared for Superior Refining Company LLC; January 16, 2018.

Tables

Table 1 Soil Analytical Data Summary Detections Only Husky Energy Property- Future Substation Site Superior, WI

				Ju	perior, w	1								
				Location	SB-1	SB-1	SB-2	SB-2	SB-3	SB-3	SB-4	SB-4	SB-5	SB-5
				Date	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/22/2018	6/22/2018	6/22/2018	6/22/2018
				Depth	2 - 3 ft	12 - 13 ft	0 - 1 ft	6 - 7 ft	0 - 2 ft	8 - 9 ft	0 - 2 ft	6 - 7 ft	0 - 1 ft	8 - 9 ft
			Π	WDNR		12 10 11	0 110	0 0 0	0 270	0 011	0 210	0 110	0 0 11	0 0 11
		Wisconsin Not	Wisconsin Not to	Background										
		to Exceed	Exceed Non-	Threshold										
Parameter	Units	Industrial RCLs	Industrial RCLs	Values										
Effective Date		06/01/2018	06/01/2018	06/01/2018										
Exceedance Key		Bold	Underline	Reference Only										
General Parameters				ŕ										
Moisture	%				27.6	35.3	20.3	24.5	24.5	31.6	26.7	29.4	23.3	28.1
Metals														
Mercury	mg/kg	3.13	3.13		0.023 j	0.026 j	0.022 j	0.020 j	0.026 j	0.021 j	0.023 j	0.021 j	0.10	0.017 j
Arsenic	mg/kg	3	0.677	8	<u>3.1</u>	3.8	3.0	3.3	3.5	2.8	3.0	3.0	<u>5.1 j</u>	3.4
Barium	mg/kg	100000	15300	364	245	193	145	150	174	176	191	160	287	173
Cadmium	mg/kg	985	71.1	1	-					0.11 j		0.097 j	0.56 j	
Chromium	mg/kg	100000 CR3	100000 CR3	44	49.6	42.9	37.0	39.5	41.7	42.6	48.6	39.4	1850	42.0
Lead	mg/kg	800	400	52	10.5	9.5	7.6	8.1	9.0	7.8	9.1	7.7	88.2	8.4
Selenium	mg/kg	5840	391		0.56 j									
Silver	mg/kg	5840	391										1.1 j	
Semivolatile Organic Compounds														
Acenaphthene	ug/kg	45200000	3590000										6.9	
Acenaphthylene	ug/kg												3.4	
Anthracene	ug/kg	100000000	17900000										11.0	
Benz(a)anthracene	ug/kg	20800	1140										77.8	
Benzo(a)pyrene	ug/kg	2110	<u>115</u>							1.2 j			<u>128</u>	
Benzo(b)fluoranthene	ug/kg	21100	1150		1.1 j					2.2			162	
Benzo(g,h,i)perylene	ug/kg									2.3 j			116	
Benzo(k)fluoranthene	ug/kg	211000	11500							2.2 j			55.7	
Chrysene	ug/kg	2110000	115000		-								98.1	
Dibenz(a,h)anthracene	ug/kg	2110	115		-					2.2 j			32.5	
Fluoranthene	ug/kg	30100000	2390000		1.8 j					1.9 j			90.4	
Fluorene	ug/kg	30100000	2390000		-								2.5	
Indeno(1,2,3-cd)pyrene	ug/kg	21100	1150		-					2.2 j			94.4	
Naphthalene	ug/kg	24100	5520		-								4.3	
Phenanthrene	ug/kg												39.1	
Pyrene	ug/kg	22600000	1790000										75.2	
Volatile Organic Compounds **														
Toluene	ug/kg	818000	818000		-								38.8 j	
Barr Calculated Comparison - Non-Industrial														
Exceedance Count	no unit	0	<u>0</u>		0	0	0	0	0	0	0	0	<u>1</u>	0

Note

^{**} Non-detect VOC compounds reported on a wet weight basis per WIDNR requirements.

Table 2 Soil Analytical Data Summary Husky Energy Property- Future Substation Site Superior, WI

				Su	perior, W	1								
				Location	SB-1	SB-1	SB-2	SB-2	SB-3	SB-3	SB-4	SB-4	SB-5	SB-5
				Date	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/22/2018	6/22/2018	6/22/2018	6/22/2018
				Depth	2 - 3 ft	12 - 13 ft	0 - 1 ft	6 - 7 ft	0 - 2 ft	8 - 9 ft	0 - 2 ft	6 - 7 ft	0 - 1 ft	8 - 9 ft
Parameter	Units	Wisconsin Not to Exceed Industrial RCLs	Wisconsin Not to Exceed Non- Industrial RCLs	WDNR Background Threshold Values										
Effective Date		06/01/2018	06/01/2018	06/01/2018										
Exceedance Key		Bold	<u>Underline</u>	Reference Only										
General Parameters														
Moisture	%				27.6	35.3	20.3	24.5	24.5	31.6	26.7	29.4	23.3	28.1
Metals														
Mercury	mg/kg	3.13	3.13		0.023 j	0.026 j	0.022 j	0.020 j	0.026 j	0.021 j	0.023 j	0.021 j	0.10	0.017 j
Arsenic	mg/kg	3	<u>0.677</u>	8	<u>3.1</u>	<u>3.8</u>	<u>3.0</u>	<u>3.3</u>	<u>3.5</u>	<u>2.8</u>	<u>3.0</u>	<u>3.0</u>	<u>5.1 j</u>	<u>3.4</u>
Barium	mg/kg	100000	15300	364	245	193	145	150	174	176	191	160	287	173
Cadmium	mg/kg	985	71.1	1	< 0.075	< 0.082	< 0.065	< 0.070	< 0.069	0.11 j	< 0.071	0.097 j	0.56 j	< 0.073
Chromium	mg/kg	100000 CR3	100000 CR3	44	49.6	42.9	37.0	39.5	41.7	42.6	48.6	39.4	1850	42.0
Lead	mg/kg	800	400	52	10.5	9.5	7.6	8.1	9.0	7.8	9.1	7.7	88.2	8.4
Selenium	mg/kg	5840	391		0.56 j*	< 0.61	< 0.49	< 0.52	< 0.51	< 0.58	< 0.53	< 0.56	< 5.2	< 0.54
Silver	mg/kg	5840	391		< 0.11	< 0.12	< 0.098	< 0.11	< 0.10	< 0.12	< 0.11	< 0.11	1.1 j	< 0.11
Semivolatile Organic Compounds														
Acenaphthene	ug/kg	45200000	3590000		< 0.56	< 0.63	< 0.51	< 0.54	< 0.54	< 0.60	< 0.56	< 0.58	6.9	< 0.57
Acenaphthylene	ug/kg				< 0.68	< 0.76	< 0.62	< 0.66	< 0.65	< 0.72	< 0.67	< 0.70	3.4	< 0.69
Anthracene	ug/kg	100000000	17900000		< 0.65	< 0.72	< 0.59	< 0.62	< 0.62	< 0.68	< 0.64	< 0.66	11.0	< 0.65
Benz(a)anthracene	ug/kg	20800	1140		< 1.5	< 1.7	< 1.4	< 1.4	< 1.4	< 1.6	< 1.5	< 1.5	77.8	< 1.5
Benzo(a)pyrene	ug/kg	2110	<u>115</u>		< 0.95	< 1.1	< 0.86	< 0.91	< 0.91	1.2 j	< 0.94	< 0.97	<u>128</u>	< 0.95
Benzo(b)fluoranthene	ug/kg	21100	1150		1.1 j	< 0.57	< 0.47	< 0.49	< 0.49	2.2	< 0.51	< 0.53	162	< 0.52
Benzo(g,h,i)perylene	ug/kg				< 0.87	< 0.97	< 0.79	< 0.84	< 0.83	2.3 j	< 0.86	< 0.90	116	< 0.88
Benzo(k)fluoranthene	ug/kg	211000	11500		< 1.2	< 1.3	< 1.1	< 1.1	< 1.1	2.2 j	< 1.2	< 1.2	55.7	< 1.2
Chrysene	ug/kg	2110000	115000		< 1.9	< 2.1	< 1.7	< 1.8	< 1.8	< 2.0	< 1.9	< 1.9	98.1	< 1.9
Dibenz(a,h)anthracene	ug/kg	2110	115		< 0.64	< 0.71	< 0.58	< 0.61	< 0.61	2.2 j	< 0.63	< 0.65	32.5	< 0.64
Fluoranthene	ug/kg	30100000	2390000		1.8 j	< 0.66	< 0.54	< 0.57	< 0.56	1.9 j	< 0.58	< 0.61	90.4	< 0.59
Fluorene	ug/kg	30100000	2390000		< 0.43	< 0.48	< 0.39	< 0.41	< 0.41	< 0.46	< 0.43	< 0.44	2.5	< 0.43
Indeno(1,2,3-cd)pyrene	ug/kg	21100	1150		< 0.93	< 1.0	< 0.84	< 0.89	< 0.88	2.2 j	< 0.91	< 0.95	94.4	< 0.93
Naphthalene	ug/kg	24100	5520		< 1.1	< 1.2	< 0.97	< 1.0	< 1.0	< 1.1	< 1.1	< 1.1	4.3	< 1.1
Phenanthrene	ug/kg				< 2.7	< 3.0	< 2.4	< 2.5	< 2.5	< 2.8	< 2.6	< 2.7	39.1	< 2.7
Pyrene	ug/kg	22600000	1790000		< 2.1	< 2.4	< 1.9	< 2.0	< 2.0	< 2.2	< 2.1	< 2.2	75.2	< 2.1

Table 2 Soil Analytical Data Summary Husky Energy Property- Future Substation Site Superior, WI

Location SB-1 SB-2 SB-3 SB-3 SB-4 SB-	B-5 SB-5
Date 6/21/2018 6/21/2018 6/21/2018 6/21/2018 6/21/2018 6/21/2018 6/22/2018 6/22/2018 6/22/2018 6/22/2018	/2018 6/22/2018
Depth 2-3 ft 12-13 ft 0-1 ft 6-7 ft 0-2 ft 8-9 ft 0-2 ft 6-7 ft 0	1 ft 8 - 9 ft
WDNB	
Wisconsin Not Wisconsin Not to Packground	
to Exceed Exceed Non- Threshold	
Parameter Units Units Industrial RCLs Industrial RCLs Values	
Effective Date 06/01/2018 06/01/2018 06/01/2018	
Exceedance Key Bold Underline Reference Only	
Volatile Organic Compounds **	
1,1,1-Trichloroethane ug/kg 640000 640000 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0	25.0 < 25.0
1,1,2,2-Tetrachloroethane ug/kg 3600 810 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 2	25.0 < 25.0
1,1,2-Trichloroethane ug/kg 7010 1590 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0	25.0 < 25.0
	25.0 < 25.0
	25.0 < 25.0
	25.0 < 25.0
	25.0 < 25.0
	25.0 < 25.0
	25.0 < 25.0
1,3-Dichloropropene, cis ug/kg 1210000 1210000 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <	25.0 < 25.0
1,3-Dichloropropene, trans	25.0 < 25.0
2-Hexanone ug/kg 1760000 237000 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.	52.0 < 52.0
	77.8 < 77.8
	25.0 < 25.0
	25.0 < 25.0
Bromoform ug/kg 113000 25400 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <	25.0 < 25.0
Bromomethane ug/kg 43000 9600 <69.9 <69.9 <69.9 <69.9 <69.9 <69.9 <69.9 <69.9 <69.9 <69.9	69.9 < 69.9
Carbon disulfide	25.0 < 25.0
Carbon tetrachloride	25.0 < 25.0
Chlorobenzene ug/kg 761000 370000 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 2	25.0 < 25.0
Chlorodibromomethane ug/kg 38900 8280 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.	25.0 < 25.0
	67.0 < 67.0
Chloroform ug/kg 1980 454 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46	46.4 < 46.4
Chloromethane ug/kg 669000 159000 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <2	25.0 < 25.0
Ethyl benzene ug/kg 35400 8020 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0	25.0 < 25.0
Methyl ethyl ketone (2-butanone) ug/kg 28400000 28400000 < 107 < 107 < 107 < 107 < 107 < 107 < 107 < 107 < 107	107 < 107
Methyl isobutyl ketone (MIBK) ug/kg 3360000 3360000 <41.1 <41.1 <41.1 <41.1 <41.1 <41.1 <41.1 <41.1 <41.1	41.1 < 41.1
Methyl tertiary butyl ether (MTBE) ug/kg 282000 63800 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0	25.0 < 25.0
Methylene chloride ug/kg 1150000 61800 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.	25.0 < 25.0
Styrene ug/kg 867000 867000 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 <	25.0 < 25.0
	25.0 < 25.0
Toluene ug/kg 818000 818000 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <2	3.8 j < 25.0
Trichloroethylene (TCE) ug/kg 8410 1300 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <2	25.0 < 25.0
	25.0 < 25.0
Xylene, m & p	50.0 < 50.0
Xylene, o ug/kg 434000 434000 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0	25.0 < 25.0
Xylene, total (Barr Calculation) ug/kg 260000 260000 ND ND ND ND ND ND ND ND ND	ND ND
Barr Calculated Comparison - Industrial	
Exceedance Count no unit 0 0 0 0 0 0 0 0	0 0
Hazard Index no unit ≤ 1.0 ≤ 1.0 0.0004 0.0003 0.0003 0.0004 0.0003 0.0003 0.0003 0.0003 0.0003	124 0.0011
Cumulative Cancer Risk no unit ≤ 1E-0.5 ≤ 1E-0.5 5.2E-11 0.0E+00 0.0E+00 0.0E+00 1.8E-09 0.0E+00 0.0E+00 9.	E-08 0.0E+00
Barr Calculated Comparison - Non-Industrial	
Exceedance Count no unit 0 0 0 0 0 0 0 0	<u>1</u> 0
	2342 0.0003
Cumulative Cancer Risk no unit ≤ 1E-0.5 ≤ 1E-0.5 9.6E-10 0.0E+00 0.0E+00 0.0E+00 3.4E-08 0.0E+00 0.0E+00 1.	E-06 0.0E+00

Note

^{**} Non-detect VOC compounds reported on a wet weight basis per WIDNR requirements.

Table 3 Groundwater Analytical Data Summary Husky Energy Property- Future Substation Site Superior, WI

			Location	SB-3
			Date	6/22/2018
			Depth	14.5 - 19.5 ft
			Sample Type	N
	_	Wissensin		N
		Wisconsin Groundwater Public	Wisconsin Groundwater	
		Health Enforcement	Preventive Action	
Parameter	Units	Standards	Limits	
Effective Date		07/01/2015	07/01/2015	
Exceedance Key		No Exceed	No Exceed	
Semivolatile Organic Compounds				
Acenaphthene	ug/l			< 0.0043
Acenaphthylene	ug/l			< 0.0063
Anthracene	ug/l	3000	600	< 0.0083
Benz(a)anthracene	ug/l			< 0.0053
Benzo(a)pyrene	ug/l	0.2	0.02	< 0.0054
Benzo(b)fluoranthene	ug/l	0.2	0.02	< 0.017
Benzo(g,h,i)perylene	ug/l			< 0.013
Benzo(k)fluoranthene	ug/l	2.2	2.22	< 0.014
Chrysene	ug/l	0.2	0.02	< 0.012
Dibenz(a,h)anthracene	ug/l	400	00	< 0.012
Fluoranthene	ug/l	400	80	< 0.025
Fluorene	ug/l	400	80	< 0.0080
Indeno(1,2,3-cd)pyrene	ug/l	100	10	< 0.018
Naphthalene Phenanthrene	ug/l ug/l	100	10	< 0.0092 < 0.014
Pyrene	ug/l	250	50	< 0.014
Volatile Organic Compounds	ug/i	250	30	V 0.020
1,1,1,2-Tetrachloroethane	ug/l	70	7	< 0.20
1,1,1-Trichloroethane	ug/l	200	40	< 0.14
1.1.2.2-Tetrachloroethane	ug/l	0.2	0.02	< 0.17
1,1,2-Trichloroethane	ug/l	5	0.5	< 0.18
1,1-Dichloroethane	ug/l	850	85	< 0.17
1,1-Dichloroethylene	ug/l	7	0.7	< 0.16
1,1-Dichloropropene	ug/l			< 0.20
1,2,3-Trichlorobenzene	ug/l			< 0.21
1,2,3-Trichloropropane	ug/l	60	12	< 0.26
1,2,4-Trichlorobenzene	ug/l	70	14	< 0.20
1,2,4-Trimethylbenzene	ug/l	480 c	96 c	< 0.20
1,2-Dibromo-3-chloropropane (DBCP)	ug/l	0.2	0.02	< 1.7
1,2-Dibromoethane (EDB)	ug/l	0.05	0.005	< 0.24
1,2-Dichlorobenzene	ug/l	600	60	< 0.14
1,2-Dichloroethane	ug/l	5	0.5	< 0.22
1,2-Dichloroethylene, cis	ug/l	70	7	< 0.15
1,2-Dichloroethylene, trans	ug/l	100	20	< 0.12
1,2-Dichloropropane	ug/l	5	0.5	< 0.16
1,3,5-Trimethylbenzene	ug/l	480 c	96 c	< 0.12
1,3-Dichloropenana	ug/l	600	120	< 0.16
1,3-Dichloropropane 1,3-Dichloropropene, cis	ug/l	0.4	0.04	< 0.070 < 0.20
1,3-Dichloropropene, cis 1,3-Dichloropropene, trans	ug/l ug/l	0.4	0.04	< 0.20
1,4-Dichlorobenzene	ug/l	75	15	< 0.17
2,2-Dichloropropane	ug/l	10	10	< 0.17
Acetone	ug/l	9000	1800	< 9.2
Allyl chloride	ug/l	5500	1300	< 0.29
Benzene	ug/l	5	0.5	< 0.10
Bromobenzene	ug/l	, , ,	5.5	< 0.21
Bromochloromethane	ug/l			< 0.27
Bromodichloromethane	ug/l	0.6	0.06	< 0.22
Bromoform	ug/l	4.4	0.44	< 0.80

Table 3 Groundwater Analytical Data Summary Husky Energy Property- Future Substation Site Superior, WI

			Location	SB-3
			Date	6/22/2018
			Depth	14.5 - 19.5 ft
			Sample Type	N
	Τ	Wisconsin	Wisconsin	
		Groundwater Public	Groundwater	
		Health Enforcement	Preventive Action	
Parameter	Units	Standards	Limits	
Effective Date		07/01/2015	07/01/2015	
Exceedance Key		No Exceed	No Exceed	
Bromomethane	ug/l	10	1	< 1.8
Butylbenzene	ug/l			< 0.24
Butylbenzene, sec	ug/l			< 0.15
Butylbenzene, tert	ug/l			< 0.15
Carbon tetrachloride	ug/l	5	0.5	< 0.19
Chlorobenzene	ug/l	100	20	< 0.17
Chlorodibromomethane	ug/l	60	6	< 0.12
Chloroethane	ug/l	400	80	< 0.49
Chloroform	ug/l	6	0.6	< 0.45
Chloromethane	ug/l	30	3	< 0.16
Chlorotoluene, o	ug/l			< 0.16
Chlorotoluene, p	ug/l			< 0.13
Cumene (isopropyl benzene)	ug/l			< 0.18
Cymene p- (toluene isopropyl p-)	ug/l			< 0.15
Dibromomethane (methylene bromide)	ug/l			< 0.16
Dichlorodifluoromethane (Freon-12)	ug/l	1000	200	< 0.23
Dichlorofluoromethane (Freon-21)	ug/l	7000		< 0.14
Ethyl benzene	ug/l	700	140	< 0.14
Ethyl ether	ug/l	1000	100	< 0.095
Hexachlorobutadiene	ug/l			< 0.31
Methyl ethyl ketone (2-butanone)	ug/l	4000	800	< 0.99
Methyl isobutyl ketone (MIBK)	ug/l	500	50	< 0.42
Methyl tertiary butyl ether (MTBE)	ug/l	60	12	< 0.16
Methylene chloride	ug/l	5	0.5	< 0.98
Naphthalene	ug/l	100	10	< 0.48
Propylbenzene	ug/l			< 0.10
Styrene	ug/l	100	10	< 0.19
Tetrachloroethylene	ug/l	5	0.5	< 0.17
Tetrahydrofuran	ug/l	50	10	< 2.2
Toluene	ug/l	800	160	2.1
Trichloroethylene (TCE)	ug/l	5	0.5	< 0.15
Trichlorofluoromethane (Freon-11)	ug/l	3490	698	< 0.23
Trichlorotrifluoroethane (Freon 113)	ug/l			< 0.22
Vinyl chloride	ug/l	0.2	0.02	< 0.092
Xylene, total	ug/l	2000 (4)	400 (4)	< 0.31

Data Footnotes and Qualifiers

Barr Standard Footnotes and Qualifiers

	Not analyzed/Not available.
j	Estimated detected value. The reported value is less than the stated laboratory quantitation limit but greater than the laboratory method detection limit.
*	Estimated value, QA/QC criteria not met.
**	Non-detect VOC compounds reported on a wet weight basis per WIDNR requirements.

Wisconsin RCLs

CR3	Value represents the criteria for Chromium(III)
XYL	Value represents the criteria for Xylene, total (m-,o-,p- combined).

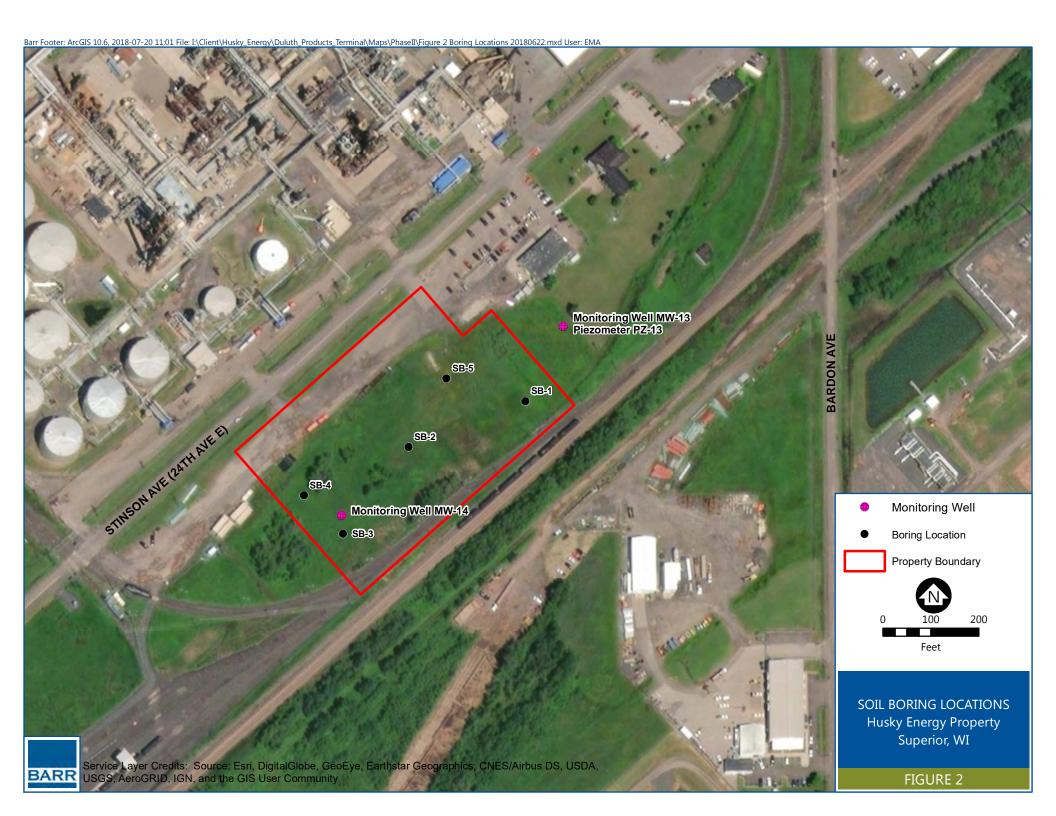
Wisconsin Groundwater Public Health Enforcement Standards

(4)	Xylene includes meta-, ortho-, and para-xylene combined.
С	Value represents the criteria for Trimethylbenzes (1,2,4- and 1,3,5- combined).

Wisconsin Preventive Action Limits

(4)	Xylene includes meta-, ortho-, and para-xylene combined.
С	Value represents the criteria for Trimethylbenzes (1,2,4- and 1,3,5- combined).

Figures



Attachments

Attachment A

Standard Operating Procedures

Collection of Groundwater Samples
Collection of Soil Samples
Decontamination of Sampling Equipment
Field Screening of Soil Samples



Standard Operating Procedure

Collection of Groundwater Samples from a Temporary or Permanent Monitoring Well (Includes Well Purging and Stabilization)

Revision 1

April 5, 2016

Approved By:

	K	m channers	n_		
Kim Johanness	sen / V			04/05/16	
Print	Technical Reviewer	Signature		Date	_
 Terri Olson	2	eni a ll	Son	04/05/16	
Print	QA Manager	Signature		Date	_
D : (1) 6	201 1 (1.1 COD 1:11 (I			
Review of the SC	OP has been performed and	the SOP still reflect	is current prac	ctice.	
Initials:		Date:			
Initials:		Date:			
_				_	
Initials:		Date:		_	
Initials:		Date:			

Collection of Groundwater Samples from a Monitoring Well (Includes Well Purging and Stabilization)

1.0 Scope and Applicability

The purpose of this Standard Operating Procedure (SOP) is to describe the methods used for monitoring well purging, stabilization, and sampling (excluding residential/water supply systems). The SOP also provides details regarding the calculation of purge volumes and measurement of groundwater stabilization criteria and identifies the common container, preservative, and holding times for typical groundwater sample analyses.

The recommended procedures in this SOP should be followed unless conditions make it impractical or inappropriate to do so. Modifications should be noted in the applicable documentation and communicated to appropriate personnel. Significant changes may result in a revision or newly created SOP.

2.0 Limitations

- Sample collection methods can vary by project. If not specified in the project scope of work and/or documentation (e.g., Work Plan, Sampling Analysis Plan (SAP), or Quality Assurance Project Plan (QAPP)), consult with the appropriate regulatory agency for guidance.
- Collection of groundwater samples from residential/water supply systems are not discussed within this SOP.
- Dedicated sampling equipment and/or decontamination of sampling equipment is required to prevent cross-contamination.
- Low-flow sampling methods are not discussed within this SOP.
- Sample collection using 'clean hands/dirty hands' methods is not discussed within this SOP.

3.0 Responsibilities

Equipment Technicians are responsible to maintain equipment in working order and aid in troubleshooting equipment issues.

The role of the Project Health and Safety Team Leader is to oversee all aspects of on-site safety activities.

The Project Manager, in conjunction with the client, develops the site specific scope of work (e.g., Work Plan, SAP, etc.).

Experienced Field Technician(s) are responsible for the measurement of well pumping rates, calculation of well purge volume, field screening procedures, field equipment and calibration, proper sample identification, collection of samples, quality control procedures, and documentation.

Project staff are responsible for ordering sample containers prior to the sampling event.

4.0 Safety

Barr staff is responsible for conducting all aspects of the job safely. When applicable, refer to the appropriate Project Health and Safety Plan (PHASP) to understand the hazards associated with suspected

contamination, symptoms of exposure, methods to minimize exposure, personal protection equipment (PPE), and personal air monitoring required when using this SOP. Minimum protection of two pair of chemical resistant gloves (e.g., nitrile) and safety glasses with side shields should be worn to prevent sample contact with the skin and eyes. When sampling waters contaminated with corrosive materials, emergency eye flushing facilities should be available.

5.0 Equipment, Reagents, and Supplies

- Water quality meter (e.g., YSI, or equivalent)
- Polyethylene bailer and rope
- Sample tubing and fittings
- Turbidimeter (optional)
- Coolers
- Ice
- Chemical resistant gloves (e.g., nitrile)
- Custody seal, if applicable
- Calculator
- Locks/keys

- Pump (peristaltic or submersible), power source, and appropriate drive tubing
- Cord reel (optional)
- Graduated measuring container
- Plastic bags
- Waterproof ink pen or pencil
- Clock or stopwatch
- Sample containers (method specific)
- Sample labels
- Chain-of-custody (COC)

6.0 Procedure

This section describes the procedure(s) for calibrating field equipment, measuring pumping rates, calculating purge volumes, well purging, measuring well stabilization, and the sampling, handling, and delivery of groundwater samples. Best practices include setting up the purging, stabilization, and sampling equipment in an upwind direction from any potential source of contamination.

This SOP describes the groundwater collection from a bore hole, temporary well, or permanent monitoring well. Typically, a direct-push (Geoprobe® or equivalent) will be used to create the bore hole or temporary well by advancing the direct-push sampler to the desired sampling interval (sampling depth). When the sampling depth is reached, small diameter extension rods are inserted through the steel probe rods to hold the groundwater sampler screen in place while the rods and screen sheath are retracted, exposing the screen. The groundwater sampler screen can typically be exposed up to 41 inches, but can be exposed a shorter length depending on project requirements. Alternately, a small diameter PVC well screen and riser pipe may be installed in the bore hole for use as a temporary well. Polyethylene (or project specified) tubing is placed into the bore hole or temporary well, and a peristaltic pump (or equivalent) or project specified pump is used to draw water samples to the surface for collection. Well stabilization is not always necessary for temporary well s but if required by the project, see Section 6.2.6 of this SOP.

After each borehole or temporary well is constructed, the probe rods are decontaminated by the drilling contractor in accordance with project requirements. The polyethylene (or project specified) tubing is discarded after each sample is collected and new tubing is used for the collection of the next sample. The

borehole and temporary well locations will be permanently sealed following applicable state and local regulations.

6.1 Calibration

The water quality meter and turbidimeter will be calibrated as per the applicable Barr SOP. The meters will undergo calibration checks, at a minimum, before and after sampling. The calibration check will be documented on a calibration form (as appropriate) and/or in the field notebook. Any significant issues found during the calibration check will be noted in the field notebook and the Equipment Technicians will be notified.

6.2 Purging/Well Stabilization/Sampling

Prior to sampling, purging of the monitoring well is performed to remove stagnant water from within the well and to stabilize the well to allow for representative groundwater sample collection. The term 'purge volume' refers to the amount of water removed from a well before groundwater sample collection occurs.

Purging well volumes and stabilizing to remove stagnant water from a temporary well may not be necessary due to the short time frame between well installation and sampling. Purging and well stabilization procedure for temporary wells may vary by project or by well. Recommended practice is to purge a temporary well until the water clears, if possible, prior to sampling; however, purging prior to sampling may not be possible at all if water is limited (as it might be in a perched water zone), or water recharge is slow (as it would be in a clayey or silty water bearing zone).

6.2.1 Purge Volume

The volume of standing water in the well is calculated to determine the purge volume that needs to be removed from the well. The water level must be measured in order to determine the volume (see applicable Barr SOP). Calculation of the purge volume is addressed in Section 6.3, Data Reduction/Calculation of this SOP and Table 1. If a well is pumped dry, this constitutes an adequate purge and the well can be sampled following recovery. Refer to project documentation for volumes required to be purged.

6.2.2 Bailer Purging

A bailer can be used for slowly recovering wells with minimal water volume and a depth to groundwater greater than 25 feet. A new disposable polyethylene bailer with a check valve can be attached to a cord reel or a downrigger and support assembly. Polyethylene bailers can be hauled using stainless steel wire or new nylon line (rope).

- Put on gloves for skin protection and to prevent sample contamination.
- Secure the bailer and lower slowly into the water column until the bailer is submerged. Avoid rapid movements of the bailer to minimize turbidity. A cord reel can be used to aid in the lowering of the bailer.
- Raise the bailer and empty the water collected from the bailer into a graduated measuring container.
- Sampling may begin once desired volume is purged and the well has stabilized (see Section 6.2.6, Well Stabilization of this SOP).

6.2.3 Peristaltic Pump Purging

A peristaltic pump is used when the water level is within suction lift (e.g., within about 25 feet of the ground surface but may be less at higher altitudes). It usually is a low-volume suction pump with low pumping rates suitable for sampling shallow, small-diameter wells.

- Put on gloves for skin protection and to prevent sample contamination.
- Lower tubing into the well water (1 to 2 feet below surface) and cut to the desired length.
- Connect the well tubing to the drive tubing entering the pump.
- Connect the drive tubing exiting the pump to the short section of tubing entering the flow-through cell or graduated measuring container.
- Turn on pump and set the speed at the desired rate of flow.
- Sampling may begin once desired volume is purged and the well has stabilized (see Section 6.2.6, Well Stabilization of this SOP).

6.2.4 Submersible Pump Purging

A submersible pump is used when the water level is greater than the suction lift associated with a peristaltic pump. It is commonly used in conjunction with a control box to achieve the desired pumping rate (low to high). Variable rate submersible pumps are available to fit inside 2 inch or larger wells.

6.2.4.1 1.5-inch Submersible Pump

This is a type of submersible pump that can be used in 2-inch or larger diameter wells. It can purge water from depths down to 200 feet or greater, depending on pump model and manufacturer.

- Put on gloves for skin protection and to prevent sample contamination.
- Attach appropriate diameter tubing to pump intake, lower pump, and secure at desired depth.
- Cut off tubing, allowing additional tubing length for discharge.
- Plug the pump into the controller. Pump will begin pumping using the variable speed controller. There are a variety of speed controllers available, typically designed for a specific pump.
- Attach the controller to the power supply.
- Turn on the controller and dial the speed control to the desired flow rate. The controller can slow the purge rate down to the optimum rate.
 - Note: If the submersible pump is not running, turn off the pump and then disconnect from the power supply. Check connections and try again.
- Attach the flow-through cell for the water quality meter.
 - Note: If water is considerably turbid after initial pump start-up, the flow-through cell may be connected after purge water has cleared visually.
- Sampling may begin once desired volume is purged and the well has stabilized (see Section 6.2.6, Well Stabilization of this SOP).

6.2.4.2 3 or 4-inch Submersible Pump

This pump may be used to purge water samples from any depth.

• Put on gloves for skin protection and to prevent sample contamination.

- Attach purging hose to the pipe connected on the top of the submersible pump.
- Lower the submersible pump slowly into the well until it is completely submersed into the water and secure at desired depth.
- Connect the pump to the generator with an extension cord.
- Turn switch to start the generator, put choke on, pull recoil rope, and let generator idle until it is running smoothly
- Turn on power (which is located on the front of the generator).
 - Note: Submersible pump should be running; if not, turn off the generator and check connections.
- Adjust flow rate to desired rate with the valve and measure the flow rate with the graduated measuring container.
- Attach the flow-through cell for the water quality meter.
 - Note: If water is considerably turbid after initial pump start-up, the flow-through cell may be connected after purge water has cleared visually.
- Sampling may begin once desired volume is purged and the well has stabilized (see Section 6.2.6, Well Stabilization of this SOP).

6.2.5 Well Purging with In-place Plumbing

In-place plumbing consists of dedicated, submersible pumps that are permanently installed in a well.

- Put on gloves for skin protection and to prevent sample contamination.
- Turn switch to start the generator, put choke on, pull recoil rope, and let generator idle until it is running smooth.
- Connect the pump to the generator with an extension cord.
- Connect the pipe, elbow, and valve to the discharge pipe of the submersible pump (located at the top of the well) and turn on the generator.
 - *Note: If the pump does not start, check the connection from the generator to the pump.*
- When water flows from discharge of the pump, adjust the flow according to desired flow rate and measure the flow rate with the graduated measuring container.
- Attach the flow-through cell for the water quality meter.
 - Note: If water is considerably turbid after initial pump start-up, the flow-through cell may be connected after purge water has cleared visually.
- Sampling may begin once desired volume is purged and the well has stabilized (see Section 6.2.6, Well Stabilization of this SOP).
 - Note: Each dedicated pump has its own pipe, elbow, and valve. These pieces are left at each well.

6.2.6 Well Stabilization

Well stabilization is typically conducted to help verify that the groundwater sample is representative of aquifer conditions. A well is considered 'stabilized' after the well purge volume has been met and the groundwater (or well) stabilization parameter measurements are within acceptable limits for three consecutive readings. Well stabilization parameters may vary by project or regulatory agency but at a minimum typically include pH, temperature, and specific conductance (temperature corrected electrical conductivity). Dissolved oxygen (DO) and oxidation-reduction potential (ORP) may also be used as stabilization parameters.

The procedure to stabilize a well includes recording well stabilization parameter measurements collected with the water quality meter at the beginning of the well purging process and after subsequently purged well volumes. A well volume is measured as the volume of water present inside a well screen and/or casing (i.e., from the base of the well to the water level measurement) and is defined in the footnotes of Table 1. Groundwater aliquots used for stabilization parameter measurements are typically collected by either directing the purge water discharge line through a flow-through cell or by pouring groundwater from a bailer into a container holding the water quality meter probe (depending on the purging method used).

Documentation of the well stabilization process typically includes recording pertinent information such as the pump type, pumping rate, volume pumped, and well stabilization measurements on the field log data sheets or field notebook. If only the minimum parameters are used for stabilization, the DO and ORP should still be measured and recorded as they may be needed to interpret other chemical parameter results. Turbidity is measured with a standalone turbidimeter but is typically not used as a stabilization parameter. A qualitative determination of turbidity may also be noted (e.g. clear, cloudy, very cloudy, etc.).

The well may be sampled after three consecutive measurements (typically one well volume per measurement), collected at the intervals described above, are within specific project criteria or the criteria presented in Section 7.2, Measurement Criteria of this SOP.

If field parameters do not stabilize after five well volumes have been purged, then the field technician will verify that the probes and related equipment are functioning properly and that operator error is not an issue. They will also re-evaluate whether or not water is being withdrawn from the appropriate depth to effectively evacuate the well. If all the checks produce no new insight, a decision will need to be made by the project team on whether to collect samples for laboratory analysis. When samples are collected, it will be clearly documented that stabilization was not achieved; at a minimum, this fact will be reported on the field log data sheets and in the Field Sampling Report.

If the well was purged dry, it shall be allowed to recharge and the samples should then be collected. If there is insufficient sample volume for the analyses being sampled, the project team will need to decide if sampling should be carried out or if a reduced prioritized list of analyses should be collected.

6.2.7 Sampling

The project team will determine the order for sampling the wells but general guidelines are below:

- Where water quality data are available, the least contaminated wells would be sampled first, proceeding to increasingly contaminated wells.
- Where the distribution of contaminants is not known, wells considered to be up gradient from likely sources of contamination would be sampled first and downgradient wells closest to the suspected contamination would be last.
- Make certain to keep records of the order in which wells were sampled.

Similar to purging, sampling requires the use of pumps or bailers. It may be appropriate to use a different device to sample than that which was used to purge. The most common example of this is the use of a pump to purge and a bailer to sample. There are several factors to take into consideration when choosing

a sampling device. The experience of the project team will be used to determine which is appropriate and care should be taken when reviewing the advantages or disadvantages of any one device.

To prevent the possible loss of some volatile organic compounds (VOCs), samples for volatile parameters should be collected first with as little agitation and disturbance as possible, then proceed in order towards the least volatile parameter as listed in Barr's 'Water Sampling Guidelines' form. The 40 mL vials used to collect the VOC samples should be checked for air bubbles. Air bubbles may be caused by insufficient meniscus when sealing the vial, degassing after sample collection or during sample shipment, or reaction between the sample and preservative (HCl). If air bubbles > 6 mm (pea-sized) are observed during sampling, discard the vial and recollect the sample using a new vial. If air bubbles are believed to be due to the sample reacting with the preservative, the sample should be collected in an unpreserved vial if possible.

Put on new sampling gloves at each sampling site to reduce the risk of sample cross-contamination and exposure to skin. Never reuse old gloves.

Prepare sampling containers by filling out the label, using an indelible permanent pen, with the following information at a minimum:

- Sample ID
- Date and time of sample collection
- Preservative
- Sample analysis (if required by the lab)

When filling the containers, do not insert the tubing into the containers and do not overfill preserved containers. When all samples are containerized, place the filled sample containers in a sampling cooler with ice, turn off any equipment, disassemble the sampling apparatus, dispose of all one-time use (disposable) equipment, and decontaminate reusable equipment per Barr's SOP 'Decontamination of Sampling Equipment'.

6.2.7.1 Bailer Sampling

After the well has been purged and stabilized, secure the bailer and slowly lower into the top of the water column making certain not to stir up the water with the bailer, which could result in volatizing the samples. Keep the bailer in the top portion of the water column when collecting the sample.

When the bailer is filled, slowly raise the bailer out of the well. A clean tarp may be used to cover the ground to minimize the contact of the rope with the ground. Fill containers in the order listed in Barr's 'Water Sampling Guidelines' form.

6.2.7.2 Peristaltic / Submersible Pump Sampling

After the well has been purged and stabilized, disconnect the tubing exiting the pump from the flow-through cell, if used and fill containers as listed in Barr's 'Water Sampling Guidelines' form.

6.2.7.3 Check Valve Sampling

Sampling temporary wells through tubing with a check valve may be conducted following a drilling subcontractor's procedure.

6.2.8 Preservation

Container volume, type, and preservative are important considerations in sample collection. Container volume must be adequate to meet laboratory requirements for quality control, split samples, or repeat analyses. The container type varies with the analysis required. Typically, the analytical laboratory will preserve the container before shipment. Preservation and shelf life vary; contact the laboratory to determine if an on-hand container is still useful. Barr's 'Water Sampling Guidelines' form lists the parameter, container type, container volume, and preservative for many of the most common parameters collected.

6.2.9 Handling

The samples will be bubble wrapped or bagged after collection, stored in a sample cooler, and packed on double bagged wet ice. Samples will be kept cold (\leq 6 °C, but not frozen), until receipt at the laboratory (where applicable).

Note: Samples may need to be stored indoors in winter to prevent freezing.

6.2.10 Shipment/Delivery

Once the cooler is packed to prevent breaking of bottles, the proper chain-of-custody (COC) documentation is signed and placed inside a plastic bag then added to the cooler.

All samples will be kept secured to prevent tampering. If sample coolers are left in a vehicle or field office for temporary storage, the area will be locked and secured.

Custody seals may be present, but at a minimum, the coolers must be taped shut to prevent the lid from opening during shipment.

The coolers must be delivered to the laboratory via hand or overnight delivery courier, if possible, in accordance with all Federal, State and Local transportation regulations and Barr's SOP 'Domestic Transport of Samples to the Laboratory'.

6.3 Data Reduction/Calculations

Table 1 provides the volume of water (per foot or meter of depth) based on the diameter of the casing or hole. The following are two examples of calculations used in Table 1:

Volume of Standing Water (V), cubic feet

$$V = (\pi)(r^2)(h)$$

Where: $\pi = 3.1416$

r = Well radius (ft)

h = Total well depth (ft) – depth to static water (ft) = Water column height (ft)

Note: For the table calculations, 'h' is equal to one foot.

Well Volume (WV), gallons

$$WV = (V)(7.48)$$

Where: V = Volume of standing water, cubic feet

7.48 = Cubic foot to US Gallons conversion factor

Calculate the volume of water to be purged using the equation below:

VP = (WV)(NWV)

Where: VP = Volume of water to be purged

WV = Well volume in gallons

NMV = Number of well volumes to be purged per project requirements

6.4 Disposal

Waste generated by this process will be disposed of in accordance with Federal, State and Local regulations and Barr's SOP 'Investigative Derived Waste'. Where reasonably feasible, technological changes have been implemented to minimize the potential for environmental pollution.

7.0 Quality Control and Quality Assurance (QA/QC)

The QC activities described below allow the self-verification of the quality and consistency of the work.

7.1 QA/QC Samples

QA/QC samples are defined in Barr's SOP 'Collection of Quality Control Samples'. The sampling frequency should be performed at the frequency noted in the project scope of work and/or documentation (e.g., Work Plan, SAP, or QAPP).

7.2 Well Stabilization Criteria

Well stabilization criteria to be used if there are no project specific criteria:

- pH ± 0.1 standard units
- Temperature ± 0.5 °C
- Specific conductance ± 5%
- Optional Criteria:
 - ORP ± 10 mV
 - Dissolved oxygen ± 10% (> 0.5 mg/L)

Note: Three consecutive readings ≤ 0.5 mg/L can be considered stabilized.

o Turbidity ± 10% (> 5 Nephelometric Turbidity Units (NTU))

Note: Three consecutive readings ≤ 5 NTU can be considered stabilized.

8.0 Records

The field technician will document the pumping flow rate, well volume, time purged, volume purged, water level, total well depth and stabilization test measurements on the field log data sheet and/or field notebook. They will also document the type and number of bottles on the chain-of-custody record, as appropriate. The analysis for each container and the laboratory used will be documented on the chain-of-custody record. Refer to Barr's SOP 'Documentation on a Chain-of-Custody (COC)' for further information.

Examples of common field documentation are available in Barr's "Compendium of Field Documentation". Field documentation specific to this SOP are listed below:

• Chain-of-custody (COC)

- Sample label
- Custody seal (if applicable)
- Water Level Data Sheet
- Field Log Data Sheet
- Field Log Cover Sheet
- Field Sampling Report
- Water Sampling Guidelines (includes sampling order, container, preservation, and holding time)

The field documents and COCs are provided to a Barr Data Management Administrator for storage on the internal Barr network.

Additional records information can be found in Barr's "Records Management System Manual".

Other Barr SOP subjects referenced within this SOP: water level measurement, water quality meter, turbidimeter, collection of QC samples, decontamination of sampling equipment, and documentation on a COC.

9.0 References

Environmental Protection Agency. Title 40 of the Code of Federal Regulations, Part 136.3.

Environmental Protection Agency, EPA/540/P-91/007. 1999. Compendium of ERT Groundwater Sampling Procedures.

Minnesota Pollution Control Agency, Water Quality Division. 2006. Sampling Procedures for Groundwater Monitoring Wells.

Table 1

Volume of Water in Casing or Hole

Diameter of Casing or Hole (In)	Gallons per Foot of Depth (WV)	Cubic Feet per Foot of Depth (V)	Liters per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509 x 10 ⁻³
1½	0.092	0.0123	1.142	1.142 x 10 ⁻³
2	0.163	0.0218	2.024	2.024 x 10 ⁻³
2½	0.255	0.0341	3.167	3.167 x 10 ⁻³
3	0.367	0.0491	4.558	4.558 x 10 ⁻³
3½	0.500	0.0668	6.209	6.209 x 10 ⁻³
4	0.653	0.0873	8.110	8.110 x 10 ⁻³
4½	0.826	0.1104	10.26	10.26 x 10 ⁻³
5	1.020	0.1364	12.67	12.67 x 10 ⁻³
5½	1.234	0.1650	15.33	15.33 x 10 ⁻³
6	1.469	0.1963	18.24	18.24 x 10 ⁻³
7	2.000	0.2673	24.84	24.84 x 10 ⁻³
8	2.611	0.3491	32.43	32.43 x 10 ⁻³
9	3.305	0.4418	41.04	42.04 x 10 ⁻³
10	4.080	0.5454	50.67	50.67 x 10 ⁻³
11	4.937	0.6600	61.31	61.31 x 10 ⁻³
12	5.875	0.7854	72.96	72.96 x 10 ⁻³
14	8.000	1.069	99.35	99.35 x 10 ⁻³
16	10.44	1.396	129.65	129.65 x 10 ⁻³
18	13.22	1.767	164.18	164.18 x 10 ⁻³
20	16.32	2.182	202.68	202.68 x 10 ⁻³
22	19.75	2.640	245.28	245.28 x 10 ⁻³
24	23.50	3.142	291.85	291.85 x 10 ⁻³
26	27.58	3.687	342.52	342.52 x 10 ⁻³
28	32.00	4.276	397.41	397.41 x 10 ⁻³
30	36.72	4.909	456.02	456.02 x 10 ⁻³
32	41.78	5.585	518.87	518.87 x 10 ⁻³
34	47.16	6.305	585.68	585.68 x 10 ⁻³
36	52.88	7.069	656.72	656.72 x 10 ⁻³

¹ gallon = 3.7854 liters

¹ liter = 0.26417 gallons

¹ meter = 3.281 feet

¹ gallon water weighs 8.33 lbs. = 3.785 kilograms

¹ liter water weighs 1 kilogram = 2.205 lbs.

¹ gallon per foot of depth = 12.419 liters per foot of depth

¹ gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth



Standard Operating Procedure Collection of Soil Samples

Revision 8

February 23, 2016

Approved By:

	ν	TO TOUR	40	
Kevin McGilp		The state of the	<u>/</u>	02/23/16
Print Tech	nnical Reviewer	Signature		Date
Terri Olson	2	eni a. Al	Son	02/23/16
	A Manager		<u> </u>	Date
Review of the SOP has	been performed and	I the SOP still reflects	current prac	tice.
Traitiala		Data		
Initials:		Date:		_
Initials:		Date:		
Initials:		Date:		
		·		_
Initials:		Date:		

Collection of Soil Samples

1.0 Scope and Applicability

The purpose of this Standard Operating Procedure (SOP) is to describe the collection of a representative soil sample using a variety of methods (including compositing of discrete samples) and equipment depending on the depth and type of sample required. This procedure applies to the collection of soil samples for volatiles (VOC), semivolatiles (SVOC), metals, and inorganics analyses. It also identifies the container, preservative, and weight required for each analysis type.

The recommended procedures in this SOP should be followed unless conditions make it impractical or inappropriate to do so. Modifications should be noted in the applicable documentation and communicated to appropriate personnel. Significant changes may result in a revision or newly created SOP.

2.0 Limitations

- Sample collection methods can vary by project. If not specified in the project scope of work and/or documentation (e.g., Work Plan, Sampling Analysis Plan (SAP), or Quality Assurance Project Plan (QAPP)), consult with the appropriate regulatory agency for guidance.
- Inadequate homogenization of the samples, where applicable, can result in non-representative samples and results.
- Decontamination of sampling equipment is required to prevent cross-contamination.
- Contact the local utilities hotline prior to digging to have utilities identified at sampling locations.

3.0 Responsibilities

Equipment Technicians are responsible to maintain equipment in working order and aid in troubleshooting equipment issues.

The role of the Project Health and Safety Team Leader is to oversee all aspects of on-site safety activities.

The Project Manager, in conjunction with the client, develops the site specific scope of work (e.g., Work Plan, SAP, etc.).

Experienced Field Technicians are responsible for the proper sample identification, collection of samples, field screening procedures, field equipment and calibration, quality control procedures, and documentation.

Project staff are responsible for ordering sample containers prior to the sampling event.

4.0 Safety

Barr staff is responsible for conducting all aspects of the job safely. When applicable, refer to the appropriate Project Health and Safety Plan (PHASP) to understand the hazards associated with suspected contamination, symptoms of exposure, methods to minimize exposure, personal protection equipment (PPE), and personal air monitoring required when using this SOP. Minimum protection of two pair of chemical resistant gloves (e.g., nitrile) and safety glasses with side shields should be worn to prevent

sample contact with the skin and eyes. When sampling soils contaminated with corrosive materials, emergency eye flushing facilities should be available.

Some of the sample containers may require the use of preservatives. Consult the applicable Safety Data Sheet to review hazards and appropriate PPE to minimize exposure.

5.0 Equipment, Reagents, and Supplies

- Sampling devices/tools
- Stainless steel mixing bowl and spoon
- Sample containers (method specific)
- Balance
- Coolers
- Plastic bags
- Non-phosphorus containing detergent (e.g., Liquinox[™])

- Chemical resistant gloves (e.g., nitrile)
- Paper towels/laboratory tissues
- Chain-of-custody (COC)
- Sample label
- Custody seal, if applicable
- Waterproof ink pen or pencil
- Ice

6.0 Procedure

This section describes the procedure(s) for the sampling, handling, and delivery of soil samples.

6.1 Calibration

No specific calibration procedures are required for the actual sampling equipment; however, the calibration of the balance should be verified prior to use. Refer to the applicable Barr SOP.

6.2 Sampling

General considerations to be taken into account when planning and conducting sampling operations are the required sample weight, sample holding times, sample handling, and special precautions for trace contaminant sampling.

To prevent sample cross-contamination, the soil sampling equipment is carefully cleaned before initially sampling and after working at each sampling point per Barr's SOP 'Decontamination of Sampling Equipment'. A new, clean outer pair of disposable gloves will be worn for each sample location and sample containers are placed in separate plastic bags after collecting, preserving and tagging. Sample collection activities will proceed progressively from the least contaminated area to the most contaminated area (when known).

Depending on the project work to be done, soil samples will be collected for analysis by either a drilling apparatus (equipped with a split spoon or core barrel sampler), hand excavation (hand auger, trowel, or shovel), or direct-push (Geoprobe®) technology

• If a drilling apparatus was used, retrieve the split spoon or core barrel sampler from the desired sampling interval and open. If a liner (sleeve) is present and will not be sampled in the field, wrap the ends of the liner with heavy-duty aluminum foil, taking care to not pierce the foil. Tape the foil to the brass liner with duct tape to seal. Cover the ends of the liner with plastic caps or duct tape to fully protect the foil and package for shipment to the laboratory. If a liner is being sampled in the field, open the liner to sample the soil.

- If hand excavating, dig with a trowel or shovel to the desired sampling interval and expose a fresh soil surface to sample. Collect a large sample on a shovel and bring it to the surface or collect the sample directly from the fresh soil surface. The hand excavation technique may be done from the bucket of a backhoe also.
- If direct-push (Geoprobe®) technology is used, soils are typically sampled following the subcontractor's soil sampling procedures. This method generally utilizes a direct-push soil boring rig, steel drive rods and a 2-inch outside diameter (O.D.) soil core sampler with a dedicated 1.75-inch inside diameter (I.D) removable acetate plastic sampler liner. The probe rods and sampling unit are driven to the desired sampling depth by the static weight of the carrier vehicle and hydraulic hammer percussion. Two, four, or five-foot sample cores are typically collected. The assembly is brought to the surface and the soil sample is exposed by cutting open the sampler liner.

In most investigations, the soil samples are field screened for moisture, odor, oil sheen, discoloration and the presence of organic soil vapors and classified in accordance with ASTM D-2488, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure). Refer to Barr's SOP 'Screening Soil Samples'.

The form 'Soil Sampling Guidelines' lists the analyses (in order of collection) and describes the weight of sample, preservation, container, and holding time for the most common sampling media (information can vary depending on the laboratory used). The container size, type, preservative, and holding time are important considerations in sample collection. Sample and container size must be adequate to meet laboratory requirements for quality control, split samples, or repeat analyses. The container type varies with the analysis required. Typically, the analytical laboratory will preserve the container before shipment, where applicable. Preservation and shelf life vary; contact the laboratory to determine if an on-hand container is still useful.

Both discrete and composite samples can be used for environmental investigations. A discrete sample is a sample that originated from a specific area at a specific time. The sample may be transferred directly from the sampler or sampling location to the sample container.

A composite sample is a collection of multiple temporary or discrete samples of the same medium that are combined, thoroughly homogenized, and treated as a single sample. Composite samples are valuable in characterizing a large area or volume of soil.

NOTE: Samples collected for analysis of volatile organic compounds (VOC) should not be homogenized or composited, due to aeration of the sample during mixing which may result in loss of VOC.

6.2.1 Volatile Organic Compounds (VOC)

If VOC or similar analyses (e.g., GRO, TPH as Gasoline) are being analyzed, these samples should be collected as soon as possible after the soil is removed from the ground from a representative area of the most undisturbed soil possible. Please refer to Barr's SOP 'Screening Soil Samples'. It is important to note that there are different containers and sampling media available for collecting a soil sample for VOC. Typically, the VOC sample is collected at a 1:1 weight ratio with a preservative. A coring device, such as a Terra Core® or En Core® sampler, is the first choice for sampling. After VOC samples are collected, mix the remaining soil from the sampling locations/intervals prior to filling the rest of the sample containers.

Note: Analytical samples should not be collected from polyethylene bags sometimes used for field screening purposes.

6.2.1.1 Terra Core® Sampler

The Terra Core[®] Sampler is a single use device that is typically supplied with a 40 mL VOA vial containing preservative (e.g., methanol) and an unpreserved container for % moisture/% solids determination. To use the Terra Core[®], make certain the plunger is aligned with, and seated in, the handle. Push the Terra Core[®] into freshly exposed soil until the sample chamber is filled. Depending on the Terra Core[®] sampler size, a filled chamber will deliver approximately 5 or 10 g of soil. If a 1:1 ratio of soil to preservative is needed, verify the correct size sampler is being used.

Wipe the outside of the sampler, check that the soil plug is flush with the mouth of the sampler, and remove any excess soil. Rotate the plunger 90° until it is aligned with the slots in the body. Extrude the sample into the appropriate container by pushing the plunger down. To provide a good sealing surface, wipe the container lip and screw threads to remove soil and immediately screw on the lid. If preservative is present in the container, swirl to immerse the sample. Record the sample ID on the container and package for shipment to the laboratory.

6.2.1.2 En Core® Sampler

The disposable En Core® sampler is a single use device that is pushed into the soil using a reusable En Core® T-handle. Two, 5 g samplers are typically supplied with an unpreserved container for % moisture/% solids determination. Hold the En Core® coring body and push plunger down until the small O-ring rests against the tabs so the plunger moves freely.

Depress the locking lever on the T-handle. Place coring body plunger end first into the open end of the T-Handle, aligning the slots on the coring body with the locking pins in the T-Handle. Twist coring body clockwise to lock pins in slots. Make certain that the sampler is locked in place.

Turn T-handle with T-up and coring body down. This will position the plunger bottom flush with bottom of coring body. Using T-handle, push sampler into soil until coring body is completely full. When full the small O-ring will be centered in the T-handle viewing hole. Remove excess soil from the coring body exterior.

Cap the coring body while it is still on the T-handle by pushing and twisting the cap over the bottom until grooves on locking arms seat over ridge on coring body. Remove the coring body from the T-handle and lock plunger by rotating extended plunger rod fully counterclockwise until wings rest firmly against tabs.

Attach the accompanying label and package for shipment to the laboratory.

6.2.1.3 Other

If no coring device is available, an estimate of the amount of soil needed to provide the desired weight can be determined. Place an extra laboratory container, disposable weigh boat, paper towel, or laboratory tissue on a balance pan. Using a stainless steel spoon, add the desired weight (10 g or 25 g) of a representative soil sample on the balance. Once the amount has been established, discard the soil used in the estimation and collect the sample as per form 'Soil Sampling Guidelines'.

If allowed by applicable regulations for VOC sample collection, the VOC aliquot may be weighed directly into the sample container by placing the pre-weighed sample container on the balance, taring the balance, then adding the appropriate amount of soil to the container to reach the desired aliquot weight. This should be done quickly to reduce the possible loss of VOCs.

6.2.2 Compositing Discrete Samples

Discrete samples, to be used for compositing, are stored at \leq 6 °C until each individual sample is obtained. A minimum volume of soil obtained during discrete sampling will be dependent on the final analytical requirements for the composite sample; however, a minimum weight of eight ounces should be sufficient for analysis of semivolatiles (SVOC), PCBs, pesticides, and metals.

After discrete samples have been obtained, record the locations to be included in a final composited sample in the field documentation. Appropriate laboratory containers should be labeled with this final sample identifier and the date of collection.

Retrieve the samples selected for compositing from storage. One container from each discrete sample location should remain in storage in case individual sample confirmations are necessary. Empty the entire contents of each container into a stainless steel mixing bowl, removing any large debris or rocks, and mix thoroughly.

6.2.3 Diesel Range Organics (DRO) / SVOC / General Chemistry / Metals

Using either a composited sample or a homogenized, discrete sample, fill the remaining containers in the order listed on form 'Soil Sampling Guidelines'. Unless aliquot weights are listed, pack the soil into the sample jars leaving no headspace. If allowed by applicable regulations, the WIDRO sample may be weighed directly into the sample container by placing the pre-weighed sample container on the field balance, taring the field balance, then adding the appropriate amount of soil to the container to reach the desired sample weight (~25 g).

Wipe the container lip and screw threads to remove soil and provide a good sealing surface, and immediately screw on the lid.

6.2.4 Handling

After collection, all samples should be handled as few times as possible. Samplers should use extreme care to ensure that samples are not contaminated. Immediately after samples are collected, they are bubble wrap or bagged and placed in a cooler containing bagged ice. Samples will be kept cold (\leq 6 °C, but not frozen) until receipt at the laboratory, where they are to be stored in a refrigerated area.

Keep samples secure to prevent tampering. If sample coolers are left in a vehicle or field office for temporary storage, the area will be locked and secured.

6.2.5 Shipment/Delivery

Once the cooler is packed to prevent breaking of containers, the proper COC documentation is relinquished by the sampler, placed into a plastic bag, and included in the cooler. Custody seals may be used, and the coolers should be taped shut if not hand delivered.

The coolers must be delivered to the laboratory via hand or overnight delivery courier in accordance with all Federal, State and Local transportation regulations and Barr's SOP 'Domestic Transport of Samples to the Laboratory'.

Note: Samples may have to be stored indoors in winter to prevent freezing.

6.3 Data Reduction/Calculations

No data reduction or calculations are associated with this procedure.

6.4 Disposal

Waste generated by this process will be disposed of in accordance with Federal, State and Local regulations and Barr's SOP 'Investigative Derived Waste'. Where reasonably feasible, technological changes have been implemented to minimize the potential for environmental pollution.

7.0 Quality Control and Quality Assurance (QA/QC)

The QC activities described below allow the self-verification of the quality and consistency of the work.

7.1 QA/QC Samples

QA/QC samples are defined in Barr's SOP 'Collection of Quality Control Samples'. The sampling frequency should be performed as written in the project scope of work and/or documentation (e.g., Work Plan, SAP, or QAPP).

7.2 Measurement Criteria

No specific criteria apply to the implementation of this SOP.

8.0 Records

The field technician will document the soil sampling event in a project dedicated field logbook or on field log data sheets. The analysis for each container, the number of bottles, and the laboratory used will be documented on the chain-of-custody record. Refer to Barr's SOP 'Documentation on a Chain-of-Custody (COC)' for further information.

Examples of common field documentation are available in Barr's "Compendium of Field Documentation". Field documentation specific to this SOP are listed below:

- Field Sampling Report
- Field Log Data Sheet
- COC
- Sample label
- Custody seal (if applicable)
- Soil Sampling Guidelines (includes sampling order, container, preservation, and holding time)

Field documentation and COC are provided to a Barr Data Management Administrator for storage on the internal Barr network.

Additional records information can be found in Barr's "Records Management System Manual."

Other Barr SOP subjects referenced within this SOP: screening soil samples, balance calibration, collection of QC samples, decontamination of sampling equipment, investigative derived waste, domestic transport of samples, and documentation on a COC.

9.0 References

USEPA Environmental Response Team. 2000. SOP for Soil Sampling.



Standard Operating Procedure Decontamination of Sampling Equipment

Revision 1

March 15, 2018

Approved By:

	//	Jhn W. Jo	with	
John W. Juntilla	/			03/15/18
Print	Technical Reviewer	Signature		Date
Terri Olson	J	eni a.	llson	03/15/18
			7000	
Print	QA Manager	Signature		Date
Review of the SC	DP has been performed and	d the SOP still re	flects current pra	ctice.
	·		·	
Initials:		Date:		_
Initials:		Date:		_
Initials:		Date:		
Initials:		Date:		

Decontamination of Sampling Equipment

1.0 Scope and Applicability

The purpose of this Standard Operating Procedure (SOP) is to define the process used for decontaminating environmental sampling-related equipment including pumps, meters, and materials coming into contact with actual sampling equipment or with sampling personnel. This procedure is applicable to all personnel who are collecting samples and/or decontaminating sampling and field equipment.

The recommended procedures in this SOP should be followed unless conditions make it impractical or inappropriate to do so. Modifications should be noted in the applicable documentation and communicated to appropriate personnel. Significant changes may result in a revision or newly created SOP.

2.0 Limitations

• Equipment used once and discarded such as bailers, protective gear, and filtration devices are not part of this SOP.

3.0 Responsibilities

The equipment technician is responsible for ensuring field equipment has been thoroughly decontaminated and prepared for use out in the field. The field technician(s) are responsible for decontamination in the field at each individual sampling point and for ensuring adherence to any investigative derived waste (IDW) project-specific requirements set forth in a QAPP or SAP (if applicable).

The role of the Field Safety Representative is to oversee on-site safety activities.

4.0 Safety

Barr staff is responsible for implementing aspects of the job safely. Where available, refer to the appropriate Project Health and Safety Plan (PHASP) to determine the proper personal protection equipment (PPE) required when using this SOP. Barr staff is responsible for conducting all aspects of the job safely. When applicable, refer to the appropriate Project Health and Safety Plan (PHASP) to understand the hazards associated with suspected contamination, symptoms of exposure, methods to minimize exposure, personal protection equipment (PPE), and personal air monitoring required when using this SOP. Minimum protection of one pair of chemical resistant gloves (e.g., nitrile) and safety glasses with side shields should be worn to prevent sample contact with the skin and eyes. When sampling soils contaminated with corrosive materials, emergency eye flushing facilities should be available.

Some of the sample containers may require the use of preservatives. Consult the applicable Safety Data Sheet to review hazards and appropriate PPE to minimize exposure.

5.0 Equipment, Reagents, and Supplies

- Non-phosphorus detergent (e.g., LiquinoxTM)
- Scrub brush made of inert materials
- Oven
- Bucket
- Tap water

- Analyte-free water (e.g., distilled or deionized (DI) water, or equivalent)
- Kimwipes[®], or equivalent
- Chemical resistant gloves (e.g., nitrile)
- Spray bottle
- Organic solvent (e.g. methanol)

6.0 Procedure

This section describes the procedure(s) for the decontamination of equipment used to sample water, soil, or air.

6.1 Calibration

Calibration is not applicable to this SOP.

6.2 Operation

Decontamination of sampling equipment will be performed before sampling and after working at each sampling point, if applicable.

6.2.1 Water Sampling Equipment

Equipment that does not contact sample water or the inside of the well should be rinsed with analyte-free water and inspected for remaining particles or surface film. If these are noted, repeat cleaning and rinse procedures.

Equipment that contacts sample water or the inside of the well should be cleaned (inside and outside where possible) with a non-phosphorus detergent solution applied with a spray bottle and/or scrub brush (if needed). Rinse with analyte-free water and containerize with other IDW if required by the SAP or QAPP and inspect for remaining particles or surface film. If these are noted, repeat cleaning and rinse procedures. Shake off remaining water and allow to air dry.

The internal surfaces of pumps and tubing that cannot be adequately cleaned by the above methods alone will also be cleaned by first circulating a non-phosphorus detergent solution through them followed by circulating analyte-free water. Special care will be exercised to ensure that the "rinse" fluids will be circulated in sufficient quantities to completely flush out contaminants and detergents.

When transporting or storing equipment after cleaning, the equipment will be stored in a manner that minimizes the potential for contamination.

6.2.2 Soil/Sediment Sampling Equipment

A variety of samplers (split-barrel, split-barrel with brass liners, piston sampler, backhoe, hand-auger, or shovel) may be used to retrieve soil from sampling locations. The soil sample will either be sealed within the sampler (e.g., collecting volatile samples) or the soil sample will be transferred to laboratory-supplied containers depending on the analysis to be conducted on the soil sample. The equipment required to transfer the soil from the sampler to the laboratory-supplied sample containers includes: stainless-steel

spoons or scoops and the appropriate personal protective equipment necessary for collection and handling of soil samples as described in the PHASP.

All soil sampling equipment, including split-barrels, stainless-steel spoons and scoops, will be carefully cleaned before and during sampling with a tap water and non-phosphorus detergent solution, using a brush if necessary to remove particulate matter and films. The equipment is then rinsed three times with tap water and/or three times with analyte-free water. Inspect equipment and repeat procedure if any residual soil or visible contaminants are present. Dry sampler with a Kimwipes[®]. Organic solvents (e.g., methanol) may be used to aid with desorbing organic material but should be kept to a minimum and must be collected and containerized if used.

At the completion of the work day, the samplers should be decontaminated following the procedure above and stored in a manner that minimizes the potential for contamination.

6.2.3 Air Sampling Equipment

For non-laboratory manifold equipment, methanol soak manifold components for a minimum of two hours. Remove from the methanol bath and place in an oven pre-heated to 90 °C and continue to heat manifold components for at least 3 hours or until interior and exterior surface inspections of the manifold components indicate that they are free of liquid methanol.

6.2.4 Handling

All equipment will be handled in a manner that minimizes cross-contamination between points. After cleaning, the equipment will be visibly inspected to detect any residues or other substances that may exist after normal cleaning. If inspection reveals that decontamination was insufficient, the decontamination procedures will be repeated.

6.3 Data Reduction/Calculations

No data reduction or calculations are associated with this procedure.

6.4 Disposal

IDW generated by this process will be disposed of in accordance with Federal, State and Local regulations and/or as required by project-specific SAP or Work Plan. Where reasonably feasible, technological changes have been implemented to minimize the potential for environmental pollution.

7.0 Quality Control and Quality Assurance (QA/QC)

The QC activities described below allow the self-verification of the quality and consistency of the work.

7.1 QA/QC Samples

Decontamination procedures may be monitored through the use of an equipment blank which consists of analyte-free water processed through non-disposable or non-dedicated aqueous or solid sampling equipment after equipment decontamination and before field sample collection. The equipment blank is analyzed for the same parameters as the samples at a project specific frequency (e.g., one per twenty samples).

7.2 Measurement Criteria

Equipment blank results should be below the laboratory's method detection limit or reporting limit (depending on the data quality objectives).

8.0 Records

When required, the field technician(s) will document the field equipment decontamination procedures in a project dedicated field logbook or on field log data sheets.

Examples of common field documentation are available in Barr's "Compendium of Field Documentation". Field documentation is listed in the applicable sample collection SOP.

Field documentation and COC are provided to a Barr Data Management Administrator for storage on the internal Barr network.

Additional records information can be found in Barr's "Records Management System Manual."

Other Barr SOP subjects referenced within this SOP: collection of samples and investigative derived waste.

9.0 References

ASTM. 2015. Standard Practice for Decontamination of Field Equipment Used at Waste Sites.



Standard Operating Procedure Field Screening Soil Samples

Revision 7

April 27, 2017

Approved By:

	9	Ihr W. Jenette	5
 John W. Juntill	a		04/27/1
Print	Technical Reviewer	Signature	Date
Terri A. Olson	<i>Ö</i> .	Peni A. Also	~ 04/27/1
Print	QA Manager	Signature	Date
Review of the SOI	P has been performed and	the SOP still reflects cur	rrent practice.
Initials:		Date:	

Field Screening of Soil Samples

1.0 Scope and Applicability

The purpose of this Standard Operating Procedure (SOP) is to describe the procedure for properly screening soil or sediment samples in the field. This procedure applies to all field technicians responsible for field screening soil or sediment samples.

The recommended procedures in this SOP should be followed unless conditions make it impractical or inappropriate to do so. Modifications should be noted in the applicable documentation and communicated to appropriate personnel. Significant changes may result in a revision or newly created SOP.

2.0 Limitations

- Screening techniques can vary by project. If not specified in the project scope of work and/or documentation (e.g., Work Plan, Sampling Analysis Plan (SAP), or Quality Assurance Project Plan (QAPP)), consult with the appropriate regulatory agency for guidance, if applicable.
- Interferences on the test can be caused by any contaminant that can cause an oil sheen on water. The samples will be carefully observed for characteristic appearance or odors which may indicate a possible contaminant other than coal tar or petroleum substances.
- Sunlight and low temperatures may interfere with headspace development.
- Water and soil particles may interfere with PID and FID measurements.
- Decontamination of screening equipment is required to prevent cross-contamination.
- Contact the local utilities hotline prior to digging to have utilities identified at sampling locations.

3.0 Responsibilities

Equipment Technicians are responsible to maintain equipment in working order and aid in troubleshooting equipment issues.

The role of the Project Health and Safety Team Leader is to oversee all aspects of on-site safety activities.

The Project Manager, in conjunction with the client, develops the site specific scope of work (e.g., Work Plan, SAP, etc.).

Experienced Field Technicians are responsible for the proper sample identification, field screening procedures, field equipment and calibration, quality control procedures, and documentation.

4.0 Safety

Barr staff is responsible for conducting all aspects of the job safely. When applicable, refer to the appropriate Project Health and Safety Plan (PHASP) to understand the hazards associated with suspected contamination, symptoms of exposure, methods to minimize exposure, personal protection equipment (PPE), and personal air monitoring required when using this SOP. Minimum protection of two pair of chemical resistant gloves (e.g., nitrile) and safety glasses with side shields should be worn to prevent sample contact with the skin and eyes. When screening soils contaminated with corrosive materials, emergency eye flushing facilities should be available.

Consult the applicable Safety Data Sheet to review hazards and appropriate PPE to minimize exposure.

5.0 Equipment, Reagents, and Supplies

- Photoionization detector (PID)
- Flame ionization detector (FID)
- Squirt bottle with tap water
- Waterproof ink pen or pencil

- Chemical resistant gloves (e.g., nitrile)
- Stainless steel spoon
- Polyethylene bags

6.0 Procedure

The field screening techniques for soils are as follows: visual examination, odor, headspace organic vapor screening, and oil sheen. The results of these four screening procedures may be used to screen soil samples for possible contamination.

6.1 Calibration

The PID or FID shall be calibrated or checked against a known concentration of a calibration gas standard prior to collection of field measurements. Calibration of the PID or FID shall follow the recommended procedures as described in the manufacturer's operation manual or as per the applicable Barr SOP.

Regular calibration checks (bump tests) are expected to be performed by the field technician a minimum of once per day of use in the field. It is recommended that bump tests be conducted around mid-day and at the end of the day. More frequent bump testing may be completed if warranted by field conditions. The bump testing results should be recorded in the field log book or field log data sheets.

If problems occur during calibration, during bump tests, or if the unit will not stay calibrated, the field technician should document the issue in the field notes then contact the equipment technician or project manager for assistance.

6.2 Screening Techniques

The field screening techniques for soils are as follows: visual examination, odor, headspace organic vapor screening, and oil sheen. The results of these four screening procedures may be used to screen soil samples for possible contamination. To prevent sample cross-contamination, the screening equipment is carefully cleaned before and after working with each sample per Barr's SOP 'Decontamination of Sampling Equipment'.

6.2.1 Visual Examination

A visual examination of the soil sample will include noting any discoloration of the soil or visible oiliness or tar.

6.2.2 Odor

The field technician will note odor only if noticed incidentally while handling the soil sample. Field technicians will not unduly expose themselves to sample odors. Odor will be described as trace, light, moderate, or strong, and appropriate description of the type of odor, if evident.

6.2.3 Headspace Organic Vapor Screening

The polyethylene bag headspace method recommended by the Minnesota Pollution Control Agency will be used in the field to screen soils suspected to contain volatile organic compounds. The screening method is intended to be used in conjunction with other "real time" observations.

The following equipment is required to conduct headspace organic vapor screening: PID or FID, polyethylene bag, log book or record sheet, and appropriate PPE. Soil samples collected from a split-barrel sampler or a direct-push (i.e., Geoprobe) sample liner will be collected immediately after opening the barrel or liner. If the sample is collected from an excavation wall, soil pile, or backhoe bucket, it will be collected from a freshly exposed surface.

- Half-fill the bag with the sample to be analyzed using a stainless-steel spoon or a gloved hand and immediately seal it. Agitate the bag for 15 seconds and manually break up any soil clumps within the bag.
- Allow headspace development for approximately 10 minutes. The sample should be kept in a shaded area out of direct sunlight. Ambient temperatures during headspace development should be recorded. When ambient temperatures are below 50°F, headspace development should be conducted inside a heated vehicle or building. After completing the headspace development, agitate the bag for an additional 15 seconds.
- Quickly puncture the bag with the sampling probe of the PID or FID at a point about one-half of the headspace depth. Exercise care to avoid uptake of water droplets or soil particles.
- Record the highest PID or FID meter response as the headspace concentration. The maximum response will likely occur between 0 to 5 seconds.
- When using a FID, it may be necessary to correct for methane. In this case, take a reading first with the carbon filter, then without. This will require two duplicate bag samples. The second reading less the first is the headspace adjusted for methane. Adjusted readings less than zero are considered zero. Methane correction is not necessary if a PID is used.

6.2.4 Oil Sheen Test

The oil sheen or hydrocarbon test is a method used to immediately determine the approximate magnitude of coal tar or petroleum contamination in soil by observation of the sample in the field. The test is useful in soils which do not have a high binding capacity with petroleum compounds or polycyclic aromatic hydrocarbons (PAHs) (i.e., petroleum compounds or PAHs are free on the surface of the soil particles and can be released by a stream of water).

The equipment required to conduct the oil sheen test includes: a stainless-steel spoon, a squirt bottle filled with tap water, a log book or field log data sheet, and the appropriate personal protective equipment necessary for collection and handling of soil samples as described in the Project Health and Safety Plan.

The procedure for conducting the oil sheen test consists of obtaining approximately 50 grams (about 30 cc) of representative soil with the spoon and then directing a stream of water onto the soil in the spoon with the squirt bottle until the soil is saturated and water begins to collect around the soil. The amount of oil sheen present on the water is determined by observation and the results of the test are reported as a magnitude of oil sheen observed: none, trace, light, moderate, heavy or rainbow. The test results, sample location, and observations of the sample's appearance and odor are recorded in the log book or field log data sheet.

The specific soil types at the area of investigation should be accounted for when performing the oil sheen test. The best results are obtained in silts, sands, and/or gravels with low organic content. The results obtained from clay soils may appear deceptively low. Typical descriptions of each test result are provided in the table below.

Oil Sheen Test Result	Description
None	No sheen detected.
Trace	Possible or faint oil sheen observed (may not continue to generate sheen as additional water is added).
Light	Obvious sheen that may not cover entire water surface
Moderate	Definite oil sheen that covers entire surface, but "rainbow colors" not distinguishable.
Heavy	Definite oil film or product that does not display rainbow colors.
Rainbow	Definite oil sheen, film or product that displays rainbow colors.

6.3 Data Reduction/Calculations

No data reduction or calculations are associated with this procedure.

6.4 Disposal

Waste generated by this process will be disposed of in accordance with Federal, State and Local regulations and Barr's SOP 'Investigative Derived Waste'. Where reasonably feasible, technological changes have been implemented to minimize the potential for environmental pollution.

7.0 Quality Control and Quality Assurance (QA/QC)

Field background readings are measured for the headspace organic vapor screening. PID and FID readings should be duplicated every 20 field samples.

8.0 Records

The field technician(s) will document the field screening activities and measurements in a project dedicated field logbook or on field log data sheets.

Examples of common field documentation are available in Barr's "Compendium of Field Documentation". Field documentation specific to this SOP are listed below:

- Field Sampling Report
- Field Log Data Sheet

Field documentation are provided to a Barr Data Management Administrator for storage on the internal Barr network.

Additional records information can be found in Barr's "Records Management System Manual."

Other Barr SOP subjects referenced within this SOP: PID and FID equipment, decontamination of sampling equipment, and investigative derived waste.

9.0 References

PID and FID operation manuals.

Attachment B

Representative Photographs



Photo 1: Setting up at SB-1.



Photo 2: Typical soil boring recovery. Pictured is recovery from SB-4, 0-5 feet bgs. Thin layer of organic topsoil visible on right (top) end of sample sleeve. Soil below is stiff glaciolacustrine lean clay.



Photo 3: Advancing sampler at SB-4.



Photo 4: Attempting to sample the temporary monitoring well at SB-1.

Attachment C Soil Boring Logs

LOG OF BORING SB-1 Barr Engineering Company 325 South Lake Avenue, Suite 700 Duluth, MN 55802 BARR Telephone: 218-529-8200 SHEET 1 OF 1 Husky/MNPower Phase II 49161423.00 200 6/21/2018 Project: Surface Elevation: Superior, WI Project No.: **Drilling Method: Direct Push** UTM 15T N:5170970.147m, Location: Sampling Method: Macro-Core Coordinates: E:571189.0276m NAD 83 Datum: Completion Depth: 20.0 ft Elevation, feet BARR TEMPLATE.GD1 Sample Type & Recovery Graphic Log feet Sample No. U WELL OR PIEZOMETER **ENVIRONMENTAL** S C S Depth, LITHOLOGIC DESCRIPTION CONSTRUCTION DATA **DETAIL** OL ORGANIC SOIL (OL): brown; moist; medium stiff; with 20% grass fibers and trace medium to coarse-grained angular sand and fine WIN16I49161423 SUPERIOR REFINING CO ENV ASSISWORKFILESIPHASE II INVESTIGATIONIBORING LOGSIHUSKY MNPOWER LIM PH II.GPJ BARRLIBRARY.GLB ENVIRO LOG gravel PID:0.3 D/O/S:N/ N/ N LEAN CLAY (CL): Red-brown; moist; medium stiff; medium to high plasticity; no dilatancy; glacialacustrine deposit; with trace medium to coarse-grained angular sand and fine gravel. SB-1_2-3 ft collected for VOCs, RCRA 8 metals and PAHs. **PID:**0.3 D/O/S:N/ N/ N PID:0.8 D/O/S:N/ N/ N CL Temporary Monitoring **PID:**0.6 D/O/S:N/ N/ N 10 **PID:**0.5 D/O/S:N/ N/ N SB-1 12-13 ft collected for VOCs, RCRA 8 metals and PAHs. FAT CLAY (CH): Red-brown; moist; soft; high plasticity; no dilatancy; glacialacustrine deposit; with trace medium to coarse-grained **PID:**0.5 angular sand and fine gravel. D/O/S:N/ N/ N Screened 14.5-19.5 ft 15 bgs -Water at 16.7 ft bgs on 6/22/18, one day after **PID:**0.4 D/O/S:N/ N/ N installation. Likely surface water draining into boring. Very soft, 15-20 ft. Well produced approximately 250 mL **PID:**0.2 and purged dry before D/O/S:N/ N/ N sample could be collected. 20 End of boring 20.0 feet Target depth reached.

Date Boring Started: Date Boring Completed: Logged By:

6/21/18 2:00 pm 6/22/18 11:05 am

Drilling Contractor: Twin Ports Testing Drill Rig: Geoprobe 7822DT

Remarks: Boring advanced in SE corner of property. Ground surface was hummocky, covered with recently chipped brush, vegetated with marsh grass, and submerged with approximately 2 inches of standing water.

PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines Additional data may have been collected in the field which is not included on this log.

LOG OF BORING SB-2

SHEET 1 OF 1

Surface Elevation: 6/21/2018 Drilling Method: Direct Push

Sampling Method: Macro-Core

20.0 ft Completion Depth:

Datun	1.					Completion Depth: 20.0 ft			
Depth, feet	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	USCS	Graphic Log	LITHOLOGIC DESCRIPTION	l	L OR PIEZOMETER CONSTRUCTION DETAIL	Elevation, feet
Date E Date E	X		PID :0.1 D/O/S:N/ N/ N	-OL/		ORGANIC SOIL WITH GRAVEL (OL): dark brown; moist; soft; with \$0% angular basalt fine gravel. LEAN CLAY (CL): brown; moist; stiff; medium to high plasticity; no dilatancy; glacialacustrine deposit; with trace angular medium to coarse-grained sand and fine gravel. SB-2_0-1 ft collected for VOCs, RCRA 8 metals and PAHs. Red-brown below 5 ft bgs.			
5 —			PID :0.2 D/O/S: N/ N/ N						
_			PID :0.2 D/O/S: N/ N/ N			With 1-2mm long planar gray mottles, 5-7 ft bgs. SB-2_6-7 ft collected for VOCs, RCRA 8 metals and PAHs.		-Temporary Monitoring Well	
10-			PID :0.3 D/O/S: N/ N/ N	CL					
_			PID :0.4 D/O/S: N/ N/ N						
15-			PID :0.4 D/O/S: N/ N/ N						
_			PID:0.4 D/O/S:N/ N/ N					-Screened at 14-19' -Well was dry on 6/22/18, one day after installation.	
20-			PID:0.4 D/O/S:N/ N/ N						
						End of boring 20.0 feet Target depth reached.			
	Boring	Comp	leted: 6/22/18 11:10			Remarks: Boring advanced in center of property. Ground	l d surface v	 was dry, flat, and grass-cove	ered.
Logge Drilling Drill R	g Con	tractor	MAB Twin Ports Te Geoprobe 78:			PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Co Additional data may have been collected in the field which is not included on this lo		= Gravel/Sand/Fines	

Barr Engineering Company 325 South Lake Avenue, Suite 700 Duluth, MN 55802 BARR Duluth, MN 55802 Telephone: 218-529-8200

LOG OF BORING SB-3

SHEET 1 OF 1

Husky/MNPower Phase II 49161423.00 200 Project: Surface Elevation: 657.3 ft Project No.: Direct Push Drilling Method: Location: UTM 15T N:5170886.079m, Sampling Method: Macro-Core

Coordinates: E:571073.1286m NAD 83

					Completion Depth: 20.0 ft		
Depth, feet Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	USCS	Graphic Log	LITHOLOGIC DESCRIPTION	L OR PIEZOMETER CONSTRUCTION DETAIL	Elevation, feet
		PID: 0.1 D/O/S: N/ N/ N	-OL		ORGANIC SOIL (OL): dark brown; moist; soft; with 20% grass fibers. LEAN CLAY (CL): red-brown; moist; stiff; medium to high plasticity; no dilatancy; glacialacustrine deposit; with trace angular medium to coarse-grained sand and fine gravel. SB-3_0-2 ft collected for VOCs, RCRA 8 metals and PAHs.		655-
5 —		PID: 0.1 D/O/S: N/ N/ N					_
-		PID: 0.1 D/O/S: N/ N/ N			With trace faint 1mm-long brown-gray mottling, 5-10' bgs.	-Temporary Monitoring Well	650-
10		PID: 0.2 D/O/S: N/ N/ N	CL		SB-3_8-9 ft collected for VOCs, RCRA 8 metals and PAHs.		_
-		PID: 0.2 D/O/S: N/ N/ N			Medium soft consistency from 9-13.5 ft bgs. Trace weathered fine gravel from 10-15 ft bgs.		645-
15		PID: 0.2 D/O/S: N/ N/ N			Soft consistency below 13.5 ft bgs.		_
-		PID: 0.2 D/O/S: N/ N/ N				-Screened at 14.5-19.5' -Water at 9.5 ft bgs on	640-
20		PID: 0.2 D/O/S: N/ N/ N			End of boring 20.0 feet Target depth reached.	6/22/18, one day after installation. Likely surface water draining into boring. -SB-3_14.5-19.5 (groundwater) collected for VOCs and PAHs	_

6/22/18 11:30 am MAB

Date Boring Completed:

State Boring Completed:

Logged By:
Drilling Contractor:

Drill Rig: Twin Ports Testing Geoprobe 7822DT

PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines Additional data may have been collected in the field which is not included on this log.

Barr Engineering Company 325 South Lake Avenue, Suite 700 Duluth, MN 55802 BARR Dullutn, IVIN 53002 Telephone: 218-529-8200

LOG OF BORING SB-4

SHEET 1 OF 1

Husky/MNPower Phase II 49161423.00 200 Project: Surface Elevation: 657.4 ft Project No.: Superior, WI Direct Push Drilling Method: Location: UTM 15T N:5170910.454m, Sampling Method: Macro-Core Coordinates: E:571048.3472m NAD 83

Datur	n:			1		Completion Depth: 20.0 ft	
	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	USCS	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation, feet
-0- - -			PID:0.3 D/O/S:N/ N/ N	OL		—ORGANIC SOIL (OL): dark brown; moist; soft; with 30% grass fibers. LEAN CLAY (CL): red-brown; moist; stiff; medium plasticity; no dilatancy; glacialacustrine deposit; with trace angular medium to coarse-grained sand and fine gravel. SB-4_0-2 ft collected for VOCs, RCRA 8 metals and PAHs.	655
- 5 -			PID:0.2 D/O/S:N/ N/ N				
-	X		PID:0.1 D/O/S:N/ N/ N			SB-4_6-7 ft collected for VOCs, RCRA 8 metals and PAHs.	650
10-			PID: 0.0 D/O/S: N/ N/ N	CL		1/2-inch diameter very weathered basalt clast at 8.5 ft bgs.	
-			PID: 0.0 D/O/S: N/ N/ N				645
- 15-			PID: 0.0 D/O/S :N/ N/ N				
-			PID:0.0 D/O/S:N/ N/ N				640
20-			PID: 0.0 D/O/S: N/ N/ N			End of having 20.0 fact	
_	Boring	Starte	ed: 6/22/18 8:35	am		End of boring 20.0 feet Target depth reached. Remarks: Boring advanced in NW corner of property. Ground surface was hummocky, cover	red
Date l Logge	Boring ed By: g Con	Comp	oleted: 6/22/18 9:00 MAB	am esting		with recently chipped brush, vegetated with marsh grass, and covered in approxim inches of standing water. PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines Additional data may have been collected in the field which is not included on this log.	ately:

Barr Engineering Company 325 South Lake Avenue, Suite 700 Duluth, MN 55802 BARR Dullutn, IVIN 53002 Telephone: 218-529-8200 Husky/MNPower Phase II 49161423.00 Project: Project No.: Location: Superior, WI Coordinates: UTM 15T N:5170984.65m, E:571138.864m

LOG OF BORING SB-5

SHEET 1 OF 1

Surface Elevation: 657.6 ft Drilling Method: Direct Push Sampling Method: Macro-Core

Datun	dinates n:	N	IAD 83			Completion Depth: 20.0 ft	
Depth, feet	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	U S C S	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation, feet
-0 -	X		PID: 1.2 D/O/S: Black/ N/ N	SM		FILL; SILTY SAND WITH GRAVEL (SM): black; moist; 70% shiny black angular fine to coarse-grained ¬sand and fine gravel; apparent weathered asphalt pavement with topsoil. \$B-5_0-1 ft collected for VOCs, RCRA 8 metals and PAHs. LEAN CLAY (CL): red-brown; moist; stiff; medium plasticity; no dilatancy; glacialacustrine deposit; with trace medium to coarse-grained angular sand and fine gravel.	7
-							65
5 —			PID:N/A D/O/S:N/ N/ N			Insufficent recovery for headspace reading.	
-	-		PID :0.4 D/O/s :N/ N/ N				
-	X		PID :0.5 D/O/S: N/ N/ N			SB-5_8-9 ft collected for VOCs, RCRA 8 metals and PAHs.	65
10-			PID :0.3 D/O/S: N/ N/ N	CL		With trace 1-2mm-long, planar gray mottles from 5-15 ft bgs.	
-			PID :0.3 D/O/S: N/ N/ N				64
15— - -			PID :0.3 D/O/S :N/ N/ N				
-			PID :0.3 D/O/S :N/ N/ N				64
20-						End of boring 20.0 feet Target depth reached.	
ate E		 Starte	leted: 6/22/18 9:55		1	Remarks: Boring advanced in NE corner of property. Ground surface was dry, level, and cove with grass and gravel.	ered
	g Con	tractor:	MAB Twin Ports Te Geoprobe 782			PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines Additional data may have been collected in the field which is not included on this log.	

Attachment D

Soil and Groundwater Laboratory Analytical Reports





July 03, 2018

Jim Taraldsen Barr Engineering Company 325 S Lake Ave Duluth, MN 55802

RE: Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Dear Jim Taraldsen:

Enclosed are the analytical results for sample(s) received by the laboratory on June 22, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Amanda Albrecht amanda.albrecht@pacelabs.com

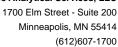
amanda & albeecht

(612)607-6382 Project Manager

Enclosures

cc: BarrDM, Barr Engineering







CERTIFICATIONS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Minnesota Certification IDs

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414-

2485

A2LA Certification #: 2926.01 Alabama Certification #: 40770

Alaska Contaminated Sites Certification #: 17-009

Alaska DW Certification #: MN00064 Arizona Certification #: AZ0014 Arkansas Certification #: 88-0680 California Certification #: 2929 CNMI Saipan Certification #:MP0003 Colorado Certification #: MN00064 Connecticut Certification #: PH-0256

EPA Region 8+Wyoming DW Certification #: via MN 027-

053-137

Florida Certification #: E87605
Georgia Certification #: 959
Guam EPA Certification #: MN00064
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 93086
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064

Massachusetts Certification #: M-MN064

Michigan Certification #: 9909

Minnesota Certification #: 027-053-137
Mississippi Certification #: MN00064
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700

North Carolina BW Certification #: 530 North Dakota Certification #: R-036 Ohio DW Certification #: 41244 Ohio VAP Certification #: CL101 Oklahoma Certification #: 9507

Oregon NwTPH Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #: T4003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DW Certification #: 9952 C
West Virginia DEP Certification #: 382
Wisconsin Certification #: 999407970

Green Bay Certification IDs

Maryland Certification #: 322

1241 Bellevue Street, Green Bay, WI 54302 Florida/NELAP Certification #: E87948

Illinois Certification #: 200050 Kentucky UST Certification #: 82 Louisiana Certification #: 04168 Minnesota Certification #: 055-999-334 New York Certification #: 12064 North Dakota Certification #: R-150 Virginia VELAP ID: 460263

South Carolina Certification #: 83006001 Texas Certification #: T104704529-14-1 Wisconsin Certification #: 405132750 Wisconsin DATCP Certification #: 105-444 USDA Soil Permit #: P330-16-00157 Federal Fish & Wildlife Permit #: LE51774A-0



SAMPLE SUMMARY

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10436863001	SB-1_2-3	Solid	06/21/18 14:05	06/22/18 20:00
10436863002	SB-1_12-13	Solid	06/21/18 14:30	06/22/18 20:00
10436863003	SB-2_0-1	Solid	06/21/18 15:15	06/22/18 20:00
10436863004	SB-2_6-7	Solid	06/21/18 15:30	06/22/18 20:00
10436863005	SB-3_0-2	Solid	06/21/18 16:20	06/22/18 20:00
10436863006	SB-3_8-9	Solid	06/21/18 16:35	06/22/18 20:00
10436863007	SB-4_0-2	Solid	06/22/18 08:40	06/22/18 20:00
10436863008	SB-4_6-7	Solid	06/22/18 08:55	06/22/18 20:00
10436863009	SB-5_0-1	Solid	06/22/18 09:35	06/22/18 20:00
10436863010	SB-5_8-9	Solid	06/22/18 09:50	06/22/18 20:00
10436863011	SB-3_14.5-19.5	Water	06/22/18 11:20	06/22/18 20:00
10436863012	Trip Blank	Water	06/21/18 00:00	06/22/18 20:00
10436863013	MeOH Trip Blank	Solid	06/21/18 00:00	06/22/18 20:00



SAMPLE ANALYTE COUNT

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10436863001	SB-1_2-3	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
0436863002	SB-1_12-13	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
0436863003	SB-2_0-1	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
0436863004	SB-2_6-7	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
0436863005	SB-3_0-2	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
0436863006	SB-3_8-9	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
0436863007	SB-4_0-2	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
10436863008	SB-4_6-7	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



SAMPLE ANALYTE COUNT

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
10436863009	SB-5_0-1	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
10436863010	SB-5_8-9	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
10436863011	SB-3_14.5-19.5	EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260B	DS2	70	PASI-M
10436863012	Trip Blank	EPA 8260B	DS2	70	PASI-M
10436863013	MeOH Trip Blank	EPA 8260	SMT	39	PASI-G



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-1_2-3 Lab ID: 10436863001 Collected: 06/21/18 14:05 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EPA	A 6010D Prepa	aration Met	hod: E	PA 3050			
Arsenic	3.1	mg/kg	1.6	0.48	1	06/26/18 04:58	06/27/18 06:54	7440-38-2	M1
Barium	245	mg/kg	4.2	1.3	5	06/26/18 04:58	06/27/18 15:29	7440-39-3	M1
Cadmium	< 0.075	mg/kg	0.25	0.075	1	06/26/18 04:58	06/27/18 06:54	7440-43-9	
Chromium	49.6	mg/kg	5.1	1.5	5	06/26/18 04:58	06/27/18 15:29	7440-47-3	
Lead	10.5	mg/kg	5.3	1.6	5	06/26/18 04:58	06/27/18 15:29		
Selenium	0.56J	mg/kg	1.9	0.56	1	06/26/18 04:58	06/27/18 06:54		M1
Silver	<0.11	mg/kg	0.38	0.11	1	06/26/18 04:58	06/27/18 06:54		M1
7471B Mercury	Analytical	Method: EPA	A 7471B Prepa	aration Met	hod: E	PA 7471B			
Mercury	0.023J	mg/kg	0.033	0.0098	1	06/25/18 07:21	06/28/18 17:46	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	27.6	%	0.10	0.10	1		06/27/18 16:25		
8270D MSSV PAH by SIM	Analytical	Method: EPA	A 8270D by SII	M Preparat	ion Me	ethod: EPA 3550			
Acenaphthene	<0.56	ug/kg	1.9	0.56	1	06/25/18 06:31	06/26/18 18:00	83-32-9	
Acenaphthylene	<0.68	ug/kg	2.3	0.68	1	06/25/18 06:31	06/26/18 18:00		
Anthracene	<0.65	ug/kg	2.2	0.65	1	06/25/18 06:31	06/26/18 18:00		
Benzo(a)anthracene	<1.5	ug/kg	5.0	1.5	1	06/25/18 06:31	06/26/18 18:00		
Benzo(a)pyrene	<0.95	ug/kg	3.2	0.95	1	06/25/18 06:31	06/26/18 18:00		
Benzo(b)fluoranthene	1.1J	ug/kg	1.7	0.52	1	06/25/18 06:31	06/26/18 18:00		
Benzo(g,h,i)perylene	<0.87	ug/kg ug/kg	2.9	0.87	1	06/25/18 06:31	06/26/18 18:00		
Benzo(k)fluoranthene	<1.2	ug/kg ug/kg	3.9	1.2	1	06/25/18 06:31	06/26/18 18:00		
Chrysene	<1.9	ug/kg ug/kg	6.3	1.9	1	06/25/18 06:31	06/26/18 18:00		
Dibenz(a,h)anthracene	<0.64	ug/kg ug/kg	2.1	0.64	1	06/25/18 06:31	06/26/18 18:00		
Fluoranthene	1.8J	ug/kg ug/kg	2.0	0.59	1	06/25/18 06:31	06/26/18 18:00		
Fluorene	<0.43	ug/kg ug/kg	1.4	0.43	1	06/25/18 06:31	06/26/18 18:00		
Indeno(1,2,3-cd)pyrene	<0.43	ug/kg ug/kg	3.1	0.43	1	06/25/18 06:31	06/26/18 18:00		
Naphthalene	<1.1	ug/kg ug/kg	3.5	1.1	1	06/25/18 06:31	06/26/18 18:00		
Phenanthrene	<1.1 <2.7		3.3 8.8	2.7	1	06/25/18 06:31	06/26/18 18:00		
	<2.1 <2.1	ug/kg	7.0	2.1	1	06/25/18 06:31	06/26/18 18:00		
Pyrene Surrogates	<2.1	ug/kg	7.0	2.1	ı	00/23/10 00.31	00/20/10 10.00	129-00-0	
2-Fluorobiphenyl (S)	58	%.	42-125		1	06/25/18 06:31	06/26/18 18:00	321-60-8	
p-Terphenyl-d14 (S)	75	%.	57-125		1	06/25/18 06:31	06/26/18 18:00		
8260 MSV Med Level Normal List			4 8260 Prepar	ation Meth			00,20,10 10.00		
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	71-55-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02		W
1,1,2-Trichloroethane	<25.0	ug/kg ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02		W
1,1-Dichloroethane	<25.0	ug/kg ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02		W
1,1-Dichloroethene	<25.0	ug/kg ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02		W
1,2-Dichloroethane	<25.0	ug/kg ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02		W
1,2-Dichloropropane	<25.0	ug/kg ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02		W
2-Butanone (MEK)	<107	ug/kg ug/kg	250	107	1	06/28/18 11:30	06/28/18 18:02		W
2-Hexanone	<52.0	ug/kg ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 18:02		W
2 HOXAHOHO	~JZ.U	ug/kg	250	32.0	ı	00/20/10 11.30	00/20/10 10:02	00 i = 10=0	v v



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-1_2-3 Lab ID: 10436863001 Collected: 06/21/18 14:05 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepai	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 18:02	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 18:02	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 18:02	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 18:02	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 18:02	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 18:02	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	107	%	57-148		1	06/28/18 11:30	06/28/18 18:02		
Toluene-d8 (S)	95	%	58-142		1	06/28/18 11:30	06/28/18 18:02		
4-Bromofluorobenzene (S)	81	%	48-130		1	06/28/18 11:30	06/28/18 18:02	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-1_12-13 Lab ID: 10436863002 Collected: 06/21/18 14:30 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EPA	A 6010D Prepa	aration Met	hod: E	PA 3050			
Arsenic	3.8	mg/kg	1.8	0.53	1	06/26/18 04:58	06/27/18 07:02	7440-38-2	
Barium	193	mg/kg	0.92	0.28	1	06/26/18 04:58	06/27/18 07:02	7440-39-3	
Cadmium	< 0.082	mg/kg	0.27	0.082	1	06/26/18 04:58	06/27/18 07:02	7440-43-9	
Chromium	42.9	mg/kg	1.1	0.34	1	06/26/18 04:58	06/27/18 07:02	7440-47-3	
Lead	9.5	mg/kg	1.2	0.35	1	06/26/18 04:58	06/27/18 07:02	7439-92-1	
Selenium	<0.61	mg/kg	2.0	0.61	1	06/26/18 04:58	06/27/18 07:02	7782-49-2	
Silver	<0.12	mg/kg	0.41	0.12	1	06/26/18 04:58	06/27/18 07:02	7440-22-4	
7471B Mercury	Analytical	Method: EPA	A 7471B Prepa	aration Met	hod: E	PA 7471B			
Mercury	0.026J	mg/kg	0.039	0.012	1	06/25/18 07:21	06/28/18 17:52	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974						
Percent Moisture	35.3	%	0.10	0.10	1		06/27/18 16:26		
8270D MSSV PAH by SIM	Analytical	Method: EPA	A 8270D by SII	M Prepara	tion Me	thod: EPA 3550			
Acenaphthene	<0.63	ug/kg	2.1	0.63	1	06/25/18 06:31	06/26/18 18:23	83-32-9	
Acenaphthylene	<0.76	ug/kg	2.5	0.76	1	06/25/18 06:31	06/26/18 18:23	208-96-8	
Anthracene	<0.72	ug/kg	2.4	0.72	1	06/25/18 06:31	06/26/18 18:23	120-12-7	
Benzo(a)anthracene	<1.7	ug/kg	5.5	1.7	1	06/25/18 06:31	06/26/18 18:23	56-55-3	
Benzo(a)pyrene	<1.1	ug/kg	3.5	1.1	1	06/25/18 06:31	06/26/18 18:23	50-32-8	
Benzo(b)fluoranthene	<0.57	ug/kg	1.9	0.57	1	06/25/18 06:31	06/26/18 18:23	205-99-2	
Benzo(g,h,i)perylene	<0.97	ug/kg	3.2	0.97	1	06/25/18 06:31	06/26/18 18:23	191-24-2	
Benzo(k)fluoranthene	<1.3	ug/kg	4.3	1.3	1	06/25/18 06:31	06/26/18 18:23	207-08-9	
Chrysene	<2.1	ug/kg	7.0	2.1	1	06/25/18 06:31	06/26/18 18:23	218-01-9	
Dibenz(a,h)anthracene	<0.71	ug/kg	2.4	0.71	1	06/25/18 06:31	06/26/18 18:23	53-70-3	
Fluoranthene	<0.66	ug/kg	2.2	0.66	1	06/25/18 06:31	06/26/18 18:23	206-44-0	
Fluorene	<0.48	ug/kg	1.6	0.48	1	06/25/18 06:31	06/26/18 18:23	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.0	ug/kg	3.4	1.0	1	06/25/18 06:31	06/26/18 18:23	193-39-5	
Naphthalene	<1.2	ug/kg	4.0	1.2	1	06/25/18 06:31	06/26/18 18:23	91-20-3	
Phenanthrene	<3.0	ug/kg	9.8	3.0	1	06/25/18 06:31	06/26/18 18:23	85-01-8	
Pyrene	<2.4	ug/kg	7.8	2.4	1	06/25/18 06:31	06/26/18 18:23	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	60	%.	42-125		1	06/25/18 06:31	06/26/18 18:23	321-60-8	
p-Terphenyl-d14 (S)	78	%.	57-125		1	06/25/18 06:31	06/26/18 18:23	1718-51-0	
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepar	ation Meth	od: EP	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	71-55-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	79-34-5	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	79-00-5	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	75-34-3	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	75-35-4	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	107-06-2	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25		W
2-Butanone (MEK)	<107	ug/kg	250	107	1	06/28/18 11:30	06/28/18 18:25	78-93-3	W
2-Hexanone	<52.0	ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 18:25	591-78-6	W



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-1_12-13 Lab ID: 10436863002 Collected: 06/21/18 14:30 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepai	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 18:25	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 18:25	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 18:25	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 18:25	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 18:25	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 18:25	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	110	%	57-148		1	06/28/18 11:30	06/28/18 18:25	1868-53-7	
Toluene-d8 (S)	94	%	58-142		1	06/28/18 11:30	06/28/18 18:25	2037-26-5	
4-Bromofluorobenzene (S)	80	%	48-130		1	06/28/18 11:30	06/28/18 18:25	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-2_0-1 Lab ID: 10436863003 Collected: 06/21/18 15:15 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EP/	A 6010D Prep	aration Met	hod: E	PA 3050			
Arsenic	3.0	mg/kg	1.4	0.42	1	06/26/18 04:58	06/27/18 07:04	7440-38-2	
Barium	145	mg/kg	0.73	0.22	1	06/26/18 04:58	06/27/18 07:04	7440-39-3	
Cadmium	< 0.065	mg/kg	0.22	0.065	1	06/26/18 04:58	06/27/18 07:04	7440-43-9	
Chromium	37.0	mg/kg	0.89	0.27	1	06/26/18 04:58	06/27/18 07:04	7440-47-3	
Lead	7.6	mg/kg	0.93	0.28	1	06/26/18 04:58	06/27/18 07:04	7439-92-1	
Selenium	< 0.49	mg/kg	1.6	0.49	1	06/26/18 04:58	06/27/18 07:04	7782-49-2	
Silver	<0.098	mg/kg	0.33	0.098	1	06/26/18 04:58	06/27/18 07:04	7440-22-4	
7471B Mercury	Analytical	Method: EPA	A 7471B Prepa	aration Met	hod: E	PA 7471B			
Mercury	0.022J	mg/kg	0.028	0.0084	1	06/25/18 07:21	06/28/18 17:54	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974						
Percent Moisture	20.3	%	0.10	0.10	1		06/27/18 16:26		
8270D MSSV PAH by SIM	Analytical	Method: EP/	A 8270D by SII	M Prepara	tion Me	ethod: EPA 3550			
Acenaphthene	<0.51	ug/kg	1.7	0.51	1	06/25/18 06:31	06/26/18 18:46	83-32-9	
Acenaphthylene	<0.62	ug/kg	2.1	0.62	1	06/25/18 06:31	06/26/18 18:46	208-96-8	
Anthracene	<0.59	ug/kg	2.0	0.59	1	06/25/18 06:31	06/26/18 18:46	120-12-7	
Benzo(a)anthracene	<1.4	ug/kg	4.5	1.4	1	06/25/18 06:31	06/26/18 18:46	56-55-3	
Benzo(a)pyrene	<0.86	ug/kg	2.9	0.86	1	06/25/18 06:31	06/26/18 18:46	50-32-8	
Benzo(b)fluoranthene	<0.47	ug/kg	1.6	0.47	1	06/25/18 06:31	06/26/18 18:46	205-99-2	
Benzo(g,h,i)perylene	<0.79	ug/kg	2.6	0.79	1	06/25/18 06:31	06/26/18 18:46	191-24-2	
Benzo(k)fluoranthene	<1.1	ug/kg	3.5	1.1	1	06/25/18 06:31	06/26/18 18:46	207-08-9	
Chrysene	<1.7	ug/kg	5.7	1.7	1	06/25/18 06:31	06/26/18 18:46	218-01-9	
Dibenz(a,h)anthracene	<0.58	ug/kg	1.9	0.58	1	06/25/18 06:31	06/26/18 18:46	53-70-3	
Fluoranthene	<0.54	ug/kg	1.8	0.54	1	06/25/18 06:31	06/26/18 18:46	206-44-0	
Fluorene	<0.39	ug/kg	1.3	0.39	1	06/25/18 06:31	06/26/18 18:46	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.84	ug/kg	2.8	0.84	1	06/25/18 06:31	06/26/18 18:46	193-39-5	
Naphthalene	<0.97	ug/kg	3.2	0.97	1	06/25/18 06:31	06/26/18 18:46	91-20-3	
Phenanthrene	<2.4	ug/kg	8.0	2.4	1	06/25/18 06:31	06/26/18 18:46	85-01-8	
Pyrene	<1.9	ug/kg	6.4	1.9	1	06/25/18 06:31	06/26/18 18:46	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	60	%.	42-125		1	06/25/18 06:31	06/26/18 18:46		
p-Terphenyl-d14 (S)	74	%.	57-125		1	06/25/18 06:31	06/26/18 18:46	1718-51-0	
8260 MSV Med Level Normal List	Analytical	Method: EP/	A 8260 Prepar	ration Meth	od: EP	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1		06/28/18 18:47		W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47		W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47		W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47		W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47		W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47		W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	78-87-5	W
2-Butanone (MEK)	<107	ug/kg	250	107	1	06/28/18 11:30	06/28/18 18:47		W
2-Hexanone	<52.0	ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 18:47	591-78-6	W



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-2_0-1 Lab ID: 10436863003 Collected: 06/21/18 15:15 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepai	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 18:47	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 18:47	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 18:47	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 18:47	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 18:47	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 18:47	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	117	%	57-148		1	06/28/18 11:30	06/28/18 18:47	1868-53-7	
Toluene-d8 (S)	102	%	58-142		1	06/28/18 11:30	06/28/18 18:47	2037-26-5	
4-Bromofluorobenzene (S)	87	%	48-130		1	06/28/18 11:30	06/28/18 18:47	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-2_6-7 Lab ID: 10436863004 Collected: 06/21/18 15:30 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EP	A 6010D Prepa	aration Met	thod: E	PA 3050			
Arsenic	3.3	mg/kg	1.5	0.45	1	06/26/18 04:58	06/27/18 07:06	7440-38-2	
Barium	150	mg/kg	0.79	0.24	1	06/26/18 04:58	06/27/18 07:06	7440-39-3	
Cadmium	< 0.070	mg/kg	0.23	0.070	1	06/26/18 04:58	06/27/18 07:06	7440-43-9	
Chromium	39.5	mg/kg	0.96	0.29	1	06/26/18 04:58	06/27/18 07:06	7440-47-3	
Lead	8.1	mg/kg	1.0	0.30	1	06/26/18 04:58	06/27/18 07:06	7439-92-1	
Selenium	<0.52	mg/kg	1.7	0.52	1	06/26/18 04:58	06/27/18 07:06	7782-49-2	
Silver	<0.11	mg/kg	0.35	0.11	1	06/26/18 04:58	06/27/18 07:06	7440-22-4	
7471B Mercury	Analytical	Method: EP	A 7471B Prepa	aration Met	hod: E	PA 7471B			
Mercury	0.020J	mg/kg	0.032	0.0097	1	06/25/18 07:21	06/28/18 17:56	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	24.5	%	0.10	0.10	1		06/27/18 16:26		
8270D MSSV PAH by SIM	Analytical	Method: EP	A 8270D by SI	M Prepara	tion Me	thod: EPA 3550			
Acenaphthene	<0.54	ug/kg	1.8	0.54	1	06/25/18 06:31	06/26/18 19:10	83-32-9	
Acenaphthylene	<0.66	ug/kg	2.2	0.66	1	06/25/18 06:31	06/26/18 19:10	208-96-8	
Anthracene	< 0.62	ug/kg	2.1	0.62	1	06/25/18 06:31	06/26/18 19:10	120-12-7	
Benzo(a)anthracene	<1.4	ug/kg	4.8	1.4	1	06/25/18 06:31	06/26/18 19:10	56-55-3	
Benzo(a)pyrene	<0.91	ug/kg	3.0	0.91	1	06/25/18 06:31	06/26/18 19:10	50-32-8	
Benzo(b)fluoranthene	< 0.49	ug/kg	1.6	0.49	1	06/25/18 06:31	06/26/18 19:10	205-99-2	
Benzo(g,h,i)perylene	<0.84	ug/kg	2.8	0.84	1	06/25/18 06:31	06/26/18 19:10	191-24-2	
Benzo(k)fluoranthene	<1.1	ug/kg	3.7	1.1	1	06/25/18 06:31	06/26/18 19:10	207-08-9	
Chrysene	<1.8	ug/kg	6.0	1.8	1	06/25/18 06:31	06/26/18 19:10	218-01-9	
Dibenz(a,h)anthracene	<0.61	ug/kg	2.0	0.61	1	06/25/18 06:31	06/26/18 19:10	53-70-3	
Fluoranthene	<0.57	ug/kg	1.9	0.57	1	06/25/18 06:31	06/26/18 19:10	206-44-0	
Fluorene	<0.41	ug/kg	1.4	0.41	1	06/25/18 06:31	06/26/18 19:10	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.89	ug/kg	3.0	0.89	1	06/25/18 06:31	06/26/18 19:10	193-39-5	
Naphthalene	<1.0	ug/kg	3.4	1.0	1	06/25/18 06:31	06/26/18 19:10	91-20-3	
Phenanthrene	<2.5	ug/kg	8.5	2.5	1	06/25/18 06:31	06/26/18 19:10	85-01-8	
Pyrene	<2.0	ug/kg	6.7	2.0	1	06/25/18 06:31	06/26/18 19:10	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	55	%.	42-125		1	06/25/18 06:31	06/26/18 19:10		
p-Terphenyl-d14 (S)	75	%.	57-125		1	06/25/18 06:31	06/26/18 19:10	1718-51-0	
8260 MSV Med Level Normal List	Analytical	Method: EP	A 8260 Prepar	ation Meth	od: EP/	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	71-55-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40		W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40		W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40		W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40		W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40		W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	78-87-5	W
2-Butanone (MEK)	<107	ug/kg	250	107	1	06/28/18 11:30	06/28/18 17:40	78-93-3	W
2-Hexanone	<52.0	ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 17:40	591-78-6	W



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-2_6-7 Lab ID: 10436863004 Collected: 06/21/18 15:30 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepai	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 17:40	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 17:40	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 17:40	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 17:40	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 17:40	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 17:40	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	109	%	57-148		1	06/28/18 11:30	06/28/18 17:40		
Toluene-d8 (S)	105	%	58-142		1	06/28/18 11:30	06/28/18 17:40		
4-Bromofluorobenzene (S)	89	%	48-130		1	06/28/18 11:30	06/28/18 17:40	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-3_0-2 Lab ID: 10436863005 Collected: 06/21/18 16:20 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EP/	A 6010D Prep	aration Met	hod: E	PA 3050			
Arsenic	3.5	mg/kg	1.5	0.44	1	06/26/18 04:58	06/27/18 07:10	7440-38-2	
Barium	174	mg/kg	0.77	0.23	1	06/26/18 04:58	06/27/18 07:10	7440-39-3	
Cadmium	< 0.069	mg/kg	0.23	0.069	1	06/26/18 04:58	06/27/18 07:10	7440-43-9	
Chromium	41.7	mg/kg	0.94	0.28	1	06/26/18 04:58	06/27/18 07:10	7440-47-3	
Lead	9.0	mg/kg	0.99	0.30	1	06/26/18 04:58	06/27/18 07:10	7439-92-1	
Selenium	<0.51	mg/kg	1.7	0.51	1	06/26/18 04:58	06/27/18 07:10	7782-49-2	
Silver	<0.10	mg/kg	0.35	0.10	1	06/26/18 04:58	06/27/18 07:10	7440-22-4	
7471B Mercury	Analytical	Method: EPA	A 7471B Prepa	aration Met	hod: E	PA 7471B			
Mercury	0.026J	mg/kg	0.031	0.0094	1	06/25/18 07:21	06/28/18 18:03	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	24.5	%	0.10	0.10	1		06/27/18 16:26		
8270D MSSV PAH by SIM	Analytical	Method: EPA	A 8270D by SII	M Prepara	ion Me	ethod: EPA 3550			
Acenaphthene	<0.54	ug/kg	1.8	0.54	1	06/25/18 06:31	06/26/18 19:33	83-32-9	
Acenaphthylene	<0.65	ug/kg	2.2	0.65	1	06/25/18 06:31	06/26/18 19:33	208-96-8	
Anthracene	<0.62	ug/kg	2.1	0.62	1	06/25/18 06:31	06/26/18 19:33	120-12-7	
Benzo(a)anthracene	<1.4	ug/kg	4.7	1.4	1	06/25/18 06:31	06/26/18 19:33	56-55-3	
Benzo(a)pyrene	<0.91	ug/kg	3.0	0.91	1	06/25/18 06:31	06/26/18 19:33	50-32-8	
Benzo(b)fluoranthene	<0.49	ug/kg	1.6	0.49	1	06/25/18 06:31	06/26/18 19:33	205-99-2	
Benzo(g,h,i)perylene	<0.83	ug/kg	2.8	0.83	1	06/25/18 06:31	06/26/18 19:33	191-24-2	
Benzo(k)fluoranthene	<1.1	ug/kg	3.7	1.1	1	06/25/18 06:31	06/26/18 19:33	207-08-9	
Chrysene	<1.8	ug/kg	6.0	1.8	1	06/25/18 06:31	06/26/18 19:33	218-01-9	
Dibenz(a,h)anthracene	<0.61	ug/kg	2.0	0.61	1	06/25/18 06:31	06/26/18 19:33	53-70-3	
Fluoranthene	<0.56	ug/kg	1.9	0.56	1	06/25/18 06:31	06/26/18 19:33	206-44-0	
Fluorene	<0.41	ug/kg	1.4	0.41	1	06/25/18 06:31	06/26/18 19:33	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.88	ug/kg	2.9	0.88	1	06/25/18 06:31	06/26/18 19:33	193-39-5	
Naphthalene	<1.0	ug/kg	3.4	1.0	1	06/25/18 06:31	06/26/18 19:33	91-20-3	
Phenanthrene	<2.5	ug/kg	8.4	2.5	1	06/25/18 06:31	06/26/18 19:33	85-01-8	
Pyrene	<2.0	ug/kg	6.7	2.0	1	06/25/18 06:31	06/26/18 19:33	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	79	%.	42-125		1	06/25/18 06:31	06/26/18 19:33		
p-Terphenyl-d14 (S)	77	%.	57-125		1	06/25/18 06:31	06/26/18 19:33	1718-51-0	
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepar	ration Meth	od: EP	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	71-55-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	79-34-5	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	79-00-5	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	75-34-3	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	75-35-4	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	107-06-2	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	78-87-5	W
2-Butanone (MEK)	<107	ug/kg	250	107	1	06/28/18 11:30	06/28/18 19:10	78-93-3	W
2-Hexanone	<52.0	ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 19:10	591-78-6	W



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-3_0-2 Lab ID: 10436863005 Collected: 06/21/18 16:20 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepai	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 19:10	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 19:10	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 19:10	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 19:10	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 19:10	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 19:10	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	109	%	57-148		1	06/28/18 11:30	06/28/18 19:10		
Toluene-d8 (S)	99	%	58-142		1	06/28/18 11:30	06/28/18 19:10		
4-Bromofluorobenzene (S)	83	%	48-130		1	06/28/18 11:30	06/28/18 19:10	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-3_8-9 Lab ID: 10436863006 Collected: 06/21/18 16:35 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EP	A 6010D Prepa	aration Met	hod: E	PA 3050			
Arsenic	2.8	mg/kg	1.7	0.50	1	06/26/18 04:58	06/27/18 07:12	7440-38-2	
Barium	176	mg/kg	0.87	0.26	1	06/26/18 04:58	06/27/18 07:12	7440-39-3	
Cadmium	0.11J	mg/kg	0.26	0.077	1	06/26/18 04:58	06/27/18 07:12	7440-43-9	
Chromium	42.6	mg/kg	1.1	0.32	1	06/26/18 04:58	06/27/18 07:12	7440-47-3	
Lead	7.8	mg/kg	1.1	0.33	1	06/26/18 04:58	06/27/18 07:12	7439-92-1	
Selenium	<0.58	mg/kg	1.9	0.58	1	06/26/18 04:58	06/27/18 07:12	7782-49-2	
Silver	<0.12	mg/kg	0.39	0.12	1	06/26/18 04:58	06/27/18 07:12	7440-22-4	
7471B Mercury	Analytical	Method: EP	A 7471B Prepa	aration Met	hod: E	PA 7471B			
Mercury	0.021J	mg/kg	0.037	0.011	1	06/25/18 07:21	06/28/18 18:05	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	31.6	%	0.10	0.10	1		06/27/18 16:27		
8270D MSSV PAH by SIM	Analytical	Method: EP	A 8270D by SII	M Prepara	tion Me	thod: EPA 3550			
Acenaphthene	<0.60	ug/kg	2.0	0.60	1	06/25/18 06:31	06/26/18 19:57	83-32-9	
Acenaphthylene	<0.72	ug/kg	2.4	0.72	1	06/25/18 06:31	06/26/18 19:57	208-96-8	
Anthracene	<0.68	ug/kg	2.3	0.68	1	06/25/18 06:31	06/26/18 19:57	120-12-7	
Benzo(a)anthracene	<1.6	ug/kg	5.3	1.6	1	06/25/18 06:31	06/26/18 19:57	56-55-3	
Benzo(a)pyrene	1.2J	ug/kg	3.3	1.0	1	06/25/18 06:31	06/26/18 19:57	50-32-8	
Benzo(b)fluoranthene	2.2	ug/kg	1.8	0.55	1	06/25/18 06:31	06/26/18 19:57	205-99-2	
Benzo(g,h,i)perylene	2.3J	ug/kg	3.1	0.93	1	06/25/18 06:31	06/26/18 19:57	191-24-2	
Benzo(k)fluoranthene	2.2J	ug/kg	4.1	1.2	1	06/25/18 06:31	06/26/18 19:57	207-08-9	
Chrysene	<2.0	ug/kg	6.6	2.0	1	06/25/18 06:31	06/26/18 19:57	218-01-9	
Dibenz(a,h)anthracene	2.2J	ug/kg	2.2	0.67	1	06/25/18 06:31	06/26/18 19:57	53-70-3	
Fluoranthene	1.9J	ug/kg	2.1	0.63	1	06/25/18 06:31	06/26/18 19:57	206-44-0	
Fluorene	< 0.46	ug/kg	1.5	0.46	1	06/25/18 06:31	06/26/18 19:57	86-73-7	
Indeno(1,2,3-cd)pyrene	2.2J	ug/kg	3.3	0.98	1	06/25/18 06:31	06/26/18 19:57	193-39-5	
Naphthalene	<1.1	ug/kg	3.8	1.1	1	06/25/18 06:31	06/26/18 19:57	91-20-3	
Phenanthrene	<2.8	ug/kg	9.3	2.8	1	06/25/18 06:31	06/26/18 19:57	85-01-8	
Pyrene	<2.2	ug/kg	7.4	2.2	1	06/25/18 06:31	06/26/18 19:57	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	60	%.	42-125		1	06/25/18 06:31	06/26/18 19:57		
p-Terphenyl-d14 (S)	77	%.	57-125		1	06/25/18 06:31	06/26/18 19:57	1718-51-0	
8260 MSV Med Level Normal List	Analytical	Method: EP	A 8260 Prepar	ation Meth	od: EP/	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30			W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	79-34-5	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32		W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32		W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32		W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32		W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	78-87-5	W
2-Butanone (MEK)	<107	ug/kg	250	107	1	06/28/18 11:30	06/28/18 19:32	78-93-3	W
2-Hexanone	<52.0	ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 19:32	591-78-6	W



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-3_8-9 Lab ID: 10436863006 Collected: 06/21/18 16:35 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepar	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 19:32	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 19:32	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 19:32	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 19:32	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 19:32	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 19:32	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	103	%	57-148		1	06/28/18 11:30	06/28/18 19:32	1868-53-7	
Toluene-d8 (S)	98	%	58-142		1	06/28/18 11:30	06/28/18 19:32	2037-26-5	
4-Bromofluorobenzene (S)	82	%	48-130		1	06/28/18 11:30	06/28/18 19:32	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-4_0-2 Lab ID: 10436863007 Collected: 06/22/18 08:40 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EP	A 6010D Prepa	aration Met	hod: E	PA 3050			
Arsenic	3.0	mg/kg	1.5	0.46	1	06/26/18 04:58	06/27/18 07:14	7440-38-2	
Barium	191	mg/kg	0.79	0.24	1	06/26/18 04:58	06/27/18 07:14	7440-39-3	
Cadmium	< 0.071	mg/kg	0.24	0.071	1	06/26/18 04:58	06/27/18 07:14	7440-43-9	
Chromium	48.6	mg/kg	0.97	0.29	1	06/26/18 04:58	06/27/18 07:14	7440-47-3	
Lead	9.1	mg/kg	1.0	0.30	1	06/26/18 04:58	06/27/18 07:14	7439-92-1	
Selenium	<0.53	mg/kg	1.8	0.53	1	06/26/18 04:58	06/27/18 07:14	7782-49-2	
Silver	<0.11	mg/kg	0.36	0.11	1	06/26/18 04:58	06/27/18 07:14	7440-22-4	
7471B Mercury	Analytical	Method: EP	A 7471B Prepa	aration Met	hod: E	PA 7471B			
Mercury	0.023J	mg/kg	0.032	0.0097	1	06/25/18 07:21	06/28/18 18:07	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	26.7	%	0.10	0.10	1		06/27/18 16:27		
8270D MSSV PAH by SIM	Analytical	Method: EP	A 8270D by SI	M Prepara	tion Me	thod: EPA 3550			
Acenaphthene	<0.56	ug/kg	1.9	0.56	1	06/25/18 06:31	06/26/18 20:20	83-32-9	
Acenaphthylene	<0.67	ug/kg	2.2	0.67	1	06/25/18 06:31	06/26/18 20:20	208-96-8	
Anthracene	<0.64	ug/kg	2.1	0.64	1	06/25/18 06:31	06/26/18 20:20	120-12-7	
Benzo(a)anthracene	<1.5	ug/kg	4.9	1.5	1	06/25/18 06:31	06/26/18 20:20	56-55-3	
Benzo(a)pyrene	< 0.94	ug/kg	3.1	0.94	1	06/25/18 06:31	06/26/18 20:20	50-32-8	
Benzo(b)fluoranthene	<0.51	ug/kg	1.7	0.51	1	06/25/18 06:31	06/26/18 20:20	205-99-2	
Benzo(g,h,i)perylene	<0.86	ug/kg	2.9	0.86	1	06/25/18 06:31	06/26/18 20:20	191-24-2	
Benzo(k)fluoranthene	<1.2	ug/kg	3.8	1.2	1	06/25/18 06:31	06/26/18 20:20	207-08-9	
Chrysene	<1.9	ug/kg	6.2	1.9	1	06/25/18 06:31	06/26/18 20:20	218-01-9	
Dibenz(a,h)anthracene	< 0.63	ug/kg	2.1	0.63	1	06/25/18 06:31	06/26/18 20:20	53-70-3	
Fluoranthene	<0.58	ug/kg	1.9	0.58	1	06/25/18 06:31	06/26/18 20:20	206-44-0	
Fluorene	< 0.43	ug/kg	1.4	0.43	1	06/25/18 06:31	06/26/18 20:20	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.91	ug/kg	3.0	0.91	1	06/25/18 06:31	06/26/18 20:20	193-39-5	
Naphthalene	<1.1	ug/kg	3.5	1.1	1	06/25/18 06:31	06/26/18 20:20	91-20-3	
Phenanthrene	<2.6	ug/kg	8.7	2.6	1	06/25/18 06:31	06/26/18 20:20	85-01-8	
Pyrene	<2.1	ug/kg	6.9	2.1	1	06/25/18 06:31	06/26/18 20:20	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	64	%.	42-125		1	06/25/18 06:31	06/26/18 20:20		
p-Terphenyl-d14 (S)	74	%.	57-125		1	06/25/18 06:31	06/26/18 20:20	1718-51-0	
8260 MSV Med Level Normal List	Analytical	Method: EP	A 8260 Prepar	ation Meth	od: EP/	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	71-55-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55		W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	79-00-5	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	75-34-3	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	75-35-4	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	107-06-2	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	78-87-5	W
2-Butanone (MEK)	<107	ug/kg	250	107	1	06/28/18 11:30	06/28/18 19:55	78-93-3	W
2-Hexanone	<52.0	ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 19:55	591-78-6	W



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-4_0-2 Lab ID: 10436863007 Collected: 06/22/18 08:40 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepai	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 19:55	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 19:55	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 19:55	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 19:55	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 19:55	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 19:55	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	109	%	57-148		1	06/28/18 11:30	06/28/18 19:55		
Toluene-d8 (S)	97	%	58-142		1	06/28/18 11:30	06/28/18 19:55		
4-Bromofluorobenzene (S)	80	%	48-130		1	06/28/18 11:30	06/28/18 19:55	460-00-4	



Project: 49161423.00 Husky Phase II

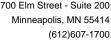
Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-4_6-7 Lab ID: 10436863008 Collected: 06/22/18 08:55 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EP	A 6010D Prepa	aration Met	hod: E	PA 3050			
Arsenic	3.0	mg/kg	1.6	0.48	1	06/26/18 04:58	06/27/18 07:15	7440-38-2	
Barium	160	mg/kg	0.84	0.25	1	06/26/18 04:58	06/27/18 07:15	7440-39-3	
Cadmium	0.097J	mg/kg	0.25	0.075	1	06/26/18 04:58	06/27/18 07:15	7440-43-9	
Chromium	39.4	mg/kg	1.0	0.31	1	06/26/18 04:58	06/27/18 07:15	7440-47-3	
Lead	7.7	mg/kg	1.1	0.32	1		06/27/18 07:15		
Selenium	<0.56	mg/kg	1.9	0.56	1	06/26/18 04:58	06/27/18 07:15	7782-49-2	
Silver	<0.11	mg/kg	0.38	0.11	1		06/27/18 07:15		
7471B Mercury	Analytical	Method: EP	A 7471B Prepa	aration Met	hod: E	PA 7471B			
Mercury	0.021J	mg/kg	0.038	0.011	1	06/25/18 07:21	06/28/18 18:09	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	29.4	%	0.10	0.10	1		06/27/18 16:27		
8270D MSSV PAH by SIM	Analytical	Method: EP	A 8270D by SI	M Prepara	tion Me	thod: EPA 3550			
Acenaphthene	<0.58	ug/kg	1.9	0.58	1	06/25/18 06:31	06/26/18 20:44	83-32-9	
Acenaphthylene	<0.70	ug/kg	2.3	0.70	1	06/25/18 06:31	06/26/18 20:44	208-96-8	
Anthracene	<0.66	ug/kg	2.2	0.66	1	06/25/18 06:31	06/26/18 20:44	120-12-7	
Benzo(a)anthracene	<1.5	ug/kg	5.1	1.5	1	06/25/18 06:31	06/26/18 20:44	56-55-3	
Benzo(a)pyrene	< 0.97	ug/kg	3.2	0.97	1	06/25/18 06:31	06/26/18 20:44	50-32-8	
Benzo(b)fluoranthene	< 0.53	ug/kg	1.8	0.53	1	06/25/18 06:31	06/26/18 20:44	205-99-2	
Benzo(g,h,i)perylene	< 0.90	ug/kg	3.0	0.90	1	06/25/18 06:31	06/26/18 20:44	191-24-2	
Benzo(k)fluoranthene	<1.2	ug/kg	4.0	1.2	1	06/25/18 06:31	06/26/18 20:44	207-08-9	
Chrysene	<1.9	ug/kg	6.4	1.9	1	06/25/18 06:31	06/26/18 20:44	218-01-9	
Dibenz(a,h)anthracene	< 0.65	ug/kg	2.2	0.65	1	06/25/18 06:31	06/26/18 20:44	53-70-3	
Fluoranthene	<0.61	ug/kg	2.0	0.61	1	06/25/18 06:31	06/26/18 20:44	206-44-0	
Fluorene	< 0.44	ug/kg	1.5	0.44	1	06/25/18 06:31	06/26/18 20:44	86-73-7	
Indeno(1,2,3-cd)pyrene	< 0.95	ug/kg	3.2	0.95	1	06/25/18 06:31	06/26/18 20:44	193-39-5	
Naphthalene	<1.1	ug/kg	3.6	1.1	1	06/25/18 06:31	06/26/18 20:44	91-20-3	
Phenanthrene	<2.7	ug/kg	9.0	2.7	1	06/25/18 06:31	06/26/18 20:44	85-01-8	
Pyrene	<2.2	ug/kg	7.2	2.2	1	06/25/18 06:31	06/26/18 20:44	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	75	%.	42-125		1	06/25/18 06:31	06/26/18 20:44	321-60-8	
p-Terphenyl-d14 (S)	74	%.	57-125		1	06/25/18 06:31	06/26/18 20:44	1718-51-0	
8260 MSV Med Level Normal List	Analytical	Method: EP	A 8260 Prepar	ration Meth	od: EP/	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	71-55-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	79-34-5	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	79-00-5	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	75-34-3	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	75-35-4	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	107-06-2	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	78-87-5	W
2-Butanone (MEK)	<107	ug/kg	250	107	1	06/28/18 11:30	06/28/18 20:18	78-93-3	W
2-Hexanone	<52.0	ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 20:18	591-78-6	W





Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-4_6-7 Lab ID: 10436863008 Collected: 06/22/18 08:55 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepa	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 20:18	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 20:18	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 20:18	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 20:18	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 20:18	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 20:18	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	108	%	57-148		1	06/28/18 11:30	06/28/18 20:18		
Toluene-d8 (S)	93	%	58-142		1	06/28/18 11:30	06/28/18 20:18		
4-Bromofluorobenzene (S)	80	%	48-130		1	06/28/18 11:30	06/28/18 20:18	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-5_0-1 Lab ID: 10436863009 Collected: 06/22/18 09:35 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EPA	A 6010D Prepa	aration Met	hod: E	PA 3050			
Arsenic	5.1J	mg/kg	7.5	2.3	5	06/26/18 04:58	06/27/18 07:19	7440-38-2	D3
Barium	287	mg/kg	3.9	1.2	5	06/26/18 04:58	06/27/18 07:19	7440-39-3	
Cadmium	0.56J	mg/kg	1.2	0.35	5	06/26/18 04:58	06/27/18 07:19	7440-43-9	D3
Chromium	1850	mg/kg	9.5	2.9	10	06/26/18 04:58			
Lead	88.2	mg/kg	10.0	3.0	10	06/26/18 04:58	06/27/18 07:20		
Selenium	<5.2	mg/kg	17.4	5.2	10	06/26/18 04:58	06/27/18 07:20		D3
Silver	1.1J	mg/kg	3.5	1.1	10	06/26/18 04:58	06/27/18 07:20		D3
7471B Mercury	Analytical	Method: EPA	A 7471B Prepa	aration Met	hod: E	PA 7471B			
Mercury	0.10	mg/kg	0.033	0.0098	1	06/25/18 07:21	06/28/18 18:11	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	23.3	%	0.10	0.10	1		06/27/18 16:27		
8270D MSSV PAH by SIM	Analytical	Method: EPA	A 8270D by SII	M Preparat	ion Me	ethod: EPA 3550			
Acenaphthene	6.9	ug/kg	1.8	0.53	1	06/25/18 06:31	06/26/18 21:07	83-32-9	
Acenaphthylene	3.4	ug/kg	2.1	0.64	1	06/25/18 06:31	06/26/18 21:07	208-96-8	
Anthracene	11.0	ug/kg	2.0	0.61	1	06/25/18 06:31	06/26/18 21:07	120-12-7	
Benzo(a)anthracene	77.8	ug/kg	4.7	1.4	1	06/25/18 06:31	06/26/18 21:07	56-55-3	
Benzo(a)pyrene	128	ug/kg	3.0	0.89	1	06/25/18 06:31	06/26/18 21:07	50-32-8	
Benzo(b)fluoranthene	162	ug/kg	1.6	0.49	1	06/25/18 06:31	06/26/18 21:07	205-99-2	
Benzo(g,h,i)perylene	116	ug/kg	2.7	0.82	1	06/25/18 06:31	06/26/18 21:07	191-24-2	
Benzo(k)fluoranthene	55.7	ug/kg	3.7	1.1	1	06/25/18 06:31	06/26/18 21:07	207-08-9	
Chrysene	98.1	ug/kg	5.9	1.8	1	06/25/18 06:31	06/26/18 21:07		
Dibenz(a,h)anthracene	32.5	ug/kg	2.0	0.60	1	06/25/18 06:31	06/26/18 21:07		
Fluoranthene	90.4	ug/kg	1.9	0.56	1	06/25/18 06:31	06/26/18 21:07		
Fluorene	2.5	ug/kg	1.4	0.41	1	06/25/18 06:31	06/26/18 21:07		
Indeno(1,2,3-cd)pyrene	94.4	ug/kg	2.9	0.87	1	06/25/18 06:31	06/26/18 21:07		
Naphthalene	4.3	ug/kg	3.3	1.0	1	06/25/18 06:31	06/26/18 21:07		
Phenanthrene	39.1	ug/kg ug/kg	8.3	2.5	1	06/25/18 06:31	06/26/18 21:07		
Pyrene	75.2	ug/kg ug/kg	6.6	2.0	1	06/25/18 06:31	06/26/18 21:07		
Surrogates	. 0.2	ug/Ng	0.0	2.0	•	00/20/10 00:01	00/20/10 21:01	120 00 0	
2-Fluorobiphenyl (S)	77	%.	42-125		1	06/25/18 06:31	06/26/18 21:07	321-60-8	
p-Terphenyl-d14 (S)	85	%.	57-125		1	06/25/18 06:31	06/26/18 21:07		
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepar	ation Metho	od: EP	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	71-55-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	79-34-5	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40		W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40		W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40		W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40		W
1,2-Dichloropropane	<25.0	ug/kg ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40		W
2-Butanone (MEK)	<107	ug/kg ug/kg	250	107	1	06/28/18 11:30	06/28/18 20:40		W
2-Hexanone	<52.0	ug/kg ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 20:40		W
	402.0	~9, Ng	200	32.0	•	30,20,10 11.00	33/23/10 20:40	551.750	••



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-5_0-1 Lab ID: 10436863009 Collected: 06/22/18 09:35 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	8260 Prepa	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 20:40	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 20:40	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 20:40	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 20:40	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 20:40	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	127-18-4	W
Toluene	38.8J	ug/kg	78.3	32.6	1	06/28/18 11:30	06/28/18 20:40	108-88-3	
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 20:40	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	111	%	57-148		1	06/28/18 11:30	06/28/18 20:40	1868-53-7	
Toluene-d8 (S)	99	%	58-142		1	06/28/18 11:30	06/28/18 20:40	2037-26-5	
4-Bromofluorobenzene (S)	83	%	48-130		1	06/28/18 11:30	06/28/18 20:40	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-5_8-9 Lab ID: 10436863010 Collected: 06/22/18 09:50 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EPA	A 6010D Prep	aration Met	hod: E	PA 3050			
Arsenic	3.4	mg/kg	1.6	0.47	1	06/26/18 04:58	06/27/18 07:22	7440-38-2	
Barium	173	mg/kg	0.82	0.25	1	06/26/18 04:58	06/27/18 07:22		
Cadmium	< 0.073	mg/kg	0.24	0.073	1	06/26/18 04:58	06/27/18 07:22	7440-43-9	
Chromium	42.0	mg/kg	1.0	0.30	1	06/26/18 04:58			
Lead	8.4	mg/kg	1.0	0.31	1		06/27/18 07:22		
Selenium	<0.54	mg/kg	1.8	0.54	1	06/26/18 04:58	06/27/18 07:22		
Silver	<0.11	mg/kg	0.37	0.11	1		06/27/18 07:22		
7471B Mercury	Analytical		A 7471B Prepa	aration Met	hod: El	PA 7471B			
Mercury	0.017J	mg/kg	0.032	0.0096	1	06/25/18 07:21	06/28/18 18:13	7439-97-6	
Dry Weight / %M by ASTM D2974		Method: AS							
Percent Moisture	28.1	%	0.10	0.10	1		06/27/18 16:28		
8270D MSSV PAH by SIM						thod: EPA 3550			
Acenaphthene	<0.57	ug/kg	1.9	0.57	1	06/25/18 06:31	06/26/18 21:31	83-32-9	
Acenaphthylene	< 0.69	ug/kg	2.3	0.69	1	06/25/18 06:31	06/26/18 21:31	208-96-8	
Anthracene	< 0.65	ug/kg	2.2	0.65	1	06/25/18 06:31	06/26/18 21:31	120-12-7	
Benzo(a)anthracene	<1.5	ug/kg	5.0	1.5	1	06/25/18 06:31	06/26/18 21:31		
Benzo(a)pyrene	<0.95	ug/kg	3.2	0.95	1	06/25/18 06:31	06/26/18 21:31		
Benzo(b)fluoranthene	<0.52	ug/kg	1.7	0.52	1	06/25/18 06:31	06/26/18 21:31		
Benzo(g,h,i)perylene	<0.88	ug/kg	2.9	0.88	1	06/25/18 06:31	06/26/18 21:31		
Benzo(k)fluoranthene	<1.2	ug/kg	3.9	1.2	1	06/25/18 06:31	06/26/18 21:31		
Chrysene	<1.9	ug/kg	6.3	1.9	1	06/25/18 06:31	06/26/18 21:31		
Dibenz(a,h)anthracene	<0.64	ug/kg	2.1	0.64	1	06/25/18 06:31	06/26/18 21:31		
Fluoranthene	<0.59	ug/kg	2.0	0.59	1	06/25/18 06:31	06/26/18 21:31		
Fluorene	<0.43	ug/kg	1.4	0.43	1	06/25/18 06:31	06/26/18 21:31		
Indeno(1,2,3-cd)pyrene	<0.93	ug/kg	3.1	0.93	1	06/25/18 06:31	06/26/18 21:31		
Naphthalene	<1.1	ug/kg	3.6	1.1	1	06/25/18 06:31	06/26/18 21:31		
Phenanthrene	<2.7	ug/kg	8.9	2.7	1	06/25/18 06:31	06/26/18 21:31		
Pyrene	<2.1	ug/kg	7.1	2.1	1	06/25/18 06:31	06/26/18 21:31		
Surrogates		99							
2-Fluorobiphenyl (S)	60	%.	42-125		1	06/25/18 06:31	06/26/18 21:31	321-60-8	
p-Terphenyl-d14 (S)	74	%.	57-125		1	06/25/18 06:31	06/26/18 21:31	1718-51-0	
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepar	ation Meth	od: EP/	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03		W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03		W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03		W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03		W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	75-35-4	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	107-06-2	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	78-87-5	W
2-Butanone (MEK)	<107	ug/kg	250	107	1	06/28/18 11:30	06/28/18 21:03	78-93-3	W
2-Hexanone	<52.0	ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 21:03	591-78-6	W



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-5_8-9 Lab ID: 10436863010 Collected: 06/22/18 09:50 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepa	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 21:03	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 21:03	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 21:03	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 21:03	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 21:03	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 21:03	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	103	%	57-148		1	06/28/18 11:30	06/28/18 21:03	1868-53-7	
Toluene-d8 (S)	94	%	58-142		1	06/28/18 11:30	06/28/18 21:03	2037-26-5	
4-Bromofluorobenzene (S)	82	%	48-130		1	06/28/18 11:30	06/28/18 21:03	460-00-4	



Date: 07/03/2018 03:29 PM

ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863 Lab ID: 10436863011 Sample: SB-3_14.5-19.5 Collected: 06/22/18 11:20 Received: 06/22/18 20:00 Matrix: Water DF Results Units LOO LOD CAS No. **Parameters** Prepared Analyzed Qual 8270D MSSV PAH by SIM Analytical Method: EPA 8270D by SIM Preparation Method: EPA Mod. 3510C < 0.0043 0.014 0.0043 06/27/18 17:24 83-32-9 Acenaphthene ug/L 06/26/18 14:37 0.0063 Acenaphthylene < 0.0063 ug/L 0.021 1 06/26/18 14:37 06/27/18 17:24 208-96-8 0.0083 Anthracene < 0.0083 ug/L 0.028 1 06/26/18 14:37 06/27/18 17:24 120-12-7 Benzo(a)anthracene < 0.0053 ug/L 0.018 0.0053 06/26/18 14:37 06/27/18 17:24 56-55-3 1 < 0.0054 ug/L 0.018 0.0054 06/26/18 14:37 06/27/18 17:24 50-32-8 Benzo(a)pyrene 1 0.057 0.017 06/27/18 17:24 205-99-2 Benzo(b)fluoranthene <0.017 ug/L 06/26/18 14:37 1 0.013 06/27/18 17:24 191-24-2 Benzo(g,h,i)perylene < 0.013 ug/L 0.044 1 06/26/18 14:37 Benzo(k)fluoranthene < 0.014 ug/L 0.047 0.014 1 06/26/18 14:37 06/27/18 17:24 207-08-9 Chrysene <0.012 ug/L 0.041 0.012 1 06/26/18 14:37 06/27/18 17:24 218-01-9 Dibenz(a,h)anthracene < 0.012 ug/L 0.041 0.012 1 06/26/18 14:37 06/27/18 17:24 53-70-3 Fluoranthene < 0.025 ug/L 0.082 0.025 06/26/18 14:37 06/27/18 17:24 206-44-0 1 0.0080 Fluorene < 0.0080 ug/L 0.027 1 06/26/18 14:37 06/27/18 17:24 86-73-7 0.018 Indeno(1,2,3-cd)pyrene <0.018 ug/L 0.060 1 06/26/18 14:37 06/27/18 17:24 193-39-5 Naphthalene < 0.0092 ug/L 0.031 0.0092 1 06/26/18 14:37 06/27/18 17:24 91-20-3 <0.014 ug/L 0.047 0.014 1 06/26/18 14:37 06/27/18 17:24 85-01-8 Phenanthrene Pvrene <0.020 0.066 0.020 1 06/26/18 14:37 06/27/18 17:24 129-00-0 ug/L Surrogates 2-Fluorobiphenyl (S) 72 %. 30-145 1 06/26/18 14:37 06/27/18 17:24 321-60-8 A5 p-Terphenyl-d14 (S) 88 30-149 06/26/18 14:37 06/27/18 17:24 1718-51-0 %. 1 Analytical Method: EPA 8260B 8260B VOC <9.2 ug/L 30.8 9.2 1 06/27/18 15:59 67-64-1 Acetone Allyl chloride <0.29 ug/L 0.97 0.29 1 06/27/18 15:59 107-05-1 Benzene <0.10 ug/L 0.34 0.10 1 06/27/18 15:59 71-43-2 Bromobenzene <0.21 ug/L 0.69 0.21 1 06/27/18 15:59 108-86-1 Bromochloromethane <0.27 ug/L 0.91 0.27 06/27/18 15:59 74-97-5 1 Bromodichloromethane <0.22 ug/L 0.72 0.22 06/27/18 15:59 75-27-4 1 0.80 75-25-2 Bromoform <0.80 ug/L 2.7 06/27/18 15:59 1 Bromomethane <1.8 ug/L 6.1 1.8 1 06/27/18 15:59 74-83-9 2-Butanone (MEK) < 0.99 ug/L 3.3 0.99 1 06/27/18 15:59 78-93-3 n-Butylbenzene <0.24 ug/L 0.80 0.24 1 06/27/18 15:59 104-51-8 sec-Butylbenzene <0.15 ug/L 0.50 0.15 1 06/27/18 15:59 135-98-8 tert-Butylbenzene < 0.15 ug/L 0.49 0.15 1 06/27/18 15:59 98-06-6 Carbon tetrachloride <0.19 ug/L 0.63 0.19 1 06/27/18 15:59 56-23-5 Chlorobenzene <0.17 ug/L 0.57 0.17 1 06/27/18 15:59 108-90-7 Chloroethane < 0.49 ug/L 1.6 0.49 1 06/27/18 15:59 75-00-3 <0.45 0.45 Chloroform ug/L 1.5 1 06/27/18 15:59 67-66-3 Chloromethane < 0.16 ug/L 0.52 0.16 1 06/27/18 15:59 74-87-3 06/27/18 15:59 95-49-8 2-Chlorotoluene < 0.16 ug/L 0.54 0.161 4-Chlorotoluene < 0.13 ug/L 0.45 0.13 1 06/27/18 15:59 106-43-4 1,2-Dibromo-3-chloropropane <1.7 ug/L 5.5 1.7 1 06/27/18 15:59 96-12-8 Dibromochloromethane < 0.12 ug/L 0.41 0.12 1 06/27/18 15:59 124-48-1 1,2-Dibromoethane (EDB) <0.24 ug/L 0.80 0.24 1 06/27/18 15:59 106-93-4 0.54 0.16 06/27/18 15:59 74-95-3 Dibromomethane < 0.16 ug/L 1 1.2-Dichlorobenzene < 0.14 ua/L 0.46 0.14 1 06/27/18 15:59 95-50-1 1,3-Dichlorobenzene < 0.16 ug/L 0.54 0.16 1 06/27/18 15:59 541-73-1



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-3_14.5-19.5 Lab ID: 10436863011 Collected: 06/22/18 11:20 Received: 06/22/18 20:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
8260B VOC	Analytical	Method: EPA	A 8260B						
1,4-Dichlorobenzene	<0.17	ug/L	0.56	0.17	1		06/27/18 15:59	106-46-7	
Dichlorodifluoromethane	<0.23	ug/L	0.78	0.23	1		06/27/18 15:59	75-71-8	
1,1-Dichloroethane	<0.17	ug/L	0.57	0.17	1		06/27/18 15:59	75-34-3	
1,2-Dichloroethane	<0.22	ug/L	0.73	0.22	1		06/27/18 15:59	107-06-2	
1,1-Dichloroethene	<0.16	ug/L	0.53	0.16	1		06/27/18 15:59	75-35-4	
cis-1,2-Dichloroethene	<0.15	ug/L	0.51	0.15	1		06/27/18 15:59	156-59-2	
trans-1,2-Dichloroethene	<0.12	ug/L	0.39	0.12	1		06/27/18 15:59	156-60-5	
Dichlorofluoromethane	<0.14	ug/L	0.47	0.14	1		06/27/18 15:59	75-43-4	N2
1,2-Dichloropropane	<0.16	ug/L	0.55	0.16	1		06/27/18 15:59	78-87-5	
1,3-Dichloropropane	< 0.070	ug/L	0.23	0.070	1		06/27/18 15:59	142-28-9	
2,2-Dichloropropane	<0.17	ug/L	0.57	0.17	1		06/27/18 15:59	594-20-7	
1,1-Dichloropropene	<0.20	ug/L	0.66	0.20	1		06/27/18 15:59	563-58-6	
cis-1,3-Dichloropropene	<0.20	ug/L	0.68	0.20	1		06/27/18 15:59	10061-01-5	
trans-1,3-Dichloropropene	<0.18	ug/L	0.61	0.18	1		06/27/18 15:59		
Diethyl ether (Ethyl ether)	< 0.095	ug/L	0.32	0.095	1		06/27/18 15:59		
Ethylbenzene	<0.14	ug/L	0.46	0.14	1		06/27/18 15:59		
Hexachloro-1,3-butadiene	<0.31	ug/L	1.0	0.31	1		06/27/18 15:59		
sopropylbenzene (Cumene)	<0.18	ug/L	0.62	0.18	1		06/27/18 15:59		
o-Isopropyltoluene	<0.15	ug/L	0.51	0.15	1		06/27/18 15:59		
Methylene Chloride	<0.98	ug/L	3.3	0.98	1		06/27/18 15:59		
4-Methyl-2-pentanone (MIBK)	<0.42	ug/L	1.4	0.42	1		06/27/18 15:59		
Methyl-tert-butyl ether	<0.16	ug/L	0.54	0.16	1		06/27/18 15:59		
Naphthalene	<0.48	ug/L	1.6	0.48	1		06/27/18 15:59		
n-Propylbenzene	<0.10	ug/L	0.34	0.10	1		06/27/18 15:59		
Styrene	<0.19	ug/L	0.62	0.19	1		06/27/18 15:59		
1,1,1,2-Tetrachloroethane	<0.20	ug/L	0.65	0.10	1		06/27/18 15:59		
1,1,2,2-Tetrachloroethane	<0.17	ug/L ug/L	0.03	0.20	1		06/27/18 15:59		
Tetrachloroethene	<0.17 <0.17	ug/L ug/L	0.57	0.17	1		06/27/18 15:59		
Tetrahydrofuran	<2.2	ug/L ug/L	7.4	2.2	1		06/27/18 15:59		
Toluene	2.1	ug/L ug/L	0.28	0.083	1		06/27/18 15:59		
	<0.21	-	0.28	0.003	1		06/27/18 15:59		
1,2,3-Trichlorobenzene 1,2,4-Trichlorobenzene	<0.20	ug/L	0.66	0.21	1		06/27/18 15:59		
, ,	<0.20 <0.14	ug/L		0.20	1		06/27/18 15:59		
1,1,1-Trichloroethane	<0.14 <0.18	ug/L	0.45						
1,1,2-Trichloroethane Trichloroethene		ug/L	0.60	0.18	1 1		06/27/18 15:59		
	<0.15	ug/L	0.50	0.15			06/27/18 15:59		
Trichlorofluoromethane	<0.23	ug/L	0.77	0.23	1		06/27/18 15:59		
1,2,3-Trichloropropane	<0.26	ug/L	0.86	0.26	1		06/27/18 15:59		
1,1,2-Trichlorotrifluoroethane	<0.22	ug/L	0.72	0.22	1		06/27/18 15:59		
1,2,4-Trimethylbenzene	<0.20	ug/L	0.65	0.20	1		06/27/18 15:59		
1,3,5-Trimethylbenzene	<0.12	ug/L	0.41	0.12	1		06/27/18 15:59		
Vinyl chloride	<0.092	ug/L	0.31	0.092	1		06/27/18 15:59		
Xylene (Total)	<0.31	ug/L	1.0	0.31	1		06/27/18 15:59	1330-20-7	
Surrogates	100	0/	75 405		4		00/07/40 45 50	47000 07 0	
1,2-Dichloroethane-d4 (S)	100	%.	75-125		1		06/27/18 15:59		
Toluene-d8 (S)	98	%.	75-125		1		06/27/18 15:59		
4-Bromofluorobenzene (S)	98	%.	75-125		1		06/27/18 15:59	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: Trip Blank Lab ID: 10436863012 Collected: 06/21/18 00:00 Received: 06/22/18 20:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
3260B VOC	Analytical	Method: EPA	A 8260B						
Acetone	<9.2	ug/L	30.8	9.2	1		06/27/18 15:42	67-64-1	
Allyl chloride	<0.29	ug/L	0.97	0.29	1		06/27/18 15:42	107-05-1	
Benzene	<0.10	ug/L	0.34	0.10	1		06/27/18 15:42	71-43-2	
Bromobenzene	<0.21	ug/L	0.69	0.21	1		06/27/18 15:42	108-86-1	
Bromochloromethane	<0.27	ug/L	0.91	0.27	1		06/27/18 15:42	74-97-5	
Bromodichloromethane	<0.22	ug/L	0.72	0.22	1		06/27/18 15:42	75-27-4	
Bromoform	<0.80	ug/L	2.7	0.80	1		06/27/18 15:42	75-25-2	
Bromomethane	<1.8	ug/L	6.1	1.8	1		06/27/18 15:42	74-83-9	
2-Butanone (MEK)	<0.99	ug/L	3.3	0.99	1		06/27/18 15:42	78-93-3	
n-Butylbenzene	<0.24	ug/L	0.80	0.24	1		06/27/18 15:42		
sec-Butylbenzene	<0.15	ug/L	0.50	0.15	1		06/27/18 15:42		
ert-Butylbenzene	<0.15	ug/L	0.49	0.15	1		06/27/18 15:42		
Carbon tetrachloride	<0.19	ug/L	0.63	0.19	1		06/27/18 15:42		
Chlorobenzene	<0.17	ug/L	0.57	0.17	1		06/27/18 15:42		
Chloroethane	<0.49	ug/L	1.6	0.49	1		06/27/18 15:42		
Chloroform	<0.45	ug/L	1.5	0.45	1		06/27/18 15:42		
Chloromethane	<0.16	ug/L	0.52	0.43	1		06/27/18 15:42		
2-Chlorotoluene	<0.16	ug/L ug/L	0.54	0.16	1		06/27/18 15:42		
	<0.13	_	0.45	0.10	1		06/27/18 15:42		
-Chlorotoluene		ug/L							
,2-Dibromo-3-chloropropane	<1.7	ug/L	5.5	1.7	1		06/27/18 15:42		
Dibromochloromethane	<0.12	ug/L	0.41	0.12	1		06/27/18 15:42		
,2-Dibromoethane (EDB)	<0.24	ug/L	0.80	0.24	1		06/27/18 15:42		
Dibromomethane	<0.16	ug/L	0.54	0.16	1		06/27/18 15:42		
1,2-Dichlorobenzene	<0.14	ug/L	0.46	0.14	1		06/27/18 15:42		
,3-Dichlorobenzene	<0.16	ug/L	0.54	0.16	1		06/27/18 15:42		
1,4-Dichlorobenzene	<0.17	ug/L	0.56	0.17	1		06/27/18 15:42	106-46-7	
Dichlorodifluoromethane	<0.23	ug/L	0.78	0.23	1		06/27/18 15:42		
1,1-Dichloroethane	<0.17	ug/L	0.57	0.17	1		06/27/18 15:42	75-34-3	
,2-Dichloroethane	<0.22	ug/L	0.73	0.22	1		06/27/18 15:42	107-06-2	
1,1-Dichloroethene	<0.16	ug/L	0.53	0.16	1		06/27/18 15:42	75-35-4	
cis-1,2-Dichloroethene	<0.15	ug/L	0.51	0.15	1		06/27/18 15:42	156-59-2	
rans-1,2-Dichloroethene	<0.12	ug/L	0.39	0.12	1		06/27/18 15:42	156-60-5	
Dichlorofluoromethane	<0.14	ug/L	0.47	0.14	1		06/27/18 15:42	75-43-4	N2
,2-Dichloropropane	<0.16	ug/L	0.55	0.16	1		06/27/18 15:42	78-87-5	
,3-Dichloropropane	<0.070	ug/L	0.23	0.070	1		06/27/18 15:42	142-28-9	
2,2-Dichloropropane	<0.17	ug/L	0.57	0.17	1		06/27/18 15:42	594-20-7	
,1-Dichloropropene	<0.20	ug/L	0.66	0.20	1		06/27/18 15:42	563-58-6	
sis-1,3-Dichloropropene	<0.20	ug/L	0.68	0.20	1		06/27/18 15:42		
rans-1,3-Dichloropropene	<0.18	ug/L	0.61	0.18	1		06/27/18 15:42		
Diethyl ether (Ethyl ether)	<0.095	ug/L	0.32	0.095	1		06/27/18 15:42		
Ethylbenzene	<0.14	ug/L	0.46	0.14	1		06/27/18 15:42		
Hexachloro-1,3-butadiene	<0.31	ug/L	1.0	0.14	1		06/27/18 15:42		
sopropylbenzene (Cumene)	<0.18	ug/L ug/L	0.62	0.31	1		06/27/18 15:42		
o-Isopropyltoluene	<0.15	ug/L ug/L	0.62	0.15	1		06/27/18 15:42		
Methylene Chloride		-		0.13	1		06/27/18 15:42		
VIEUTYIETTE CHIOHUE	<0.98	ug/L	3.3	0.98	1		00/21/10 13:42	13-09-2	



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

 Sample: Trip Blank
 Lab ID: 10436863012
 Collected: 06/21/18 00:00
 Received: 06/22/18 20:00
 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260B VOC	Analytical	Method: EPA	A 8260B						
Methyl-tert-butyl ether	<0.16	ug/L	0.54	0.16	1		06/27/18 15:42	1634-04-4	
Naphthalene	<0.48	ug/L	1.6	0.48	1		06/27/18 15:42	91-20-3	
n-Propylbenzene	<0.10	ug/L	0.34	0.10	1		06/27/18 15:42	103-65-1	
Styrene	<0.19	ug/L	0.62	0.19	1		06/27/18 15:42	100-42-5	
1,1,1,2-Tetrachloroethane	<0.20	ug/L	0.65	0.20	1		06/27/18 15:42	630-20-6	
1,1,2,2-Tetrachloroethane	<0.17	ug/L	0.57	0.17	1		06/27/18 15:42	79-34-5	
Tetrachloroethene	<0.17	ug/L	0.57	0.17	1		06/27/18 15:42	127-18-4	
Tetrahydrofuran	<2.2	ug/L	7.4	2.2	1		06/27/18 15:42	109-99-9	
Toluene	<0.083	ug/L	0.28	0.083	1		06/27/18 15:42	108-88-3	
1,2,3-Trichlorobenzene	<0.21	ug/L	0.69	0.21	1		06/27/18 15:42	87-61-6	
1,2,4-Trichlorobenzene	<0.20	ug/L	0.66	0.20	1		06/27/18 15:42	120-82-1	
1,1,1-Trichloroethane	<0.14	ug/L	0.45	0.14	1		06/27/18 15:42	71-55-6	
1,1,2-Trichloroethane	<0.18	ug/L	0.60	0.18	1		06/27/18 15:42	79-00-5	
Trichloroethene	<0.15	ug/L	0.50	0.15	1		06/27/18 15:42	79-01-6	
Trichlorofluoromethane	<0.23	ug/L	0.77	0.23	1		06/27/18 15:42	75-69-4	
1,2,3-Trichloropropane	<0.26	ug/L	0.86	0.26	1		06/27/18 15:42	96-18-4	
1,1,2-Trichlorotrifluoroethane	<0.22	ug/L	0.72	0.22	1		06/27/18 15:42	76-13-1	
1,2,4-Trimethylbenzene	<0.20	ug/L	0.65	0.20	1		06/27/18 15:42	95-63-6	
1,3,5-Trimethylbenzene	<0.12	ug/L	0.41	0.12	1		06/27/18 15:42	108-67-8	
Vinyl chloride	<0.092	ug/L	0.31	0.092	1		06/27/18 15:42	75-01-4	
Xylene (Total) Surrogates	<0.31	ug/L	1.0	0.31	1		06/27/18 15:42	1330-20-7	
1,2-Dichloroethane-d4 (S)	100	%.	75-125		1		06/27/18 15:42	17060-07-0	
Toluene-d8 (S)	98	%.	75-125		1		06/27/18 15:42	2037-26-5	
4-Bromofluorobenzene (S)	96	%.	75-125		1		06/27/18 15:42	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: MeOH Trip Blank Lab ID: 10436863013 Collected: 06/21/18 00:00 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepar	ration Metho	od: EP/	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	71-55-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	79-34-5	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	79-00-5	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	75-34-3	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	75-35-4	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	107-06-2	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	78-87-5	W
2-Butanone (MEK)	<107	ug/kg	250	107	1	06/28/18 11:30	06/28/18 17:17	78-93-3	W
2-Hexanone	<52.0	ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 17:17	591-78-6	W
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 17:17	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 17:17	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 17:17	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 17:17	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 17:17	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 17:17	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	10061-02-6	W
Surrogates		0 0							
Dibromofluoromethane (S)	110	%	57-148		1	06/28/18 11:30	06/28/18 17:17	1868-53-7	
Toluene-d8 (S)	102	%	58-142		1	06/28/18 11:30	06/28/18 17:17	2037-26-5	
4-Bromofluorobenzene (S)	94	%	48-130		1	06/28/18 11:30	06/28/18 17:17	460-00-4	



QUALITY CONTROL DATA

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

QC Batch: 546627 Analysis Method: EPA 7471B

QC Batch Method: EPA 7471B Analysis Description: 7471B Mercury Solids

Associated Lab Samples: 10436863001, 10436863002, 10436863003, 10436863004, 10436863005, 10436863006, 10436863007,

10436863008, 10436863009, 10436863010

METHOD BLANK: 2972710 Matrix: Solid

Associated Lab Samples: 10436863001, 10436863002, 10436863003, 10436863004, 10436863005, 10436863006, 10436863007,

10436863008, 10436863009, 10436863010

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Mercury mg/kg <0.0080 0.027 06/28/18 17:42

LABORATORY CONTROL SAMPLE: 2972711

Spike LCS LCS % Rec

Parameter Units Conc. Result % Rec Limits Qualifiers

Mercury mg/kg .47 0.46 98 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2972712 2972713 MS MSD

MSD 10436863001 Spike Spike MS MS MSD % Rec Max RPD RPD Parameter Units Result Conc. Result Result % Rec % Rec Limits Conc. Qual Mercury 0.023J .62 .62 0.63 0.64 97 75-125 20 mg/kg

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALITY CONTROL DATA

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

QC Batch: 546886 Analysis Method: EPA 6010D
QC Batch Method: EPA 3050 Analysis Description: 6010D Solids

Associated Lab Samples: 10436863001, 10436863002, 10436863003, 10436863004, 10436863005, 10436863006, 10436863007,

10436863008, 10436863009, 10436863010

METHOD BLANK: 2973660 Matrix: Solid

Associated Lab Samples: 10436863001, 10436863002, 10436863003, 10436863004, 10436863005, 10436863006, 10436863007,

10436863008, 10436863009, 10436863010

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Arsenic	mg/kg	<0.35	1.2	06/27/18 06:51	
Barium	mg/kg	<0.18	0.60	06/27/18 06:51	
Cadmium	mg/kg	< 0.054	0.18	06/27/18 06:51	
Chromium	mg/kg	<0.22	0.74	06/27/18 06:51	
Lead	mg/kg	< 0.23	0.77	06/27/18 06:51	
Selenium	mg/kg	< 0.40	1.3	06/27/18 06:51	
Silver	mg/kg	<0.082	0.27	06/27/18 06:51	

LABORATORY CONTROL SAMPLE:	2973661					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Arsenic	mg/kg	50	48.7	97	80-120	
Barium	mg/kg	50	51.9	104	80-120	
Cadmium	mg/kg	50	50.8	102	80-120	
Chromium	mg/kg	50	52.0	104	80-120	
Lead	mg/kg	50	51.9	104	80-120	
Selenium	mg/kg	50	47.4	95	80-120	
Silver	mg/kg	25	25.0	100	80-120	

MATRIX SPIKE & MATRIX S	PIKE DUPLICA	TE: 29736	62		2973663							
Parameter	10 Units	0436863001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	3.1	67.7	67.7	50.0	54.7	69	76	75-125	9	20	M1
Barium	mg/kg	245	67.7	67.7	326	284	119	57	75-125	14	20	M1
Cadmium	mg/kg	< 0.075	67.7	67.7	50.8	55.8	75	82	75-125	9	20	
Chromium	mg/kg	49.6	67.7	67.7	113	123	94	108	75-125	8	20	
Lead	mg/kg	10.5	67.7	67.7	70.8	78.8	89	101	75-125	11	20	
Selenium	mg/kg	0.56J	67.7	67.7	45.5	48.9	66	71	75-125	7	20	M1
Silver	mg/kg	<0.11	33.9	33.9	24.4	27.0	72	80	75-125	10	20	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700



QUALITY CONTROL DATA

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

QC Batch: 547426 Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974 Analysis Description: Dry Weight / %M by ASTM D2974

Associated Lab Samples: 10436863001, 10436863002, 10436863003, 10436863004, 10436863005, 10436863006, 10436863007,

10436863008, 10436863009, 10436863010

SAMPLE DUPLICATE: 2975910

 Parameter
 Units
 10436863001 Result
 Dup Result
 Max RPD
 RPD
 Qualifiers

 Percent Moisture
 %
 27.6
 27.4
 1
 30

SAMPLE DUPLICATE: 2975911

Date: 07/03/2018 03:29 PM

		10436863010	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Percent Moisture	%	28.1	28.4	1	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

QC Batch: 293184 Analysis Method: EPA 8260

QC Batch Method: EPA 5035/5030B Analysis Description: 8260 MSV Med Level Normal List

Associated Lab Samples: 10436863001, 10436863002, 10436863003, 10436863004, 10436863005, 10436863006, 10436863007,

10436863008, 10436863009, 10436863010, 10436863013

METHOD BLANK: 1714466 Matrix: Solid

Associated Lab Samples: 10436863001, 10436863002, 10436863003, 10436863004, 10436863005, 10436863006, 10436863007,

10436863008, 10436863009, 10436863010, 10436863013

Parameter Units Result Limit Analyzed Qualifiers
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane ug/kg <17.5
1,1,2-Trichloroethane ug/kg <20.2
1,1-Dichloroethane ug/kg <17.6
1,1-Dichloroethene ug/kg <17.6
1,2-Dichloroethane ug/kg <15.0
1,2-Dichloropropane ug/kg <16.8
2-Butanone (MEK) ug/kg <124
2-Hexanone ug/kg <52.0
4-Methyl-2-pentanone (MIBK) ug/kg <41.1
Acetone ug/kg <98.6 250 06/28/18 15:01 Benzene ug/kg <9.2
Benzene ug/kg <9.2
Bromodichloromethane ug/kg <9.8 50.0 06/28/18 15:01 Bromoform ug/kg <19.8
Bromoform ug/kg <19.8
Bromomethane ug/kg <69.9
Carbon disulfide ug/kg <11.1
Carbon tetrachloride ug/kg <12.1
Chlorobenzene ug/kg <14.8 50.0 06/28/18 15:01 Chloroethane ug/kg <67.0
Chloroethane ug/kg <67.0 250 06/28/18 15:01 Chloroform ug/kg <46.4
Chloroform ug/kg <46.4 250 06/28/18 15:01 Chloromethane ug/kg <20.4
Chloromethane ug/kg <20.4 50.0 06/28/18 15:01 cis-1,2-Dichloroethene ug/kg <16.6
cis-1,2-Dichloroethene ug/kg <16.6 50.0 06/28/18 15:01
Dibromochloromethane ug/kg <17.9 50.0 06/28/18 15:01
Ethylbenzene ug/kg <12.4 50.0 06/28/18 15:01
m&p-Xylene ug/kg <34.4 100 06/28/18 15:01
Methyl-tert-butyl ether ug/kg <12.7 50.0 06/28/18 15:01
Methylene Chloride ug/kg <16.2 50.0 06/28/18 15:01
o-Xylene ug/kg <14.0 50.0 06/28/18 15:01
Styrene ug/kg <9.0 50.0 06/28/18 15:01
Tetrachloroethene ug/kg <12.9 50.0 06/28/18 15:01
Toluene ug/kg <11.2 50.0 06/28/18 15:01
trans-1,2-Dichloroethene ug/kg <16.5 50.0 06/28/18 15:01
trans-1,3-Dichloropropene ug/kg <14.4 50.0 06/28/18 15:01
Trichloroethene ug/kg <23.6 50.0 06/28/18 15:01
Vinyl chloride ug/kg <21.1 50.0 06/28/18 15:01
4-Bromofluorobenzene (S) % 93 48-130 06/28/18 15:01
Dibromofluoromethane (S) % 116 57-148 06/28/18 15:01
Toluene-d8 (S) % 107 58-142 06/28/18 15:01

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Parameter Units Spike LCS Result W Rec Limits Qualifiers
Tetrachloroethane ug/kg 2500 2590 104 70-130 ug/kg 2500 2840 114 68-130 richloroethane ug/kg 2500 2840 114 68-130 richloroethane ug/kg 2500 2610 104 70-130 richloroethane ug/kg 2500 2610 104 70-130 richloroethane ug/kg 2500 2550 102 67-132 richloroethane ug/kg 2500 2550 102 67-132 richloroethane ug/kg 2500 2740 110 67-128 richloroethane ug/kg 2500 2500 100 65-137 richloropropane ug/kg 2500 2820 113 75-126 richloromethane ug/kg 2500 2470 99 70-130 richloromethane ug/kg 2500 2470 99 70-130 richloromethane ug/kg 2500 2750 110 70-130 richloromethane ug/kg 2500 2310 92 57-117 richlane ug/kg 2500 2310 92 57-117 richlane ug/kg 2500 2360 94 48-135 richloride ug/kg 2500 2580 103 66-143 richloride ug/kg 2500 2590 103 70-130 richloride ug/kg 2500 2590 103 70-130 richloride ug/kg 2500 2590 103 70-130 richlane ug/kg 2500 2500 100 37-165
Tetrachloroethane ug/kg 2500 2840 114 68-130 richloroethane ug/kg 2500 2610 104 70-130 richloroethane ug/kg 2500 2550 102 67-132 richloroethane ug/kg 2500 2550 102 67-132 richloroethane ug/kg 2500 2500 100 67-132 richloroethane ug/kg 2500 2740 110 67-128 richloroethane ug/kg 2500 2500 100 65-137 richloropropane ug/kg 2500 2820 113 75-126 richloromethane ug/kg 2500 2820 113 75-126 richloromethane ug/kg 2500 2470 99 70-130 richloromethane ug/kg 2500 2750 110 70-130 richloromethane ug/kg 2500 2310 92 57-117 richlane ug/kg 2500 2360 94 48-135 richloride ug/kg 2500 2580 103 66-143 retrachloride ug/kg 2500 2500 106 65-133 richloride ug/kg 2500 2500 106 65-133 richloride ug/kg 2500 2500 103 70-130 richloride ug/kg 2500 2500 100 37-165
richloroethane ug/kg 2500 2610 104 70-130 107-
hloroethane ug/kg 2500 2550 102 67-132 hloroethane ug/kg 2500 2740 110 67-128 hloroethane ug/kg 2500 2740 110 67-128 hloroethane ug/kg 2500 2500 100 65-137 hloropropane ug/kg 2500 2820 113 75-126 lee ug/kg 2500 2470 99 70-130 lichloromethane ug/kg 2500 2750 110 70-130 lichloromethane ug/kg 2500 2750 110 70-130 lorm ug/kg 2500 2310 92 57-117 leethane ug/kg 2500 2360 94 48-135 loisulfide ug/kg 2500 2580 103 66-143 leetrachloride ug/kg 2500 2650 106 65-133 leenzene ug/kg 2500 2500 100 37-165
hloroethene ug/kg 2500 2740 110 67-128 hloroethane ug/kg 2500 2500 100 65-137 hloropropane ug/kg 2500 2820 113 75-126 le ug/kg 2500 2470 99 70-130 lichloromethane ug/kg 2500 2750 110 70-130 lorm ug/kg 2500 2310 92 57-117 lorethane ug/kg 2500 2360 94 48-135 loisulfide ug/kg 2500 2580 103 66-143 lettrachloride ug/kg 2500 2650 106 65-133 lettrachloride ug/kg 2500 2500 2500 103 70-130 lethane ug/kg 2500 2500 100 37-165
hloroethane ug/kg 2500 2500 100 65-137 hloropropane ug/kg 2500 2820 113 75-126 e ug/kg 2500 2470 99 70-130 lichloromethane ug/kg 2500 2750 110 70-130 orm ug/kg 2500 2310 92 57-117 hethane ug/kg 2500 2360 94 48-135 disulfide ug/kg 2500 2580 103 66-143 tetrachloride ug/kg 2500 2650 106 65-133 benzene ug/kg 2500 2500 100 37-165
hloropropane ug/kg 2500 2820 113 75-126 le ug/kg 2500 2470 99 70-130 lichloromethane ug/kg 2500 2750 110 70-130 lorm ug/kg 2500 2310 92 57-117 lorethane ug/kg 2500 2360 94 48-135 lorethane ug/kg 2500 2580 103 66-143 lettrachloride ug/kg 2500 2650 106 65-133 lorenzene ug/kg 2500 2500 103 70-130 lorenzene ug/kg 2500 2500 100 37-165
ge ug/kg 2500 2470 99 70-130 dichloromethane ug/kg 2500 2750 110 70-130 orm ug/kg 2500 2310 92 57-117 nethane ug/kg 2500 2360 94 48-135 disulfide ug/kg 2500 2580 103 66-143 tetrachloride ug/kg 2500 2650 106 65-133 venzene ug/kg 2500 2590 103 70-130 ethane ug/kg 2500 2500 100 37-165
dischloromethane ug/kg 2500 2750 110 70-130 orm ug/kg 2500 2310 92 57-117 nethane ug/kg 2500 2360 94 48-135 disulfide ug/kg 2500 2580 103 66-143 tetrachloride ug/kg 2500 2650 106 65-133 venzene ug/kg 2500 2590 103 70-130 ethane ug/kg 2500 2500 100 37-165
orm ug/kg 2500 2310 92 57-117 nethane ug/kg 2500 2360 94 48-135 disulfide ug/kg 2500 2580 103 66-143 tetrachloride ug/kg 2500 2650 106 65-133 venzene ug/kg 2500 2590 103 70-130 ventane ug/kg 2500 2500 100 37-165
nethane ug/kg 2500 2360 94 48-135 disulfide ug/kg 2500 2580 103 66-143 tetrachloride ug/kg 2500 2650 106 65-133 tetrachloride ug/kg 2500 2590 103 70-130 tethane ug/kg 2500 2500 100 37-165
disulfide ug/kg 2500 2580 103 66-143 tetrachloride ug/kg 2500 2650 106 65-133 penzene ug/kg 2500 2590 103 70-130 ethane ug/kg 2500 2500 100 37-165
tetrachloride ug/kg 2500 2650 106 65-133 enzene ug/kg 2500 2590 103 70-130 ethane ug/kg 2500 2500 100 37-165
penzene ug/kg 2500 2590 103 70-130 ethane ug/kg 2500 2500 100 37-165
ethane ug/kg 2500 2500 100 37-165
orm ug/kg 2500 2530 101 72-126
3/11 ag/11g 2000 2000 101 12 120
nethane ug/kg 2500 1960 78 34-120
Dichloroethene ug/kg 2500 2430 97 70-130
Dichloropropene ug/kg 2500 2700 108 69-130
ochloromethane ug/kg 2500 2610 104 68-130
nzene ug/kg 2500 2630 105 79-121
rlene ug/kg 5000 5260 105 70-130
tert-butyl ether ug/kg 2500 2370 95 66-129
ene Chloride ug/kg 2500 2580 103 68-129
e ug/kg 2500 2670 107 70-130
ug/kg 2500 2660 107 70-130
loroethene ug/kg 2500 2630 105 70-130
ug/kg 2500 2660 106 80-123
2-Dichloroethene ug/kg 2500 2540 102 70-130
3-Dichloropropene ug/kg 2500 2290 91 67-130
oethene ug/kg 2500 2720 109 70-130
oloride ug/kg 2500 2080 83 52-122
ofluorobenzene (S) % 98 48-130
ofluoromethane (S) % 105 57-148
e-d8 (S) % 101 58-142

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1714468 1714469												
		10436863004	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
1,1,1-Trichloroethane	ug/kg		1660	1660	1500	1440	90	87	62-130	4	20	
1,1,2,2-Tetrachloroethane	ug/kg	<25.0	1660	1660	1670	1550	101	94	64-137	7	20	
1,1,2-Trichloroethane	ug/kg	<25.0	1660	1660	1650	1520	100	92	70-130	8	20	
1,1-Dichloroethane	ug/kg	<25.0	1660	1660	1590	1510	96	91	65-132	5	20	
1,1-Dichloroethene	ug/kg	<25.0	1660	1660	1460	1410	88	85	50-128	4	21	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

MATRIX SPIKE & MATRIX SP	IKE DUPLICA	TE: 17144			1714469							
Parameter	1 Units	0436863004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qua
1,2-Dichloroethane	ug/kg	<25.0	1660	1660	1670	1570	101	95	65-139	6	20	
1,2-Dichloropropane	ug/kg	<25.0	1660	1660	1790	1660	108	100	74-128	8	20	
Benzene	ug/kg	<25.0	1660	1660	1550	1470	93	89	66-132	5	20	
Bromodichloromethane	ug/kg	<25.0	1660	1660	1710	1650	103	99	69-130	4	20	
Bromoform	ug/kg	<25.0	1660	1660	1600	1550	97	94	57-130	3	20	
Bromomethane	ug/kg	<69.9	1660	1660	1330	1250	80	75	34-145	6	20	
Carbon disulfide	ug/kg	<25.0	1660	1660	1320	1270	80	77	48-143	4	20	
Carbon tetrachloride	ug/kg	<25.0	1660	1660	1480	1460	90	88	54-133	2	20	
Chlorobenzene	ug/kg	<25.0	1660	1660	1670	1590	101	96	70-130	5	20	
Chloroethane	ug/kg	<67.0	1660	1660	1370	1360	83	82	33-165	1	20	
Chloroform	ug/kg	<46.4	1660	1660	1650	1570	99	95	72-128	5	20	
Chloromethane	ug/kg	<25.0	1660	1660	836	777	50	47	20-120	7	20	
cis-1,2-Dichloroethene	ug/kg	<25.0	1660	1660	1620	1480	98	90	69-130	9	20	
cis-1,3-Dichloropropene	ug/kg	<25.0	1660	1660	1620	1500	98	91	65-130	7	20	
Dibromochloromethane	ug/kg	<25.0	1660	1660	1620	1460	98	88	65-130	10	20	
Ethylbenzene	ug/kg	<25.0	1660	1660	1590	1480	96	90	63-127	7	20	
n&p-Xylene	ug/kg	<50.0	3310	3310	3250	3100	98	94	70-130	5	20	
Methyl-tert-butyl ether	ug/kg	<25.0	1660	1660	1480	1390	89	84	62-135	6	20	
Methylene Chloride	ug/kg	<25.0	1660	1660	1670	1560	101	94	68-129	7	20	
o-Xylene	ug/kg	<25.0	1660	1660	1620	1530	98	92	69-130	6	20	
Styrene	ug/kg	<25.0	1660	1660	1720	1580	104	96	70-130	8	20	
Tetrachloroethene	ug/kg	<25.0	1660	1660	1570	1540	95	93	70-130	2	20	
Toluene	ug/kg	<25.0	1660	1660	1680	1580	102	95	80-123	6	20	
rans-1,2-Dichloroethene	ug/kg	<25.0	1660	1660	1590	1420	96	86	70-130	11	20	
rans-1,3-Dichloropropene	ug/kg	<25.0	1660	1660	1460	1370	88	83	67-130	6	20	
Trichloroethene	ug/kg	<25.0	1660	1660	1640	1590	99	96	70-130	3	20	
/inyl chloride	ug/kg	<25.0	1660	1660	928	899	56	54	39-122	3	20	
1-Bromofluorobenzene (S)	%						97	90	48-130			
Dibromofluoromethane (S)	%						106	100	57-148			
Toluene-d8 (S)	%						102	96	58-142			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

QC Batch: 547301 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV 465 W

Associated Lab Samples: 10436863011, 10436863012

METHOD BLANK: 2975400 Matrix: Water

Associated Lab Samples: 10436863011, 10436863012

1,1,1,2-Tetrachloroethane	Parameter Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane ug/L <0.14	1,1,1,2-Tetrachloroethane	ug/L	<0.20	0.65	06/27/18 12:47	
1,1,2-Trichloroethane ug/L <0.18	1,1,1-Trichloroethane		< 0.14	0.45	06/27/18 12:47	
1,1,2-Trichloroethane ug/L <0.18	1,1,2,2-Tetrachloroethane	ug/L	<0.17	0.57	06/27/18 12:47	
1,1,2-Trichlorotrifluoroethane ug/L <0.17	1,1,2-Trichloroethane		<0.18	0.60	06/27/18 12:47	
1,1-Dichloroethene ug/L <0.16 0.53 06/27/18 12:47 1,1-Dichloropropene ug/L <0.20	1,1,2-Trichlorotrifluoroethane		< 0.22	0.72	06/27/18 12:47	
1,1-Dichloropropene ug/L <0.20	1,1-Dichloroethane	ug/L	< 0.17	0.57	06/27/18 12:47	
1,2,3-Trichlorobenzene ug/L	1,1-Dichloroethene	ug/L	<0.16	0.53	06/27/18 12:47	
1,2,3-Trichloropropane ug/L <0.26	1,1-Dichloropropene	ug/L	< 0.20	0.66	06/27/18 12:47	
1,2,4-Trichlorobenzene ug/L <0.20	1,2,3-Trichlorobenzene	ug/L	<0.21	0.69	06/27/18 12:47	
1,2,4-Trimethylbenzene ug/L <0.20	1,2,3-Trichloropropane	ug/L	< 0.26	0.86	06/27/18 12:47	
1,2-Dibromo-3-chloropropane ug/L <1.7	1,2,4-Trichlorobenzene	ug/L	< 0.20	0.66	06/27/18 12:47	
1,2-Dibromoethane (EDB) ug/L <0.24	1,2,4-Trimethylbenzene	ug/L	< 0.20	0.65	06/27/18 12:47	
1,2-Dichlorobenzene ug/L <0.14	1,2-Dibromo-3-chloropropane	ug/L	<1.7	5.5	06/27/18 12:47	
1,2-Dichloroethane ug/L <0.22	1,2-Dibromoethane (EDB)	ug/L	< 0.24	0.80	06/27/18 12:47	
1,2-Dichloropropane ug/L <0.16	1,2-Dichlorobenzene	ug/L	< 0.14	0.46	06/27/18 12:47	
1,3,5-Trimethylbenzene ug/L <0.12	1,2-Dichloroethane	ug/L	< 0.22	0.73	06/27/18 12:47	
1,3-Dichlorobenzene ug/L <0.16	1,2-Dichloropropane	ug/L	<0.16	0.55	06/27/18 12:47	
1,3-Dichloropropane ug/L <0.070	1,3,5-Trimethylbenzene	ug/L	< 0.12	0.41	06/27/18 12:47	
1,4-Dichlorobenzene ug/L <0.17	1,3-Dichlorobenzene	ug/L	<0.16	0.54	06/27/18 12:47	
2,2-Dichloropropane ug/L <0.17	1,3-Dichloropropane	ug/L	< 0.070	0.23	06/27/18 12:47	
2-Butanone (MEK) ug/L <0.99	1,4-Dichlorobenzene	ug/L	< 0.17	0.56	06/27/18 12:47	
2-Chlorotoluene ug/L <0.16	2,2-Dichloropropane	ug/L	< 0.17	0.57	06/27/18 12:47	
4-Chlorotoluene ug/L <0.13	2-Butanone (MEK)	ug/L	< 0.99	3.3	06/27/18 12:47	
4-Methyl-2-pentanone (MIBK) ug/L <0.42	2-Chlorotoluene	ug/L	<0.16	0.54	06/27/18 12:47	
Acetone ug/L <9.2	4-Chlorotoluene	ug/L	<0.13	0.45	06/27/18 12:47	
Allyl chloride ug/L <0.29 0.97 06/27/18 12:47 Benzene ug/L <0.10	4-Methyl-2-pentanone (MIBK)	ug/L	< 0.42	1.4	06/27/18 12:47	
Benzene ug/L <0.10 0.34 06/27/18 12:47 Bromobenzene ug/L <0.21	Acetone	ug/L	<9.2	30.8	06/27/18 12:47	
Bromobenzene ug/L <0.21 0.69 06/27/18 12:47 Bromochloromethane ug/L <0.27	Allyl chloride	ug/L	< 0.29	0.97	06/27/18 12:47	
Bromochloromethane ug/L <0.27 0.91 06/27/18 12:47 Bromodichloromethane ug/L <0.22	Benzene	ug/L	< 0.10	0.34	06/27/18 12:47	
Bromodichloromethane ug/L <0.22 0.72 06/27/18 12:47 Bromoform ug/L <0.80	Bromobenzene	ug/L	<0.21	0.69	06/27/18 12:47	
Bromoform ug/L <0.80 2.7 06/27/18 12:47 Bromomethane ug/L <1.8	Bromochloromethane	ug/L	< 0.27	0.91	06/27/18 12:47	
Bromomethane ug/L <1.8 6.1 06/27/18 12:47 Carbon tetrachloride ug/L <0.19	Bromodichloromethane	ug/L	< 0.22	0.72	06/27/18 12:47	
Carbon tetrachloride ug/L <0.19 0.63 06/27/18 12:47 Chlorobenzene ug/L <0.17	Bromoform	ug/L	<0.80	2.7	06/27/18 12:47	
Chlorobenzene ug/L <0.17 0.57 06/27/18 12:47 Chloroethane ug/L <0.49	Bromomethane	ug/L	<1.8	6.1	06/27/18 12:47	
Chloroethane ug/L <0.49 1.6 06/27/18 12:47 Chloroform ug/L <0.45	Carbon tetrachloride	ug/L	< 0.19	0.63	06/27/18 12:47	
Chloroform ug/L <0.45 1.5 06/27/18 12:47 Chloromethane ug/L <0.16	Chlorobenzene	ug/L	< 0.17	0.57	06/27/18 12:47	
Chloromethane ug/L <0.16 0.52 06/27/18 12:47 cis-1,2-Dichloroethene ug/L <0.15	Chloroethane	ug/L	< 0.49	1.6	06/27/18 12:47	
cis-1,2-Dichloroethene ug/L <0.15 0.51 06/27/18 12:47	Chloroform	ug/L	< 0.45	1.5	06/27/18 12:47	
cis-1,2-Dichloroethene ug/L <0.15 0.51 06/27/18 12:47	Chloromethane	-	<0.16	0.52	06/27/18 12:47	
	cis-1,2-Dichloroethene		<0.15	0.51	06/27/18 12:47	
	cis-1,3-Dichloropropene	_	<0.20	0.68	06/27/18 12:47	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

METHOD BLANK: 2975400 Matrix: Water

Associated Lab Samples: 10436863011, 10436863012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromochloromethane	ug/L	<0.12	0.41	06/27/18 12:47	
Dibromomethane	ug/L	<0.16	0.54	06/27/18 12:47	
Dichlorodifluoromethane	ug/L	< 0.23	0.78	06/27/18 12:47	
Dichlorofluoromethane	ug/L	< 0.14	0.47	06/27/18 12:47	N2
Diethyl ether (Ethyl ether)	ug/L	< 0.095	0.32	06/27/18 12:47	
Ethylbenzene	ug/L	< 0.14	0.46	06/27/18 12:47	
Hexachloro-1,3-butadiene	ug/L	< 0.31	1.0	06/27/18 12:47	
Isopropylbenzene (Cumene)	ug/L	<0.18	0.62	06/27/18 12:47	
Methyl-tert-butyl ether	ug/L	<0.16	0.54	06/27/18 12:47	
Methylene Chloride	ug/L	<0.98	3.3	06/27/18 12:47	
n-Butylbenzene	ug/L	< 0.24	0.80	06/27/18 12:47	
n-Propylbenzene	ug/L	<0.10	0.34	06/27/18 12:47	
Naphthalene	ug/L	< 0.48	1.6	06/27/18 12:47	
p-Isopropyltoluene	ug/L	<0.15	0.51	06/27/18 12:47	
sec-Butylbenzene	ug/L	<0.15	0.50	06/27/18 12:47	
Styrene	ug/L	<0.19	0.62	06/27/18 12:47	
tert-Butylbenzene	ug/L	<0.15	0.49	06/27/18 12:47	
Tetrachloroethene	ug/L	<0.17	0.57	06/27/18 12:47	
Tetrahydrofuran	ug/L	<2.2	7.4	06/27/18 12:47	
Toluene	ug/L	<0.083	0.28	06/27/18 12:47	
trans-1,2-Dichloroethene	ug/L	<0.12	0.39	06/27/18 12:47	
trans-1,3-Dichloropropene	ug/L	<0.18	0.61	06/27/18 12:47	
Trichloroethene	ug/L	<0.15	0.50	06/27/18 12:47	
Trichlorofluoromethane	ug/L	< 0.23	0.77	06/27/18 12:47	
Vinyl chloride	ug/L	< 0.092	0.31	06/27/18 12:47	
Xylene (Total)	ug/L	<0.31	1.0	06/27/18 12:47	
1,2-Dichloroethane-d4 (S)	%.	99	75-125	06/27/18 12:47	
4-Bromofluorobenzene (S)	%.	96	75-125	06/27/18 12:47	
Toluene-d8 (S)	%.	98	75-125	06/27/18 12:47	

LABORATORY CONTROL SAMPLE:	2975401					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	17.7	89	75-125	
1,1,1-Trichloroethane	ug/L	20	21.1	106	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	18.5	92	75-129	
1,1,2-Trichloroethane	ug/L	20	19.5	97	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	20	18.7	94	74-125	
1,1-Dichloroethane	ug/L	20	20.7	103	75-127	
1,1-Dichloroethene	ug/L	20	18.4	92	73-125	
1,1-Dichloropropene	ug/L	20	20.5	102	75-125	
1,2,3-Trichlorobenzene	ug/L	20	17.4	87	74-126	
1,2,3-Trichloropropane	ug/L	20	19.7	98	75-125	
1,2,4-Trichlorobenzene	ug/L	20	16.9	84	75-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Parameter Units Conc. Result % Rec Limits Qualifier 1,2,4-Trimethylbenzene ug/L 20	LABORATORY CONTROL SAMPLE:	2975401	Spike	LCS	LCS	% Rec
1.2-Dibromo-3-chloropropane ug/L 20	Parameter	Units				
1.2-Dibromo-3-chloropropane ug/L 20	1.2.4-Trimethylbenzene	ua/L		18.4	92	75-125
1.2-Dibriomoethane (EDB)	•					
1.2-Dichlorobenzene	• •	_				
2-Dichloroethane	, ,	_				
1,2-Dichloropropane	•	_				
1.3,5-Trimethylbenzene	· ·	_				
1,3-Dichlorobenzene		_				
1.3-Dichloropropane ug/L 20 19.5 98 75-125 1.4-Dichlorobenzene ug/L 20 18.1 91 75-125 2.2-Dichloropropane ug/L 20 21.0 105 70-125 2.2-Dichloropropane ug/L 20 21.0 105 70-125 2.2-Dichlorotoluene ug/L 20 18.0 90 75-125 2.C-Chlorotoluene ug/L 20 18.3 92 75-125 2.C-Chlorotoluene ug/L 100 103 103 69-137 3.C-Edello ug/L 100 103 103 69-137 3.C-Edello ug/L 20 18.5 93 32-150 3.C-Edello ug/L 20 18.5 93 32-150 3.C-Edello ug/L 20 19.6 98 75-126 3.C-Edello ug/L 20 19.6 98 75-126 3.C-Edello ug/L 20 20.0 100 75-125 3.C-Edello ug/L 20 20.0 100 75-126 3.C-Edello ug/L 20 19.3 96 75-126 3.C-Edello ug/L 20 19.3 96 75-125 3.C-Edello ug/L 20 17.0 85 67-125 3.C-Edello ug/L 20 17.0 85 67-125 3.C-Edello ug/L 20 18.0 90 75-125 3.C-Edello ug/L 20 18.0 90 75-125 3.C-Edello ug/L 20 18.0 90 75-125 3.C-Edello ug/L 20 19.8 99 75-125 3.C-Edello ug/L 20 19.8 99 75-125 3.C-Edello ug/L 20 19.8 99 75-125 3.C-Edello ug/L 20 19.7 99 75-125 3.C-Edello ug/L 20 19.7 99 75-125 3.C-Edello ug/L 20 19.7 99 75-125 3.C-Edello ug/L 20 19.5 97 75-125 3.C-Edello ug/L 20 17.6 88 75-125 3.C-Edello ug/L 20 17.6 88 75-125 3.C-Edello ug/L 20 19.5 97 75-125 3.C-Edello ug/L 20 19.5 97 75-125 3.C-Edello ug/L 20 19.5 97 75-125 3.C-Edello ug/L 20 19.6 98 75-125 3.C-Edello	The state of the s					
A-Dichlorobenzene ug/L 20	•	_				
2.2-Dichloropropane ug/L 20 21.0 105 70-125 2-Butanone (MEK) ug/L 100 106 106 57-130 2-Chlorotoluene ug/L 20 18.0 90 75-125 4-Chlorotoluene ug/L 20 18.3 92 75-125 4-Methyl-2-pentanone (MIBK) ug/L 100 103 103 69-137 Acetone ug/L 100 98.0 98 32-150 Allyl chloride ug/L 20 18.5 93 64-135 Senzene ug/L 20 19.6 98 75-126 Bromobenzene ug/L 20 20.0 100 75-125 Bromobloromethane ug/L 20 21.9 109 75-125 Bromobloromethane ug/L 20 19.3 96 75-125 Bromobloromethane ug/L 20 19.3 96 75-125 Bromobloromethane ug/L 20 14.1		_				
2-Butanone (MEK) ug/L 100 106 106 57-130 2-Chiorotoluene ug/L 20 18.0 90 75-125 1-Chiorotoluene ug/L 20 18.3 92 75-125 1-Methyl-2-pentanone (MIBK) ug/L 100 103 103 69-137 Acetone ug/L 100 98.0 98 32-150 I-Methyl-2-pentanone (MIBK) ug/L 20 18.5 93 64-135 Benzene ug/L 20 19.6 98 75-126 Benzene ug/L 20 19.6 98 75-126 Bromobenzene ug/L 20 20.0 100 75-125 Bromodichloromethane ug/L 20 19.3 96 75-125 Bromodichloromethane ug/L 20 18.0 90 75-125 Bromodichloromethane ug/L 20 18.0 90 75-125 Chlorotobenzene ug/L 20 18.0 90 75-125 Chlorotomethane ug/L 20 18.0 90 75-125 Chlorotomethane ug/L 20 19.8 99 75-125 Chlorotomethane ug/L 20 19.7 99 75-125 Chlorotomethane ug/L 20 16.1 81 64-142 Chlorotomethane ug/L 20 17.5 87 75-125 Chloromethane ug/L 20 18.3 92 75-125 Chloromethane ug/L 20 18.9 95 75-125 Chloromethane ug/L 20 18.9 95 75-125 Chloromethane ug/L 20 18.9 95 75-125 Chlorotofluoromethane ug/L 20 18.9 95 75-125 Chlorot		_				
P-Chlorotoluene ug/L 20 18.0 90 75-125 P-Chlorotoluene ug/L 20 18.3 92 75-125 P-Chlorotoluene ug/L 20 18.3 92 75-125 P-Chlorotoluene ug/L 100 103 103 69-137 P-Chlorotoluene ug/L 20 18.5 93 64-135 P-Chlorotoluene ug/L 20 19.6 98 75-126 P-Chlorotene ug/L 20 20.0 100 75-125 P-Chlorotenene ug/L 20 20.0 100 75-125 P-Chlorotenene ug/L 20 21.9 109 75-126 P-Chlorotenene ug/L 20 19.3 96 75-125 P-Chlorotenene ug/L 20 17.0 85 67-125 P-Chlorotenene ug/L 20 14.1 71 30-150 P-C-Chlorotenene ug/L 20 18.0 90 75-125 P-C-Chlorotenene ug/L 20 18.0 90 75-125 P-C-Chlorotenene ug/L 20 18.0 90 75-125 P-C-Chlorotenene ug/L 20 19.8 99 75-125 P-C-Chlorotenene ug/L 20 19.7 99 75-125 P-C-Chlorotenene ug/L 20 19.5 97 75-125 P-C-Chlorotenenene ug/L 20 19.5 98 75-125 P-C-Chlorotenenene ug/L 20 19.6 98 75-125 P-C-Chlorotenenene ug/L 20 16.9 85 75-125 P-C-Chlorotenenene ug/L 20 16.9		_				
Chlorotoluene						
Healthyl-2-pentanone (MIBK)		_				
Acetone ug/L 100 98.0 98 32-150 Allyl chloride ug/L 20 18.5 93 64-135 Beazene ug/L 20 19.6 98 75-126 Bromobenzene ug/L 20 19.6 98 75-126 Bromochloromethane ug/L 20 20.0 100 75-125 Bromochloromethane ug/L 20 21.9 109 75-126 Bromochloromethane ug/L 20 19.3 96 75-125 Bromochloromethane ug/L 20 17.0 85 67-125 Bromomethane ug/L 20 14.1 71 30-150 Bromothane ug/L 20 18.0 90 75-125 Bromothane ug/L 20 18.0 90 75-125 Bromomethane ug/L 20 18.0 90 75-125 Bromothane ug/L 20 19.8 99 75-125 Chlorobenzene ug/L 20 19.8 99 75-125 Chlorothane ug/L 20 19.7 99 75-125 Chlorothane ug/L 20 19.7 99 75-125 Chlorothane ug/L 20 15.9 80 40-150 Chis-1,2-Dichlorothene ug/L 20 15.9 80 40-150 Cisis-1,2-Dichlorothene ug/L 20 17.5 87 75-125 Dibromochloromethane ug/L 20 17.6 88 75-125 Dibromochloromethane ug/L 20 19.5 97 75-125 Dibromochloromethane ug/L 20 19.5 98 75-125 Dibromochloromethane ug/L 20 19.6 98 75-125 Dibromochloromethane ug/L 20 19.9 99 72-125 Dibromochloromethane ug/L 20 19.6 98 75-125 Dibromochloromethane ug/L 20 19.6 98 75-125 Dibromochloromethane ug/L 20 16.9 85 65-126 Dibromochloromethane ug/L 20 16.9 85 75-125 Dibromochl		_				
Allyl chloride		_				
Senzene		_				
Bromobenzene ug/L 20 20.0 100 75-125 Bromochloromethane ug/L 20 21.9 109 75-126 Bromodichloromethane ug/L 20 19.3 96 75-125 Bromodichloromethane ug/L 20 17.0 85 67-125 Bromomethane ug/L 20 14.1 71 30-150 Carbon tetrachloride ug/L 20 18.0 90 75-125 Chlorobenzene ug/L 20 19.8 99 75-125 Chlorobenzene ug/L 20 19.8 99 75-125 Chloroform ug/L 20 19.7 99 75-125 Chloromethane ug/L 20 19.7 99 75-125 Chloromethane ug/L 20 15.9 80 40-150 cis-1,3-Dichloroptopene ug/L 20 17.5 87 75-125 Dibromochloromethane ug/L 20 17.6	-					
Bromochloromethane ug/L 20 21.9 109 75-126 Bromodichloromethane ug/L 20 19.3 96 75-125 Bromoform ug/L 20 17.0 85 67-125 Bromomethane ug/L 20 14.1 71 30-150 Carbon tetrachloride ug/L 20 18.0 90 75-125 Chlorobenzene ug/L 20 19.8 99 75-125 Chlorothane ug/L 20 19.8 99 75-125 Chloroform ug/L 20 19.7 99 75-125 Chloroform ug/L 20 19.7 99 75-125 Chloromethane ug/L 20 15.9 80 40-150 Cis-1,2-Dichloroptopene ug/L 20 17.5 87 75-125 Dibromomethane ug/L 20 17.5 88 75-125 Dichlorodifluoromethane ug/L 20 19.5 97 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Second content Second color Se						
Stromoform Ug/L 20 17.0 85 67-125 17.0 17.		_				
Stromomethane Ug/L 20 14.1 71 30-150		_				
Carbon tetrachloride		_				
Chlorobenzene ug/L 20 19.8 99 75-125 Chloroethane ug/L 20 16.1 81 64-142 Chloroform ug/L 20 19.7 99 75-125 Chloromethane ug/L 20 15.9 80 40-150 Chloromethane ug/L 20 21.3 107 75-125 Dichloropfluoropropene ug/L 20 17.5 87 75-125 Dichloropfluoromethane ug/L 20 17.6 88 75-125 Dichlorodifluoromethane ug/L 20 19.5 97 75-125 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dicthyl ether (Ethyl ether) ug/L 20 18.3 92 75-129 N2 Dicthyl ether (Ethyl ether) ug/L 20 19.5 98 75-125 Ethylbenzene ug/L 20 18.9 95 75-125 Hexachloro-1,3-butadiene <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td>		_				
Chloroethane ug/L 20 16.1 81 64-142 Chloroform ug/L 20 19.7 99 75-125 Chloromethane ug/L 20 15.9 80 40-150 cis-1,2-Dichloroethene ug/L 20 21.3 107 75-125 cis-1,2-Dichloropropene ug/L 20 17.5 87 75-125 Dichloromethane ug/L 20 17.6 88 75-125 Dichlorodifluoromethane ug/L 20 19.5 97 75-125 Dichlorodifluoromethane ug/L 20 14.4 72 61-132 Dichlorofluoromethane ug/L 20 18.3 92 75-125 Dichlorofluoromethane ug/L 20 18.9 95 75-125 Ethylbenzene ug/L		_				
Chloroform ug/L 20 19.7 99 75-125 Chloromethane ug/L 20 15.9 80 40-150 cis-1,2-Dichloroethene ug/L 20 21.3 107 75-125 cis-1,3-Dichloropropene ug/L 20 17.5 87 75-125 Dichloromethane ug/L 20 17.6 88 75-125 Dichlorodifluoromethane ug/L 20 19.5 97 75-125 Dichlorodifluoromethane ug/L 20 14.4 72 61-132 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-125		_				
Chloromethane ug/L 20 15.9 80 40-150 cis-1,2-Dichloroethene ug/L 20 21.3 107 75-125 cis-1,3-Dichloropropene ug/L 20 17.5 87 75-125 Dibromochloromethane ug/L 20 17.6 88 75-125 Dibromomethane ug/L 20 19.5 97 75-125 Dichlorodifluoromethane ug/L 20 14.4 72 61-132 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 19.5 98 75-129 N2 Dichlorofluoromethane ug/L 20 19.5 98 75-125 Ethylbenzene ug/L 20 19.5 98 75-125 Ethylbenzene (Cumene) ug/L 20 18.9 95 75-125 Methyl-tert-butyl et		_				
cis-1,2-Dichloroethene ug/L 20 21.3 107 75-125 cis-1,3-Dichloropropene ug/L 20 17.5 87 75-125 Dibromochloromethane ug/L 20 17.6 88 75-125 Dibromomethane ug/L 20 19.5 97 75-125 Dichlorodifluoromethane ug/L 20 14.4 72 61-132 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 19.5 98 75-125 Dichlorofluoromethane ug/L 20 19.5 98 75-125 Hexachloro-1,3-butadiene ug/L 20 18.9 95 75-125 Soppropylbenzene (Cumene) ug/L 20 19.6 98 75-125						
cis-1,3-Dichloropropene ug/L 20 17.5 87 75-125 Dibromochloromethane ug/L 20 17.6 88 75-125 Dibromomethane ug/L 20 19.5 97 75-125 Dichlorodifluoromethane ug/L 20 14.4 72 61-132 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 19.5 98 75-125 N2 Dichlorofluoromethane ug/L 20 19.5 98 75-125 N2 Ethyllenzene ug/L 20 18.9 95 75-125 N5 N5 75-125 N5 N5 N5 75-125 N5 N6 N6 N6 75-125 N5 N6		_				
Dibromochloromethane ug/L 20 17.6 88 75-125 Dibromomethane ug/L 20 19.5 97 75-125 Dichlorodifluoromethane ug/L 20 14.4 72 61-132 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 19.5 98 75-125 N2 Dichlorofluoromethane ug/L 20 19.5 98 75-125 N2 N2 <t< td=""><td>-</td><td>_</td><td></td><td></td><td></td><td></td></t<>	-	_				
Dibromomethane ug/L 20 19.5 97 75-125 Dichlorodifluoromethane ug/L 20 14.4 72 61-132 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 20.1 101 74-125 Dichlorofluoromethane ug/L 20 20.1 101 74-125 Dichlorofluoromethane ug/L 20 19.5 98 75-125 Ethylbenzene ug/L 20 18.9 95 75-125 Methylchorologous (Cumene) ug/L 20 19.6 98 75-125 Methylchert-butyl ether ug/L 20 19.9 99 72-125 Methylcher (Chloride ug/L 20 19.9 99 72-125 m-Butylbenzene ug/L 20 16.8 84 75-125 Naphthalene ug/L 20 18.4 92 75-125 Naphthalene ug/		_				
Dichlorodifluoromethane ug/L 20 14.4 72 61-132 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Diethyl ether (Ethyl ether) ug/L 20 20.1 101 74-125 Ethylbenzene ug/L 20 19.5 98 75-125 Ethylbenzene ug/L 20 18.9 95 75-125 Hexachloro-1,3-butadiene ug/L 20 18.9 95 75-125 sopropylbenzene (Cumene) ug/L 20 19.6 98 75-125 Methyl-tert-butyl ether ug/L 20 20.8 104 73-129 Methyl-tert-butyl ether ug/L 20 19.9 99 72-125 Methylene Chloride ug/L 20 19.9 99 72-125 n-Butylbenzene ug/L 20 16.8 84 75-125 Naphthalene ug/L 20 18.4 92 75-125 Naphthalene ug/L 20 16.9 85 75-125 Sec-Butylbenzene ug/L </td <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td>		_				
Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Diethyl ether (Ethyl ether) ug/L 20 20.1 101 74-125 Ethylbenzene ug/L 20 19.5 98 75-125 Hexachloro-1,3-butadiene ug/L 20 18.9 95 75-125 sopropylbenzene (Cumene) ug/L 20 19.6 98 75-125 Methyl-tert-butyl ether ug/L 20 20.8 104 73-129 Methylene Chloride ug/L 20 19.9 99 72-125 n-Butylbenzene ug/L 20 16.8 84 75-125 n-Propylbenzene ug/L 20 18.4 92 75-125 Naphthalene ug/L 20 16.9 85 65-126 o-Isopropyltoluene ug/L 20 16.9 85 75-125 sec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125		_				
Diethyl ether (Ethyl ether) ug/L 20 20.1 101 74-125 Ethylbenzene ug/L 20 19.5 98 75-125 Hexachloro-1,3-butadiene ug/L 20 18.9 95 75-125 sopropylbenzene (Cumene) ug/L 20 19.6 98 75-125 Methyl-tert-butyl ether ug/L 20 20.8 104 73-129 Methylene Chloride ug/L 20 19.9 99 72-125 n-Butylbenzene ug/L 20 16.8 84 75-125 n-Propylbenzene ug/L 20 18.4 92 75-125 Naphthalene ug/L 20 16.9 85 65-126 o-Isopropyltoluene ug/L 20 16.9 85 75-125 sec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125		_				
Ethylbenzene ug/L 20 19.5 98 75-125 Hexachloro-1,3-butadiene ug/L 20 18.9 95 75-125 sopropylbenzene (Cumene) ug/L 20 19.6 98 75-125 Methyl-tert-butyl ether ug/L 20 20.8 104 73-129 Methylene Chloride ug/L 20 19.9 99 72-125 n-Butylbenzene ug/L 20 16.8 84 75-125 n-Propylbenzene ug/L 20 18.4 92 75-125 Naphthalene ug/L 20 16.9 85 65-126 p-Isopropyltoluene ug/L 20 16.9 85 75-125 sec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125		_				
Hexachloro-1,3-butadiene ug/L 20 18.9 95 75-125 sopropylbenzene (Cumene) ug/L 20 19.6 98 75-125 whethyl-tert-butyl ether ug/L 20 20.8 104 73-129 whethylene Chloride ug/L 20 19.9 99 72-125 m-Butylbenzene ug/L 20 16.8 84 75-125 m-Propylbenzene ug/L 20 18.4 92 75-125 whethylene Chloride ug/L 20 16.9 85 65-126 whethylene ug/L 20 16.9 85 75-125 whethylene ug/L 20 16.9 85 75-125 whethylene ug/L 20 16.9 85 75-125 whethylene ug/L 20 17.9 89 75-125 whethylene ug/L 20 19.6 98 75-125 whet		_				
sopropylbenzene (Cumene) ug/L 20 19.6 98 75-125 Methyl-tert-butyl ether ug/L 20 20.8 104 73-129 Methylene Chloride ug/L 20 19.9 99 72-125 n-Butylbenzene ug/L 20 16.8 84 75-125 n-Propylbenzene ug/L 20 18.4 92 75-125 Naphthalene ug/L 20 16.9 85 65-126 o-Isopropyltoluene ug/L 20 16.9 85 75-125 sec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125	•	_				
Methyl-tert-butyl ether ug/L 20 20.8 104 73-129 Methylene Chloride ug/L 20 19.9 99 72-125 n-Butylbenzene ug/L 20 16.8 84 75-125 n-Propylbenzene ug/L 20 18.4 92 75-125 Naphthalene ug/L 20 16.9 85 65-126 o-Isopropyltoluene ug/L 20 16.9 85 75-125 sec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125	The state of the s					
Wethylene Chloride ug/L 20 19.9 99 72-125 n-Butylbenzene ug/L 20 16.8 84 75-125 n-Propylbenzene ug/L 20 18.4 92 75-125 Naphthalene ug/L 20 16.9 85 65-126 o-Isopropyltoluene ug/L 20 16.9 85 75-125 sec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125						
n-Butylbenzene ug/L 20 16.8 84 75-125 n-Propylbenzene ug/L 20 18.4 92 75-125 Naphthalene ug/L 20 16.9 85 65-126 n-Isopropyltoluene ug/L 20 16.9 85 75-125 sec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125	,					
n-Propylbenzene ug/L 20 18.4 92 75-125 Naphthalene ug/L 20 16.9 85 65-126 D-Isopropyltoluene ug/L 20 16.9 85 75-125 Eec-Butylbenzene ug/L 20 17.9 89 75-125 Etyrene ug/L 20 19.6 98 75-125		_				
Naphthalene ug/L 20 16.9 85 65-126 b-Isopropyltoluene ug/L 20 16.9 85 75-125 bec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125		_				
o-Isopropyltoluene ug/L 20 16.9 85 75-125 eec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125						
sec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125						
Styrene ug/L 20 19.6 98 75-125		_				
	-	_				
	ert-Butylbenzene	ug/L ug/L	20	18.3	98 92	75-125 75-125

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

LABORATORY CONTROL SAMPLE:	2975401					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Tetrachloroethene	ug/L		18.9	94	75-125	
Tetrahydrofuran	ug/L	200	206	103	30-150	
Toluene	ug/L	20	19.1	96	74-125	
trans-1,2-Dichloroethene	ug/L	20	19.9	99	70-126	
trans-1,3-Dichloropropene	ug/L	20	19.7	99	75-125	
Trichloroethene	ug/L	20	18.8	94	75-125	
Trichlorofluoromethane	ug/L	20	17.5	87	71-131	
Vinyl chloride	ug/L	20	18.1	90	65-137	
Xylene (Total)	ug/L	60	59.2	99	75-125	
1,2-Dichloroethane-d4 (S)	%.			101	75-125	
4-Bromofluorobenzene (S)	%.			96	75-125	
Toluene-d8 (S)	%.			100	75-125	

MATRIX SPIKE & MATRIX SPIK	KE DUPLIC	ATE: 297542	_		2975424						
		10436832003	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD Qual
1,1,1,2-Tetrachloroethane	ug/L	<1.0	20	20	8.5	5.7	43	28	69-130	41	30 M1,R1
1,1,1-Trichloroethane	ug/L	<1.0	20	20	10.4	6.8	52	34	72-133	42	30 M1,R1
1,1,2,2-Tetrachloroethane	ug/L	<1.0	20	20	8.4	5.8	42	29	60-137	37	30 M1,R1
1,1,2-Trichloroethane	ug/L	<1.0	20	20	9.3	6.4	46	32	70-128	36	30 M1,R1
1,1,2-Trichlorotrifluoroethane	ug/L	<1.0	20	20	7.6	4.9	38	24	64-147	43	30 M1,R1
1,1-Dichloroethane	ug/L	<1.0	20	20	10.3	7.0	52	35	64-136	38	30 M1,R1
1,1-Dichloroethene	ug/L	<1.0	20	20	9.5	6.4	47	32	67-139	39	30 M1,R1
1,1-Dichloropropene	ug/L	<1.0	20	20	9.7	6.0	48	30	69-131	47	30 M1,R1
1,2,3-Trichlorobenzene	ug/L	<1.0	20	20	6.5	3.9	32	20	60-138	49	30 M1,R1
1,2,3-Trichloropropane	ug/L	<4.0	20	20	9.3	6.1	46	31	67-129	41	30 M1,R1
1,2,4-Trichlorobenzene	ug/L	<1.0	20	20	6.3	4.0	32	20	71-125	45	30 M1,R1
1,2,4-Trimethylbenzene	ug/L	<1.0	20	20	8.1	4.9	40	24	67-130	49	30 M1,R1
1,2-Dibromo-3-	ug/L	<4.0	50	50	19.6	13.2	39	26	52-141	39	30 M1,R1
chloropropane	-										
1,2-Dibromoethane (EDB)	ug/L	<1.0	20	20	8.7	6.1	43	31	66-130		30 M1,R1
1,2-Dichlorobenzene	ug/L	<1.0	20	20	8.2	5.2	41	26	72-126		30 M1,R1
1,2-Dichloroethane	ug/L	<1.0	20	20	9.5	6.9	47	35	64-125		30 M1,R1
1,2-Dichloropropane	ug/L	<4.0	20	20	9.9	6.9	50	34	65-128	37	30 M1,R1
1,3,5-Trimethylbenzene	ug/L	<1.0	20	20	8.0	4.8	40	24	63-139	51	30 M1,R1
1,3-Dichlorobenzene	ug/L	<1.0	20	20	7.9	4.9	39	24	70-128	47	30 M1,R1
1,3-Dichloropropane	ug/L	<1.0	20	20	9.2	6.3	46	31	70-131	38	30 M1,R1
1,4-Dichlorobenzene	ug/L	<1.0	20	20	7.6	5.0	38	25	74-125	42	30 M1,R1
2,2-Dichloropropane	ug/L	<4.0	20	20	10.9	7.5	55	37	58-137	38	30 M1,R1
2-Butanone (MEK)	ug/L	<5.0	100	100	50.6	35.1	51	35	45-132	36	30 M1,R1
2-Chlorotoluene	ug/L	<1.0	20	20	8.2	5.0	41	25	66-134	48	30 M1,R1
4-Chlorotoluene	ug/L	<1.0	20	20	7.9	4.9	40	25	70-132	46	30 M1,R1
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	100	100	49.1	33.6	49	34	54-143	38	30 M1,R1
Acetone	ug/L	<20.0	100	100	45.6	36.4	46	36	51-150	23	30 M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

MATRIX SPIKE & MATRIX SPIR	KE DUPLICA	TE: 29754	23		2975424							
			MS	MSD								
	10	0436832003	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qua
Allyl chloride	ug/L	<4.0	20	20	8.9	6.7	45	34	52-150	28	30	M1
Benzene	ug/L	<1.0	20	20	9.7	6.6	48	32	62-140	38	30	M1,R
Bromobenzene	ug/L	<1.0	20	20	9.3	5.9	47	29	70-128	45	30	M1,F
Bromochloromethane	ug/L	<1.0	20	20	10.6	7.2	53	36	65-131	38	30	M1,F
Bromodichloromethane	ug/L	<1.0	20	20	9.0	6.2	45	31	74-127	37	30	M1, F
Bromoform	ug/L	<4.0	20	20	7.6	5.4	38	27	59-125	34	30	M1, F
Bromomethane	ug/L	<4.0	20	20	9.8	5.8J	49	29	30-149	52	30	M1, F
Carbon tetrachloride	ug/L	<1.0	20	20	8.7	5.6	44	28	67-134	43	30	M1, F
Chlorobenzene	ug/L	<1.0	20	20	9.2	5.9	46	29	72-131	44	30	M1, F
Chloroethane	ug/L	<1.0	20	20	13.5	7.0	67	35	55-150	63	30	M1, R
Chloroform	ug/L	<1.0	20	20	9.3	6.4	47	32	67-125	38	30	M1, F
Chloromethane	ug/L	<4.0	20	20	13.3	7.3	67	37	43-148	58	30	M1, F
cis-1,2-Dichloroethene	ug/L	<1.0	20	20	10.3	7.0	51	35	62-132	38	30	M1, R
cis-1,3-Dichloropropene	ug/L	<4.0	20	20	8.1	5.6	41	28	63-129	37	30	M1, R
Dibromochloromethane	ug/L	<1.0	20	20	8.2	5.8	41	29	67-127	35	30	M1, F
Dibromomethane	ug/L	<4.0	20	20	9.2	6.4	46	32	68-132	36	30	M1, F
Dichlorodifluoromethane	ug/L	<1.0	20	20	12.6	5.6	63	28	59-144		30	M1,R
Dichlorofluoromethane	ug/L	<1.0	20	20	15.1	7.9	76	40	63-144	62		M1,N R1
Diethyl ether (Ethyl ether)	ug/L	<4.0	20	20	9.8	6.8	49	34	52-139	36	30	M1,F
Ethylbenzene	ug/L	<1.0	20	20	9.5	5.9	45	28	75-131	46	30	M1, F
Hexachloro-1,3-butadiene	ug/L	<1.0	20	20	6.1	3.6	30	18	58-146	50	30	M1, F
sopropylbenzene (Cumene)	ug/L	<1.0	20	20	8.9	5.2	45	26	71-132	52	30	M1, F
Methyl-tert-butyl ether	ug/L	<1.0	20	20	9.9	7.1	49	35	65-130	32	30	M1, F
Methylene Chloride	ug/L	<4.0	20	20	9.5	6.8	47	34	66-125	33	30	M1, F
n-Butylbenzene	ug/L	<1.0	20	20	6.1	3.7	30	18	57-141	49	30	M1, F
n-Propylbenzene	ug/L	<1.0	20	20	7.9	4.7	39	23	70-131	51	30	M1, R
Naphthalene	ug/L	<4.0	20	20	7.1	4.7	36	23	48-134	42	30	M1, F
o-Isopropyltoluene	ug/L	<1.0	20	20	6.9	4.0	34	20	66-136	52	30	M1, F
sec-Butylbenzene	ug/L	<1.0	20	20	7.5	4.1	37	20	69-134	58	30	M1,R
Styrene	ug/L	<1.0	20	20	8.9	5.5	44	28	65-134	46		M1,R
ert-Butylbenzene	ug/L	<1.0	20	20	8.3	4.7	41	23	71-130	56		M1,R
Tetrachloroethene	ug/L	<1.0	20	20	8.4	5.1	42	26	69-135	48	30	M1,R
Tetrahydrofuran	ug/L	<10.0	200	200	93.1	68.4	47	34	48-150	31		M1,R
Toluene	ug/L	<1.0	20	20	9.5	6.1	45	28	68-132	43		M1,F
rans-1,2-Dichloroethene	ug/L	<1.0	20	20	9.6	6.4	48	32	61-134			M1,F
rans-1,3-Dichloropropene	ug/L	<4.0	20	20	9.1	6.1	46	31	66-125	39		M1,F
richloroethene	ug/L	<0.40	20	20	9.1	6.0	45	30	64-136			M1,F
Frichlorofluoromethane	ug/L	<1.0	20	20	15.0	7.2	75	36	65-146			M1,F
/inyl chloride	ug/L	<0.20	20	20	15.4	8.0	77	40	51-150			M1,F
Kylene (Total)	ug/L ug/L	<3.0	60	60	27.8	17.3	46	29	69-135			MS,F
1,2-Dichloroethane-d4 (S)	ug/∟ %.	₹3.0	00	00	21.0	17.3	101	101	75-125		50	1410, [
I-Bromofluorobenzene (S)	%. %.						95	96	75-125 75-125			
DIGITIONIQUIODENZENE (G)	/0.						93	90	10-120			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

QC Batch: 546641 Analysis Method: EPA 8270D by SIM

QC Batch Method: EPA 3550 Analysis Description: 8270D Solid PAH by SIM MSSV

Associated Lab Samples: 10436863001, 10436863002, 10436863003, 10436863004, 10436863005, 10436863006, 10436863007,

10436863008, 10436863009, 10436863010

METHOD BLANK: 2972761 Matrix: Solid

Associated Lab Samples: 10436863001, 10436863002, 10436863003, 10436863004, 10436863005, 10436863006, 10436863007,

10436863008, 10436863009, 10436863010

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	<0.41	1.4	06/26/18 11:44	
Acenaphthylene	ug/kg	< 0.50	1.6	06/26/18 11:44	
Anthracene	ug/kg	< 0.47	1.6	06/26/18 11:44	
Benzo(a)anthracene	ug/kg	<1.1	3.6	06/26/18 11:44	
Benzo(a)pyrene	ug/kg	< 0.69	2.3	06/26/18 11:44	
Benzo(b)fluoranthene	ug/kg	< 0.37	1.2	06/26/18 11:44	
Benzo(g,h,i)perylene	ug/kg	< 0.63	2.1	06/26/18 11:44	
Benzo(k)fluoranthene	ug/kg	<0.84	2.8	06/26/18 11:44	
Chrysene	ug/kg	<1.4	4.5	06/26/18 11:44	
Dibenz(a,h)anthracene	ug/kg	< 0.46	1.5	06/26/18 11:44	
Fluoranthene	ug/kg	< 0.43	1.4	06/26/18 11:44	
Fluorene	ug/kg	<0.31	1.0	06/26/18 11:44	
Indeno(1,2,3-cd)pyrene	ug/kg	< 0.67	2.2	06/26/18 11:44	
Naphthalene	ug/kg	< 0.77	2.6	06/26/18 11:44	
Phenanthrene	ug/kg	<1.9	6.4	06/26/18 11:44	
Pyrene	ug/kg	<1.5	5.1	06/26/18 11:44	
2-Fluorobiphenyl (S)	%.	60	42-125	06/26/18 11:44	
p-Terphenyl-d14 (S)	%.	78	57-125	06/26/18 11:44	

LABORATORY CONTROL SAMPLE:	2972762					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Acenaphthene	ug/kg	33.3	21.4	64	52-125	
Acenaphthylene	ug/kg	33.3	21.9	66	50-125	
Anthracene	ug/kg	33.3	31.2	94	65-125	
Benzo(a)anthracene	ug/kg	33.3	36.2	109	60-125	
Benzo(a)pyrene	ug/kg	33.3	33.4	100	69-125	
Benzo(b)fluoranthene	ug/kg	33.3	39.3	118	61-125	
Benzo(g,h,i)perylene	ug/kg	33.3	34.6	104	60-125	
Benzo(k)fluoranthene	ug/kg	33.3	31.2	94	67-125	
Chrysene	ug/kg	33.3	37.4	112	67-125	
Dibenz(a,h)anthracene	ug/kg	33.3	31.2	94	63-125	
Fluoranthene	ug/kg	33.3	37.6	113	75-125	
Fluorene	ug/kg	33.3	24.5	74	54-125	
Indeno(1,2,3-cd)pyrene	ug/kg	33.3	33.6	101	63-125	
Naphthalene	ug/kg	33.3	22.6	68	49-125	
Phenanthrene	ug/kg	33.3	28.6	86	65-125	
Pyrene	ug/kg	33.3	32.2	97	64-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

LABORATORY CONTROL SAMPLE: 2972762

LABORATORT CONTROL SAMPLE.	2912102	Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
2-Fluorobiphenyl (S)	%.			67	42-125	
p-Terphenyl-d14 (S)	%.			80	57-125	

MATRIX SPIKE & MATRIX SPIR	KE DUPLICA	TE: 29727	63		2972764						
			MS	MSD							
	10	0436821003	Spike	Spike	MS	MSD	MS	MSD	% Rec	Ma	х
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD RP	D Qual
Acenaphthene	ug/kg	ND	39.3	39.3	45.3	38.3	115	98	30-125		0
Acenaphthylene	ug/kg	ND	39.3	39.3	36.1	28.8	92	73	30-133	3	0
Anthracene	ug/kg	ND	39.3	39.3	<5.5	<5.5	0	0	30-150	3	0 M6
Benzo(a)anthracene	ug/kg	ND	39.3	39.3	34.2J	33.1J	87	84	30-150	3	0
Benzo(a)pyrene	ug/kg	ND	39.3	39.3	33.9	33.6	86	86	30-150	3	0
Benzo(b)fluoranthene	ug/kg	ND	39.3	39.3	30.6	28.9	78	74	30-150	3	0
Benzo(g,h,i)perylene	ug/kg	ND	39.3	39.3	32.5	32.0	82	81	30-150	3	0
Benzo(k)fluoranthene	ug/kg	ND	39.3	39.3	37.3	31.1J	95	79	30-150	3	0
Chrysene	ug/kg	ND	39.3	39.3	35.4J	37.2J	90	95	30-150	3	0
Dibenz(a,h)anthracene	ug/kg	ND	39.3	39.3	31.4	29.4	80	75	30-131	3	0
Fluoranthene	ug/kg	ND	39.3	39.3	36.6	35.1	93	89	30-150	3	0
Fluorene	ug/kg	ND	39.3	39.3	32.3	28.1	82	72	30-147	3	0
Indeno(1,2,3-cd)pyrene	ug/kg	ND	39.3	39.3	32.4	31.0	82	79	30-150	3	0
Naphthalene	ug/kg	ND	39.3	39.3	28.8J	24.2J	73	62	30-131	3	0
Phenanthrene	ug/kg	ND	39.3	39.3	51.6J	44.7J	131	114	30-150	3	0
Pyrene	ug/kg	ND	39.3	39.3	60.3	53.6J	153	136	30-150	3	0 M6
2-Fluorobiphenyl (S)	%.						0	0	42-125		D3,S4
p-Terphenyl-d14 (S)	%.						0	0	57-125		S4

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

QC Batch: 547072 Analysis Method: EPA 8270D by SIM

QC Batch Method: EPA Mod. 3510C Analysis Description: 8270D PAH by SIM MSSV

Associated Lab Samples: 10436863011

METHOD BLANK: 2974269 Matrix: Water

Associated Lab Samples: 10436863011

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	<0.0032	0.011	06/27/18 09:55	
Acenaphthylene	ug/L	< 0.0046	0.015	06/27/18 09:55	
Anthracene	ug/L	< 0.0062	0.021	06/27/18 09:55	
Benzo(a)anthracene	ug/L	< 0.0039	0.013	06/27/18 09:55	
Benzo(a)pyrene	ug/L	< 0.0040	0.013	06/27/18 09:55	
Benzo(b)fluoranthene	ug/L	< 0.013	0.042	06/27/18 09:55	
Benzo(g,h,i)perylene	ug/L	<0.0098	0.033	06/27/18 09:55	
Benzo(k)fluoranthene	ug/L	< 0.010	0.035	06/27/18 09:55	
Chrysene	ug/L	< 0.0092	0.031	06/27/18 09:55	
Dibenz(a,h)anthracene	ug/L	< 0.0092	0.031	06/27/18 09:55	
Fluoranthene	ug/L	<0.018	0.061	06/27/18 09:55	
Fluorene	ug/L	< 0.0059	0.020	06/27/18 09:55	
Indeno(1,2,3-cd)pyrene	ug/L	< 0.013	0.044	06/27/18 09:55	
Naphthalene	ug/L	<0.0068	0.023	06/27/18 09:55	
Phenanthrene	ug/L	< 0.010	0.035	06/27/18 09:55	
Pyrene	ug/L	< 0.015	0.049	06/27/18 09:55	
2-Fluorobiphenyl (S)	%.	76	30-145	06/27/18 09:55	
p-Terphenyl-d14 (S)	%.	91	30-149	06/27/18 09:55	

LABORATORY CONTROL SAMPLE:	2974270					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Acenaphthene	ug/L		0.70	70	50-125	
Acenaphthylene	ug/L	1	0.72	72	47-125	
Anthracene	ug/L	1	0.93	93	65-125	
Benzo(a)anthracene	ug/L	1	0.91	91	60-125	
Benzo(a)pyrene	ug/L	1	0.92	92	67-125	
Benzo(b)fluoranthene	ug/L	1	0.88	88	64-125	
Benzo(g,h,i)perylene	ug/L	1	0.83	83	53-125	
Benzo(k)fluoranthene	ug/L	1	0.88	88	61-125	
Chrysene	ug/L	1	0.91	91	68-125	
Dibenz(a,h)anthracene	ug/L	1	0.75	75	45-125	
Fluoranthene	ug/L	1	0.91	91	73-125	
Fluorene	ug/L	1	0.72	72	53-125	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.83	83	62-125	
Naphthalene	ug/L	1	0.74	74	46-125	
Phenanthrene	ug/L	1	0.81	81	66-125	
Pyrene	ug/L	1	0.89	89	65-125	
2-Fluorobiphenyl (S)	%.			75	30-145	
p-Terphenyl-d14 (S)	%.			94	30-149	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

MATRIX SPIKE & MATRIX SI	PIKE DUPLICA	TE: 29742		MCD	2974272							
	1	0436884010	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qua
Acenaphthene	ug/L	ND	.95	.95	0.65	0.63	69	67	53-125	3	30	
Acenaphthylene	ug/L	ND	.95	.95	0.67	0.66	70	70	48-125	1	30	
Anthracene	ug/L	ND	.95	.95	0.88	0.89	92	94	66-125	2	30	
Benzo(a)anthracene	ug/L	ND	.95	.95	0.86	0.82	90	86	57-125	5	30	
Benzo(a)pyrene	ug/L	ND	.95	.95	0.84	0.87	89	91	62-125	2	30	
Benzo(b)fluoranthene	ug/L	ND	.95	.95	0.78	0.91	82	96	50-125	16	30	
Benzo(g,h,i)perylene	ug/L	ND	.95	.95	0.73	0.76	76	81	34-125	5	30	
Benzo(k)fluoranthene	ug/L	ND	.95	.95	0.80	0.77	84	81	50-125	4	30	
Chrysene	ug/L	ND	.95	.95	0.90	0.87	95	92	65-125	4	30	
Dibenz(a,h)anthracene	ug/L	ND	.95	.95	0.71	0.74	75	78	31-127	4	30	
Fluoranthene	ug/L	ND	.95	.95	0.88	0.90	92	95	70-125	2	30	
Fluorene	ug/L	ND	.95	.95	0.69	0.68	73	72	53-125	1	30	
ndeno(1,2,3-cd)pyrene	ug/L	ND	.95	.95	0.74	0.77	78	81	45-125	4	30	
Naphthalene	ug/L	ND	.95	.95	0.57	0.65	60	69	34-125	13	30	
Phenanthrene	ug/L	ND	.95	.95	0.78	0.79	82	84	61-125	1	30	
Pyrene	ug/L	ND	.95	.95	0.88	0.84	92	89	60-125	4	30	
2-Fluorobiphenyl (S)	%.						69	69	30-145			
o-Terphenyl-d14 (S)	%.						98	96	30-149			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALIFIERS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay
PASI-M	Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

Date: 07/03/2018 03:29 PM

A5	Greater than 5% sediment in sample determined by visual observation. Aqueous portion decanted from the sediment and extracted. The sample container could not be rinsed with solvent per the method requirement.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.
MS	Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.
N2	The lab does not hold NELAC/TNI accreditation for this parameter.
R1	RPD value was outside control limits.
RS	The RPD value in one of the constituent analytes was outside the control limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
W	Non-detect results are reported on a wet weight basis.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytic Batch				
10436863001	SB-1_2-3	EPA 3050	546886	EPA 6010D	547086				
0436863002	SB-1_12-13	EPA 3050	546886	EPA 6010D	547086				
0436863003	SB-2_0-1	EPA 3050	546886	EPA 6010D	547086				
0436863004	SB-2_6-7	EPA 3050	546886	EPA 6010D	547086				
0436863005	SB-3_0-2	EPA 3050	546886	EPA 6010D	547086				
0436863006	SB-3_8-9	EPA 3050	546886	EPA 6010D	547086				
0436863007	SB-4_0-2	EPA 3050	546886	EPA 6010D	547086				
0436863008	SB-4_6-7	EPA 3050	546886	EPA 6010D	547086				
0436863009	SB-5_0-1	EPA 3050	546886	EPA 6010D	547086				
0436863010	SB-5_8-9	EPA 3050	546886	EPA 6010D	547086				
0436863001	SB-1_2-3	EPA 7471B	546627	EPA 7471B	546772				
0436863002	SB-1_12-13	EPA 7471B	546627	EPA 7471B	546772				
0436863003	SB-2_0-1	EPA 7471B	546627	EPA 7471B	546772				
0436863004	SB-2_6-7	EPA 7471B	546627	EPA 7471B	546772				
0436863005	SB-3_0-2	EPA 7471B	546627	EPA 7471B	546772				
0436863006	SB-3_8-9	EPA 7471B	546627	EPA 7471B	546772				
0436863007	SB-4_0-2	EPA 7471B	546627	EPA 7471B	546772				
0436863008	SB-4_6-7	EPA 7471B	546627	EPA 7471B	546772				
0436863009	SB-5_0-1	EPA 7471B	546627	EPA 7471B	546772				
0436863010	SB-5_8-9	EPA 7471B	546627	EPA 7471B	546772				
0436863001	SB-1_2-3	ASTM D2974	547426						
0436863002	SB-1_12-13	ASTM D2974	547426						
0436863003	SB-2_0-1	ASTM D2974	547426						
0436863004	SB-2_6-7	ASTM D2974	547426						
0436863005	SB-3_0-2	ASTM D2974	547426						
0436863006	SB-3_8-9	ASTM D2974	547426						
0436863007	SB-4_0-2	ASTM D2974	547426						
0436863008	SB-4_6-7	ASTM D2974	547426						
0436863009	SB-5_0-1	ASTM D2974	547426						
0436863010	SB-5_8-9	ASTM D2974	547426						
0436863001	SB-1_2-3	EPA 3550	546641	EPA 8270D by SIM	546989				
0436863002	SB-1_12-13	EPA 3550	546641	EPA 8270D by SIM	546989				
0436863003	SB-2_0-1	EPA 3550	546641	EPA 8270D by SIM	546989				
0436863004	SB-2_6-7	EPA 3550	546641	EPA 8270D by SIM	546989				
0436863005	SB-3_0-2	EPA 3550	546641	EPA 8270D by SIM	546989				
0436863006	SB-3_8-9	EPA 3550	546641	EPA 8270D by SIM	546989				
0436863007	SB-4_0-2	EPA 3550	546641	EPA 8270D by SIM	546989				
0436863008	SB-4_6-7	EPA 3550	546641	EPA 8270D by SIM	546989				
0436863009	SB-5_0-1	EPA 3550	546641	EPA 8270D by SIM	546989				
0436863010	SB-5_8-9	EPA 3550	546641	EPA 8270D by SIM	546989				
0436863011	SB-3_14.5-19.5	EPA Mod. 3510C	547072	EPA 8270D by SIM	547275				
0436863001	SB-1_2-3	EPA 5035/5030B	293184	EPA 8260	293187				
0436863002	SB-1_12-13	EPA 5035/5030B	293184	EPA 8260	293187				
0436863003	SB-2_0-1 SB-2_6-7	EPA 5035/5030B	293184	EPA 8260	293187				
0436863004		EPA 5035/5030B	293184	EPA 8260	293187				





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10436863006	SB-3_8-9	EPA 5035/5030B	293184	EPA 8260	293187
10436863007	SB-4_0-2	EPA 5035/5030B	293184	EPA 8260	293187
10436863008	SB-4_6-7	EPA 5035/5030B	293184	EPA 8260	293187
10436863009	SB-5_0-1	EPA 5035/5030B	293184	EPA 8260	293187
10436863010	SB-5_8-9	EPA 5035/5030B	293184	EPA 8260	293187
10436863013	MeOH Trip Blank	EPA 5035/5030B	293184	EPA 8260	293187
10436863011	SB-3_14.5-19.5	EPA 8260B	547301		
10436863012	Trip Blank	EPA 8260B	547301		

Barr Engineering Co.	Chain	of	Cust	ody		ole Origination		\prod		Analy	ysis Requ	ested		COC Nii	mher 1	58003	
☐ Ann Arbor ဩDuluth BARR ☐ Bismarck ☐ Grand Rapids	☐ Hibbing			neapolis Lake City	☐ KS ☐ MI ☐ MN	□ND 🔄	lUT ĮWI er:			Water		Soi		coc _		oouus of <u>ユ</u>	_
REPORT TO		1			VOICE		=1	1		.]. .			12	Matri	ix Code:	Pres	ervative Code:
Company: Bary Engineering		Com	oany:		BAVV		± : 1	0 4	13	6863	}		T X		iroundwat urface Wa		= None = HCl
Address: 325 S. Lalu Ave.	Duluth	Addre	ess:		1741-		1					:		WW= W	Vaste Wat Prinking W	er C	= HNO ₃
Name: Lynette Carney		Name	2:				 363		-				\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	S = S	oil/Solid	E	= H₂SO₄ = NaOH
email: LMC ebarv. com		email	:			10436	363						8	O = 0	ediment ther	G	= MeOH = NaHSO ₄
Copy to: datamgt@barr.com		P.O.			V			MS/MS									Na₂S₂O₃Ascorbic Acid
Project Name: Husky phase 11	,			No: 니	116142	3.00		m MS.					2 4 S			j	= NH ₄ Cl = Zn Acetate
Location	Sam	iple De	epth Unit		ection	Collection	Matrix	ا ا		<u> </u>			> ८- %			0	= Other
Location	Start	Stop	(m./ft. or in.)		ate ld/yyyy)	Time (hh:mm)	Matrix Code	Perfo	5 -			į		Preservat			
1 5B-1	2	3	Ft	2	1/18	1405	1	N	+ +				2 1 1	Field Filte	erea Y/N	_	701
2 53-1	12_	13				1430	1								***		007
3 SB-2	0	1				1515											003
4. 53-2	6	7_				1530									,		064
5. 513-3	0	2				1620											865
^{6.} SB-3	8	9		1		1635											006
^{7.} SB-4	0	2		6/2	2/18	0840			·					li li			007
8 S B - 4	b	7				0855											008
^{9.} SB-5	O	ĵ				0935											009
^{10.} SB-5	8	9				0950	1										010
BARR USE ONLY Sampled by: MAB		•	uished l	W^{\vee}	12	~ 👸 '		Date 2/1	ر اد	177 /	e dived	DUV	d			6/22/18	14:35
Barr Proj. Manager: LM C		Relinq	uished	VL C	Uth	On I		Pate 2/18	lt-	700 B	eceived	by:		d.		Date 3-21-/ g	Time // oc
Barth DQ Manager: JET Lab Name: Pace		Sample	e Shipp	oed VIA:	☐ Co	urier 🗌 Fed	leral Expi				ir Bill N				Re	equested l	Due Date:
Labo Name: 14 CC Labo N		Lab W	/O:		□ Otl	Temperature on	Receipt	(°C):-	2,5	Custody S	Seal Inta	ct? 🗆 Y	′ □N	☑ None	X u Sta		Around Time
Distribution - White-Original: Accompar			Laborate	ory; Yello	w Copy:	Include in Field	Docum	ents;									
		R)	$\subset \iota$	~~	6-22	-18 20	100			~~ <	m	Trans	ی سے	mir	2000	1:	28

Barr Engineering Co. C	hain	of	Cust	<u>ody</u> □ KS	le Origination \$ □ MO 🛪		Г	Analysis Requested									COC Number: Nº 47625							
☐ Ann Arbor ☑ Duluth Bismarck ☐ Hibbing		☐ Jefferson City ☐ MI ☐ ND Other: ☐ Minneapolis ☐ MN ☐ SD								Wa	ter			So	il 	1		oc						
REPORT TO			-	INVOICE T	o		1					İ						Matrix / = Gre					ative Coo	<u>le:</u>
Company: Barr Engineering	·	Comp	any:	BAVI	···	700	1	rs										/ = Gre / = Su				4 = B =	None HCl	•
Address: 325 S. Loke Ave. Dulat	n	Addre	ess:				1 z	aine										V = Wa / = Dri			tor I		HNO₃ H₂SO₄	
Name: Lynette Carney		Name	Name:					Containers				- 1					S	= So	il/Soli	d		E =	NaOH	ı
email: LMC P. hurv. um		email:	email:															= Se		nt			MeOH NaHSO₄	
Copy to: datamgt@barr.com		P.O.	P.O.					ō							ĺ						ļ		Na ₂ S ₂ O ₃ Ascorbic	Acid
Project Name: Harly Phase !		Barr F	Project N	vo: 4916142	३ .७€		MS/	mbe	7]	בָּ			٦			Solids						J =	NH₄Cl	- 1
	Sam	ple De		Collection	Collection		١٤	Z S	> 0		1	ľ	2			s s							Zn Aceta [.] Other	ie
Location	Start	Stop	Unit (m./ft. or in.)	Date (mm/dd/yyyy)	Time (hh:mm)	Matrix Code	Perfo	Total	8 Z	4			FZ					servati i Filter						_
1 5B-3	14.5	19.5	t+	6/22/18	1120	GW			- 1										<u>.</u>				711	
2. Trip Dlank 3. MEDY Trip Blank 4. 6/22/18 20	1	ı			-		N	3	2				1					72.0					0 17	
3. MEAN This Blank																						(213	
4. ७१२४१४ ४०																				•			1	
5.																								
6.																								
7.	``			~~					 					 										\dashv
8.									\dagger												·			
9.																								
10.												1			-									
BARR USE ONLY		Relina	uished b	ov: 1 1/1 //a	ga I		Date	<u>. </u>		Time	Re	cei	∕≱d /	 9∨:		1	<u> </u>				/ Date	<u>. </u>	Time	
Sampled by: INAB]	reiniquisited by. / W/P N 6/					14	/Ų	_	35		1			Š	WO				6/	20/10	3 1	19:35	
Barr Proj. Manager: LMC							Date 21	7		Time 7ටව	(Re	ce(\	red b	^{ру.} /2	/ (24				6	Date フン・	ş	Time (ついつ	10
Barr DQ Manager: JET]	Samples Shipped VIA:							Sam	pler	Air	Bi	ll Nu	ımbeı						Requested Due Date:				
Lap Name: Pau		Other:										dard Turn Around Time												
Leb Location: MPLS			Lab WO: Temperature on Rec					eipt (°C): ♀.歩 Custody Seal Intact? □Y □N ☑None					Requested Due Date: Standard Turn Around Time Rush (mm/dd/yyyy)											

Distribution - White-Original: Accompanies Shipment to Laboratory, Yellow Copy: Include in Field Documents; Pink Copy: Send to Data Management Administrators.

1. 2.6

Pace Analytical*

Document Name:

Sample Condition Upon Receipt Form

Document No.: F-MN-L-213-rev.23 Document Revised: 02May2018 Page 1 of 2

Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt	Project #	" W0#∶10436863
Pur (<u></u>	
Courier: Fed Ex UPS USPS	Client	PM: AA1 Due Date: 07/02/18
☐Commercial ☐Pace ☐SpeeDee ☐Other:		CLIENT: BARR
Tracking Number:		
Custody Seal on Cooler/Box Present? Yes No Sea	ıls Intact? 🛮 🖽	Yes No Optional: Proj. Due Date: Proj. Name:
Packing Material: Bubble Wrap Bubble Bags None	Other:	Temp Blank? Æ Yes □No
Thermometer ☐ G87A9170600254 Type of Used: ☑ G87A9155100842	fice: Wet	☐Blue ☐None ☐Dry ☐Melted
Cooler Temp Read (°C): 2.7 Cooler Temp Corrected (°C):	2.8	Biological Tissue Frozen? Yes No XN/A
Temp should be above freezing to 6°C Correction Factor:	Date	and Initials of Person Examining Contents:
USDA Regulated Soil (N/A, water sample) Did samples originate in a quarantine zone within the United States: AL, AR,	CA. FL. GA. ID. 14	A. MS, Did samples originate from a foreign source (internationally,
NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)?	□Yes 🗵	No including Hawaii and Puerto Rico)? 🔲 Yes 🔎 No
If Yes to either question, fill out a Regulated Soil Cl	hecklist (F-MN-0	Q-338) and include with SCUR/COC paperwork.
		COMMENTS:
	□No	1,
	No	2.
	No	3.
	□No □N/A	-
	□No -£	5.
	ŽĮNo	6.
	X ∫No 	7.
	∏No	8.
	□No	9.
	No	
	No	10.
	□No ☑Ñ/A	11. Note if sediment is visible in the dissolved container
Is sufficient information available to reconcile the samples to the COC? Matrix: WT W	No	12.
All containers needing acid/base preservation have been		13.
checked?	□No XIN/A	Chlorine? Y N
compliance with EPA recommendation?		Sample #
(HNO ₃ , H ₂ SO ₃ , ≤2pH, NaOH >9 Sulfide, NaOH>12 Cyanide) ☐ Yes [Exceptions: VOA Coliform, TOC/DOC Oil and Grease,	□No X (N/A	Jack Hard Co. 11. 1
landone de la lanco	No □N/A	initial when Lot # of added completed: preservative:
	No □N/A	14. Tiji Blank 2/2 hearspace Signey
Trip Blank Present?	□No □N/A	15.
·	□No □N/A	
Pace Trip Blank Lot # (if purchased): HU: 189185, meo#: 040	5[8-3	
CLIENT NOTIFICATION/RESOLUTION		Field Data Required? ☐Yes ☐No
Person Contacted:		Date/Time:
Comments/Resolution:		
A AA	20-15-	

Project Manager Review:

Date: 6/25/18

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).

Chain	of C	usto	ody
-------	------	------	-----

Sh

40171636

Pace Analytical®	
MARKE BOCOING NOW	

Samples were sent directly to the Subcontracting Laborator
--

State Of Origin:

WI

https://documented	rkorder: 10436863 Wo	rkorder	Name: 4916142		Phase II	Water construction of the	Owner Rece	ived Date:			uested By: 7/3/2018
THE PROPERTY AND ADDRESS OF			Subcontra	THE RESIDENCE AND ADDRESS OF THE PERSON OF T					Requeste	d Analysis	
Pac 170 Sui Min	anda Albrecht se Analytical Minnesota 0 Elm Street se 200 neapolis, MN 55414 sne (612)607-6382		1241 Suite Greer	Analytical Gree Bellevue Stree 9 1 Bay, WI 5430 e (920)469-243	t	Presi	erved Containers	8260 (Pace-Green Bay)			
After PROFESSION AND ADDRESS OF A DESCRIPTION ADDRE		Sample	Collect			MeOH		VOC by {		SCOCCOPERICATION STATES AND STATE	
Item	Sample ID	Туре	Date/Time	Lab ID	Matrix	Name of the last o	especial de la constant de la consta		A TANANS AND A TAN	MAGRICAN MAG	LAB USE ONLY
1	SB-1_2-3	PS	6/21/2018 14:05	10436863001	Solid	1		X			001
2	SB-1_12-13	PS	6/21/2018 14:30	10436863002	Solid	2		X			
3	SB-2_0-1	PS	6/21/2018 15:15	10436863003	Solid	2	THE RESERVE THE PROPERTY OF TH	X			002
4	SB-2_6-7	PS	6/21/2018 15:30	10436863004	Solid	2	Description of the second of t	X			004
5	SB-3_0-2	PS	6/21/2018 16:20	10436863005	Solid	2		X			005
6	SB-3_8-9	PS	6/21/2018 16:35	10436863006	Solid	2	A CONTRACTOR OF THE CONTRACTOR	X			006
7	SB-4_0-2	PS	6/22/2018 08:40	10436863007	Solid	2		X			006
8	SB-4_6-7	PS	6/22/2018 08:55	10436863008	Solid	2		X			008
9	SB-5_0-1	PS	6/22/2018 09:35	10436863009	Solid	2		X			009
10	SB-5_8-9	PS	6/22/2018 09:50	10436863010	Solid	2		X			009
11	MeOH Trip Blank	PS	6/21/2018 00:00	10436863013	Solid	1		X			The State of the s
					*					Comment	
Tran	sfers Released By		Date/Time	Received E	Зу		Date/Tin	1е		Miladeled belong people of the sense recommend to the sense are accommendated as an about	THE THE PERSON OF THE AMERICAN STREET, AND ASSESSMENT OF THE PERSON OF T
1 2 2	Wastro		4/27/18): 4/28/18 0	7/2 855 Jus	vKU	ylee	Paul yrep	085	_		
D-COND-COQUARENCE OF						<u>U</u>				oo yo maanaa ka kaasaa ka ka aa a	
CUC	ler Temperature on Receipt		C Cus	tody Seal (// Jor N		Received or	i Ice/ Y∫oi	. N	Samples	Intact(Y or N

^{***}In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.

This chain of custody is considered complete as is since this information is available in the owner laboratory.

Client Name: Project # Sample Preservation Receipt Form

Lab Lot# of pH paper:

MO171636

All containers needing preservation have been checked and noted below: DYes DNA

Lab Std #ID of preservation (if pH adjusted):

Initial when completed:

Date/

	Г							T			LU1#	or pri	paper		т		Cal	Joid	#IU 0)	prese	rvatio	n (if pi	H adju	isted):					COM	oleted:		Time:	
		1	Station of the state of the sta	Glas	is				•		Plasi	tic	1				Vi	als				Jars		G	enera	al	(>6mm) *	23	ct pH ≥9	2		sted	\/-t-
	AG10	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	ВРЗС	BP3N	BP3S	DG9A	DG9T	VG9U	У СЭН	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	N O	VOA Vials (H2SO4 pH s	VaOH+Zn Act pH ≥9	NaOH pH ≥12	4NO3 pH s2	pH after adjusted	Volume (mL)
01																		ĺ	a		†	T		107	N		_	I	Z	Z	<u> </u>	<u>ā</u>	25/5/
02								i Wa											ュ			300							N. A. S.				2.5 / 5 /
03													1		1	1			2	T				1						\$400.00			2.5 / 5 /
04																			2				100			100.00							2.5 / 5 /
05							T		T										12	2007.01.01.02.02	10 = Q 10	W-118,000			A CONTRACT								2.5 / 5 /
06							1 1					100			2.0				コ					\$1.45 V.	251.5%			Qa(G), viga	9E 4 - 244			2.3.353388	2.5 / 5 /
07												1	5 (3) (3) (5-6)		20.230.00	1 200000-000			12										8				2.5 / 5 /
80						1							V. Carlo				in the said	248.0	2			1900	\$ 1 1 H		975 jest	10000	J-1994			800000		6773,080,084	2.5 / 5 /
09			T	T			†	1	1		1	2542435					\$190/2006		5		4,00				834.543								2.5 / 5 /
10								1000			DATE:								2		RANGES			alekti sirk	Na Airise	ASS-36	L262 L1063	Bassocavo	2011 N. 1122	nersi nesta	Ray or the Contract of the Con	10.3 30.00000	2.5 / 5 /
11	03/04/2		T	T		1		1		 			100000	38,54,545		3 WHEET		As well	1														2.5 / 5 /
12				1373								1		S 10 - 10 S	1000000		8 5 5 V 8 5 6		H			dicales	46 (NY)	rier s	38 8	35. 1129	32.000.000	1212-01 AV	Kasa as saas				2.5 / 5 /
13		10.38-1-70				†			 							200000	100		 											Section 1.3			2.5 / 5 /
14				100	4850				1000	1 115/25			90,239		108555 V	11111111	6272592	43 14 15 A. S.	2000 F 100 L	92091286	4,000,000,000		W612 1 113	3,4 (1), (2)	S. 11 11								2.5 / 5 /
15		284,802			30000	1-	1-	 	-	1.4.18.08											1000												2.5 / 5 / :
16					100.003				182814			4000	\$41.11.628	\$90.05.85.E	Eskilla o	6.0M/1993	Cold Market		Angel Sales	40.75075.000				N 2 3 75									2.5 / 5 / 3
17			\$ 445.165(8)		150,100,0	Na Visi		Ī	6888333																								2.5 / 5 / :
18				43353			1 4 1.23		3000	\$10 (\$10 LD)	JAN 184 N		1900-00-00	2500000	- A 19 10 - A	ZONNIA (S		2dig: 150 cm															2.5 / 5 / 3
19				10000	10.55	+-			698															pila si									2.5 / 5 / :
20			-	1460.86			1 10 (0.00)	3,000				200																					2.5 / 5 /
4																								100			1.00			100			2.5 / 5 / 3

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other:

__Headspace in VOA Vials (>6mm): □Yes □No □MA *If yes look in headspace column

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	0.001			
	_		i itter plastic unpres	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AGTH	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio		
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact				4 oz clear jar unpres
	120 mL amber glass unpres			VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
	_ ,	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	ВР3С	250 mL plastic NaOH	VCONA	40 1 -1 1 -1		
			•	VGSIVI	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
	500 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres	BP3S	250 mL plastic H2SO4		· - ·		. •
N						GN:	

Pace Analytical"

1241 Bellevue Street, Green Bay, WI 54302

Document Name: Sample Condition Upon Receipt (SCUR)

Document No.:

Document Revised: 25Apr2018

F-GB-C-031-Rev.07

Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Client Name: Pace MN	Project #:
Courier: CS Logistics Fed Ex Speedee FUPS	WO#: 40171636
☐ Client ☐ Pace Other:	
Tracking #: 1760825	40171636
Custody Seal on Cooler/Box Present: Yes no Seals in	ntact: Tyes I no
Custody Seal on Samples Present: yes no Seals in	ntact: Tyes Tho
Packing Material:	None Cother
	We Blue Dry None Samples on ice, cooling process has begun
Cooler Temperature Uncorr: 3 /Corr: 5.5	
Temp Blank Present: Yes Ino Biologi Temp should be above freezing to 6°C. Biota Samples may be received at ≤ 0°C.	cal Tissue is Frozen: yes no Person examining centents Date: Initials:
	□N/A 1.
^	□N/A 2.
	DNA 3
, in the second	EN/A 4. IRWO
Samples Arrived within Hold Time:	5.
- VOA Samples frozen upon receipt □Yes □No	Date/Time:
Short Hold Time Analysis (<72hr):	6.
Rush Turn Around Time Requested: △Yes □No	7.
Sufficient Volume:	8.
For Analysis: ☑Yes ☐No MS/MSD: ☐Yes ☑No ☐	JN/A
Correct Containers Used: ☐Yes ☐No	9. 0007 - d. 16/5. 008 1 V. Tal. 004-20/16
-Pace Containers Used: de la	9. 007 - Links, 008 1 vind, on-Links DA incovered ture resolution a distille
-Pace IR Containers Used: ★Yes □No □	1N/A 84 929/8
Containers Intact:	10.
Filtered volume received for Dissolved tests	IN/A 11.
Sample Labels match COC:	
-Includes date/time/ID/Analysis Matrix:	
Trip Blank Present:	N/A 13. MEOH
Trip Blank Custody Seals Present Д́Yes ☐No	N/A ha 1)
Pace Trip Blank Lot # (if purchased):	whether was
Client Notification/ Resolution:	If checked, see attached form for additional comments
Person Contacted: Da Comments/ Resolution:	ate/Time:
Project Manager Review:	Date 6 (28/18

Attachment B Work plan



Soil Investigation Work Plan

To: John Sager, Wisconsin Department of Natural Resources

From: Lynette Carney and Ryan Erickson

Subject: Superior Water, Light & Power Nemadji Substation Investigation Work Plan

Date: December 18, 2019

Location: Superior Refining Company, Superior, WI

Cc: Mark Darby and Matt Turner, Superior Refining Company

Mike French, LHB Contract Project Manager for MN Power

Dear Mr. Sager:

The following Work Plan is for a soil investigation at the Superior Refining Company (SRC) property that is leased by Superior Water Light & Power (SWL&P) for construction and operation of a new electrical substation (Nemadji Substation). The property is located at 2407 Stinson Ave, Superior, Wisconsin (Property; Figure 1).

Project Background

In 2018, SWL&P leased the Property from SRC to construct and operate an electrical substation. Prior to the lease, Barr Engineering Co. (Barr) had conducted a Phase I Environmental Site Assessment (2018) and a Phase II Investigation (2018) to document the condition of the Property prior to construction. No evidence of contamination was identified during these activities.

During substation construction earthwork activities in November 2019, SWL&P contractors encountered contaminated soil in two separate locations (Figure 1). SWL&P directed the excavation of the identified contaminated soil during their project work. The contaminated soil was characterized and transported offsite for disposal at Shamrock Landfill. SWL&P subsequently indicated that the identified contaminated soil had been remediated through excavation; however, no field screening or analytical confirmation samples were collected from the excavation extents to document final site conditions. SWL&P did report the discovery of contaminated soil to the Wisconsin Department of Natural Resources (WDNR).

The purpose of this proposed investigation is to document the soil conditions at the site following remedial actions through:

- determining whether residual soil impacts remain beneath the locations where impacted soil was excavated by SWL&P
- evaluating soil conditions laterally around the areas where impacted soil was excavated by SWL&P, and
- evaluating soil conditions on portions of the Property that have not been sampled to date.

To: John Sager, Wisconsin Department of Natural Resources

From: Lynette Carney and Ryan Erickson

Subject: Superior Water, Light & Power Nemadji Substation Investigation Work Plan

Date: December 18, 2019

Page: 2

Proposed Scope of Work

Borings advanced with a push-probe rig are proposed to evaluate the soil conditions at the site. The proposed soil boring locations were selected based on site features and previous boring locations (Barr, 2018), and are depicted on Figure 1.

Barr will prepare a project-specific health and safety plan (PHASP) and coordinate the investigation field work with SRC, SWL&P, and WDNR. Twenty-four (24) soil push-probe borings will be advanced to a depth of approximately 10 feet below ground surface (bgs) with continuous soil sample collection. Final boring locations and depths may vary depending on utility locations, accessibility in the field, depth to groundwater, soil conditions encountered, and the depth of identified contamination (if any). If contamination is identified, soil borings will be advanced to a minimum depth of 5 feet below the deepest level of contamination, as measured through field headspace screening. Soil will be classified as contaminated if it has a headspace reading >10 parts per million (ppm) or if clear evidence of contamination (e.g., hydrocarbon odor, sheen, free-product) is identified. All borings will be abandoned by the driller per Wisconsin regulatory requirements.

A Barr geoscientist will be on site to direct the advancement of the borings and will perform the field tasks and documentation in accordance with Barr's standard operating procedures (SOPs) applicable to the project. Soil samples will be screened for organic vapors using a photoionization detector (PID) with a 10.6 eV lamp. Soil samples will be classified in accordance with the Unified Soil Classification System (USCS) - ASTM D-2488, Standard Practice for Description and Identification of Soils (Visual/Manual Method) and any additional geologic information will be documented.

At least one confirmation/characterization analytical soil sample will be collected from insitu native soils from each boring and will be submitted to an approved certified laboratory for analysis of diesel range organic compounds (DRO), petroleum volatile organic compounds (PVOCs) and naphthalene. Soil samples submitted for laboratory analysis will be collected from 2-3 feet bgs and/or 6-7 feet bgs. The upper sample interval will be adjusted as necessary to ensure that soil is collected from below any recently placed fill or road base material. The lower soil sample interval will be adjusted based on the highest PID reading and/or interval with the most significant discoloration, odor or staining. A proposed soil sampling matrix and rationale has been provided in the attached Table 1. A duplicate sample will not be collected. One trip blank and one equipment blank will be collected.

A letter report will be prepared that summarizes investigation activities, findings and results. Recommendations for potential further actions will be included in the event that residual impacted soils are discovered at the Property.

ATTACHMENTS

Table 1 Boring and Sample Matrix Summary
Figure 1 Proposed Soil Boring Locations

TABLE 1 BORING AND SAMPLE MATRIX SUMMARY COMPLETED AND PROPOSED BORINGS / WELLS

Site Investigation Work Plan Nemadji Substation Lease Property

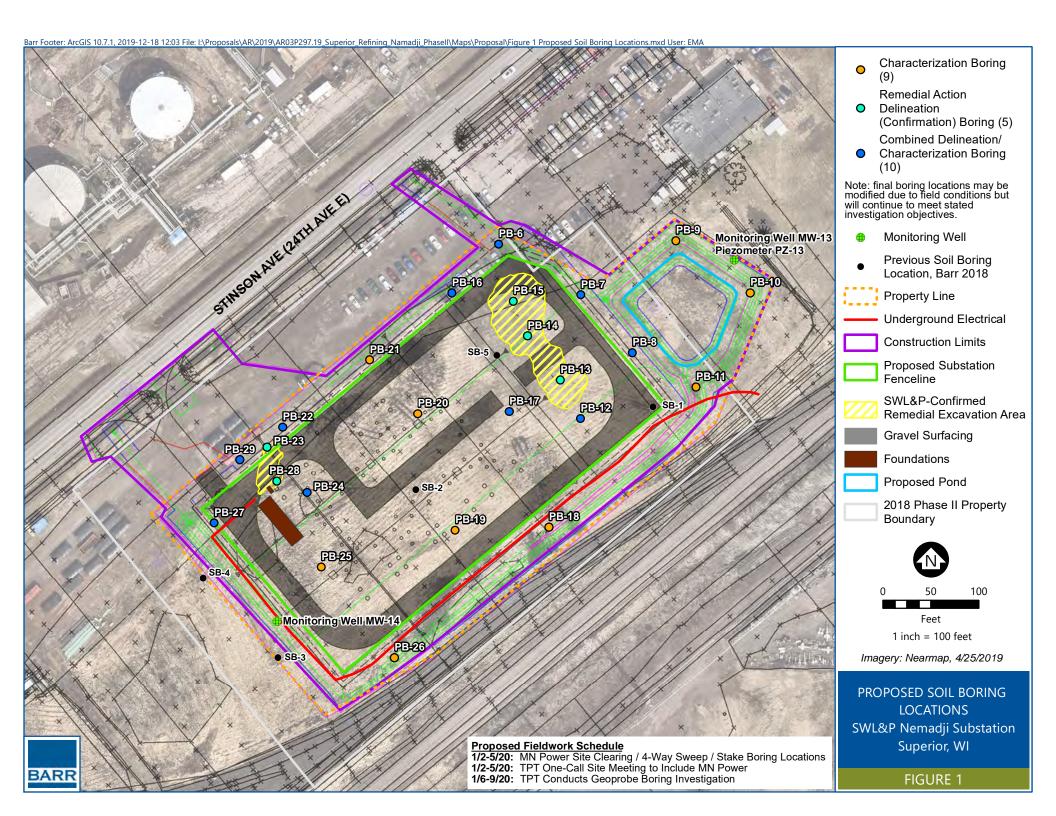
			Rationale		Sample	Target				Soil Sampl	ing Param	eters				lwater Sa	
Boring or Well ID	Completed (C) or Proposed (P)	Characterization	Delineation	Combined	Excavation Sidewall	Below Engineered Fill	Total Depth (ft)	Targeted Soil Sample Depths (ft bgs) ¹	PVOC + Naphthalene	DRO	RCRA Metals ²	VOCs	PAHs	Anticipated Groundwater Depth (ft bgs ⁺)	PVOC + Naph	VOCs	PAHs
MW-13	С	Х					20	NA						5-10	1		
MW-14	С	Х					20	NA						5-10	1		
SB-1	С	Х			х	Х	15	2-3 12-13			2	2	2	5-10			
SB-2	С	Х				Х	15	0-1 6-7			2	2	2	5-10			
SB-3	С	Х			х	х	15	0-2 8-9			2	2	2	5-10		1	1
SB-4	С	Х			х	Х	15	0-2 6-7			2	2	2	5-10			
SB-5	С	Х				Х	15	0-1 8-9			2	2	2	5-10			
PB-6	Р			Х	х	Х	10	2-3 6-7	2	2				5-10			
PB-7	Р			х	х	Х	10	2-3 6-7	2	2				5-10			
PB-8	Р			х	х	Х	10	2-3 6-7	2	2	2			5-10			
PB-9	Р	Х				Х	10	6-7	1	1				5-10			
PB-10	Р	Х				Х	10	6-7	1	1				5-10			
PB-11	Р	Х				Х	10	6-7	1	1				5-10			
PB-12	Р			Х		Х	10	6-7	1	1				5-10			
PB-13	Р		х			х	10	6-7	1	1				5-10			
PB-14	Р		х			х	10	6-7	1	1				5-10			
PB-15	Р		х			х	10	6-7	1	1				5-10			
PB-16	Р			х	х	х	10	2-3 6-7	2	2				5-10			
PB-17	Р			х		х	10	6-7	1	1				5-10			
PB-18	Р	Х			х	Х	10	2-3 6-7	2	2				5-10			
PB-19	Р	Х				Х	10	6-7	1	1				5-10			
PB-20	Р	Х				Х	10	6-7	1	1				5-10			
PB-21	Р	Х			х	х	10	2-3 6-7	2	2				5-10			
PB-22	Р			Х	х	Х	10	2-3 6-7	2	2				5-10			
PB-23	Р		х			х	10	6-7	1	1				5-10			
PB-24	Р			Х		Х	10	6-7	1	1				5-10			
PB-25	Р	Х				Х	10	6-7	1	1				5-10			
PB-26	Р	Х			Х	Х	10	2-3 6-7	2	2				5-10			
PB-27	Р			Х	х	Х	10	2-3 6-7	2	2				5-10			
PB-28	Р		х			Х	10	6-7	1	1				5-10			
PB-29	Р			Х	х	Х	10	2-3 6-7	2	2				5-10			
	•								34	34	10	10	10		2	1	1
				,	n Analytical	Methods			EPA 8260B	WI MOD DRO 8015D (C10-C28)	USEPA 6010C / 7471B	EPA 8260B	EPA 8270D		EPA 8260B	EPA 8260B	EPA 8270D

¹Actual soil sampling intervals will be adjusted based on observations of fill vs. native material and/or obvious signs of contamination.

Shaded cells represent locations previously sampled.

²RCRA Metals will include arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver.

⁺ Below ground surface.



Attachment C Representative Photographs



Photo 1: Preparing to drill at SB-10 on the edge of the pond.



Photo 2: Drilling at SB-20.



Photo 3: SB-18 offset 16 feet from original location. The original boring location is on the right side of the photo and the offset location is on the left.



Photo 4: Slag like material in the 0.6-2 foot interval of SB-10.

Attachment D Soil Boring Logs

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		tion/Redevelopment ⊠		aste N	_	ement								
																	of	1
		y/Projec			D1 *** *					Monito	ring Nu	mber	-	Boring				
					Phase III Invest f crew chief (first, la			1600 e Dril				Dat	e Drillii	ag Con		B-06		ng Method
	Jim	Johns	on		r crew ciner (mst, ia	ast) and I min	Dav	C DIII	_			Dat			•			
		in Port			DNR Well ID No	. Common Well Nam	e Fins	al Stat		2020 ter Leve	1 (Surface	Elevat	1/6/20	020	Re		rect push Diameter
	WICI	inque **	ch ivo.		DIVIC WEILID IVO	. Common wen ream		ai Stat	ic vva	ici Levi		Juliace		.2 Fee	ŧ			inches
		Grid Oı	rigin	(es		Boring Location 🖂	<u> </u>	т.	16	5° 41	' 2	0.2"	Local G	rid Loc	cation			
		Plane	. 3.77			N, E S/C/N	_	Lat						_				□ E
	SW Facilit		of N	W 1	/4 of Section 36	6, T 49 N, R 14 W	Count	Long		Civil To		0.8"	illage	Feet			ŀ	Feet W
	1 dein	.y 1D			Douglas		Count	iy coc		Super		y/ O1 •	mage					
	Sar	nple												Soil	Prope	erties		
		& jin)		 	s	Soil/Rock Description												
	e	+: <u></u>	Blow Counts	Depth In Feet	An	nd Geologic Origin For						ш	Compressive Strength	1)			\ \	nts
	nber Typ	Length Att. Recovered	Č	th Ir		Each Major Unit			CS	Graphic Log	Well Diagram	(bb	npre	Moisture Content	G/S/F %	or	Plasticity Index	D/
	Number and Type	Len	Blo	Dep					Ω	Grap Log	Well Diagr	PID (ppm)	Compress Strength	Moi	G/S	Color	Plastic Index	RQD/ Comments
EOPR	OBE	60 40.8		_	Silty gravel; fine; ç	gray; moist; angular; (fill).				000								
		40.0		_					GM	PLE		0.1						
				_	Fat clay: stiff: red	-brown; moist; high plastic	ity: black	l _r	CH			0						
				-2	\discoloration; fain	t tar odor, trace wood chip		` /										
					\fibers. Fat clav: stiff: red-	-brown; moist; high plastic	itv	/										
				-		z. c,e.,g piaete	,.					0.1						
				- 4														
				_														
EOPR	OBE	60 60										0.1						
		00		6					СН									
				_														
				_								0.2						
				- 8														
				- 0														
				_								0.2						
				_														
	ц			 10		10 feet below ground surfa	ice.											
					Analytical sample SB-6 1.5-2 ft: PV	s collected: /OC + Naphthalene, DRO												
					SB-6_5-6 ft: PVO	OC + Naphthalene, DRO ted: 1/6/2020, 1520												
					I leid blai ik collect	ieu. 1/0/2020, 1320												
			fy that	the info	rmation on this form	m is true and correct to the												
	Signat	ure (pri	itin	a Q. Seh	rt Firm B	arr Eng	ginee	ring	CO								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		/Wastewater on/Redevelopment	Waste Other	_	gement								
														Pag	ge 1	of	1
		y/Projec			n1		License/			ring Nu	mber		Boring	Numb	er		
					Phase III Investig		8160 Date Dri				Dat	e Drilli	ng Com		B-07		ing Method
		Johns	-	· · · · · · · · ·	or erew emer (mot, mot	, und I mm	Bate Bir	iiiig 5	urtea		Ju.	e Briiii	ng con	фіссо			ang memoa
	Tw	in Port	s Tes	ting	T				/2020	_			1/6/20	020			rect push
	WI Uı	nique W	ell No.		DNR Well ID No.	Common Well Name	Final Sta	itic Wa	iter Leve		Surface	Elevat	ion .6 Fee	ıt	Bo		Diameter inches
	Local	Grid Oı	rigin	(e:	stimated:) or I	Boring Location 🖂	1	4.	60 41		0.0"	Local G				2.3	Inches
		Plane			N,	E S/C/N		it46			9.8"			□ N			□ E
	SW Facilit		of N	W 1	1/4 of Section 36,	T 49 N, R 14 W	Lon County Co	g <u>-92</u>	2° <u>4</u> Civil Te		9.6"	/illage	Feet	□ S		I	Feet W
	raciii	y ID			Douglas		County Co	de	Super		.y/ 01 v	mage					
	Sar	nple					1						Soil	Prope	erties		
		& in)	S	t	Soi	l/Rock Description						0					
	ر و	Att.	ount	n Fe	And	Geologic Origin For				ے ا	(ma	ssive	e	\o		5	nts
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	I	Each Major Unit		SCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
	and N		Blc	De) D	Grap	Well Diagr	PII	Col	Mc	37	ပိ	Pla Ind	RQ Co
EOPR	OBE	60 41.4		F	Silty gravel; fine; gra ice/snow.	ay; moist; angular; (fill); 0	.6 feet of	GM	600								
				-	Poorly graded sand; rounded; (fill).	dense; fine; red-tan; moi	st;	SP			0.4						
				<u> </u>	Fat clay; stiff; red-bi	own; moist; high plasticit	y.										
				-							0.4						
				-							0.4						
				_4													
	 			L													
EOPR	OBE	60 60		-							0.4						
				- 6				СН									
				_							0.5						
				-							0.5						
				8													
				-							0.5						
	Ц	1		-10	End of Boring at 10	feet below ground surfac	e.										
					Analytical samples of SB-7 2-4 ft: PVOC	collected: + Naphthalene, DRO											
						+ Naphthalene, DRO											
	I herel	by certif	fy that	the info	ormation on this form i	s true and correct to the b	pest of my k	nowle	dge.	<u> </u>					<u> </u>		
	Signat	hire				Firm	rr Engine										Tel:
		(hri	stin	ıa (). Sehr	t Ba	Luguic	-ing									Fax:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		Vastewater □ /Redevelopment ⊠	Waste I Other	_	ement					D.	1	c	1
	Facili	ty/Proje	ct Nam	e			License/I	ermit/	Monito	ring Nui	mber		Boring	Pag Numbe		of	1
					Phase III Investiga	tion	81600			8			8		B-08	;	
		-	-	Vame of	f crew chief (first, last) a	and Firm	Date Dri	ling St	arted		Dat	e Drilli	ng Com	pleted		Drilli	ng Method
		i Johns in Port		ting				1/6/	2020				1/6/20	020		Di	rect push
		nique W			DNR Well ID No.	Common Well Name	Final Sta	ic Wa	ter Leve	el S	urface	Elevat			Вс	rehole	Diameter
		~ 11 ~											1 Fee			2.3	inches
		Grid Or Plane	rigin	☐ (es	stimated: \square) or Bo N ,	ring Location 🖂 E S/C/N	La	46	° 41	' 19	9.1"	Local G	rid Loc				
	SW		of N	W 1	/4 of Section 36,	T 49 N, R 14 W	1	-92		 .' {	8.7"		Feet	□ N□ S		F	□ E Feet □ W
	Facili		01 11	., .	County		County Co	de	Civil To	own/City		illage	1 001				
					Douglas		-		Super	rior							
	Sar	nple											Soil	Prope	erties		
		(ii) &	, so	et	Soil/I	Rock Description						o l					
	. <u>e</u>	1 +: -	Blow Counts	Depth In Feet	And G	eologic Origin For					(II)	Compressive Strength	9	\o		\ \frac{2}{3}	nts
	nber Tyr	Length Att. Recovered	× C	th I	Ea	ch Major Unit		CS	Graphic Log	Well Diagram	PID (ppm)	npre ngth	istur itent	G/S/F %	lor	Plasticity Index	D/ nme
	Number and Type	Len	Blo	Dep				Ω	Grap Log	Well Diag	PID	Compress Strength	Moisture Content	S/S	Color	Plastic Index	RQD/ Comments
EOPR	OBE	60 34.8		_		ith silt; dark brown; moist organics; (fill); 0.5 feet o		SP-SN SP-SN									
		34.6		_	\ice/snow.			<u>01 -017</u>			0.1						
				-		ith silt and gravel; coarse	; dark				0.1						
				-2	brown; angular; (fill). Fat clay; stiff; red-brown;	wn; moist; high plasticity.											
				-	, ,	, , , , , ,											
											0.4						
				-4													
EOPR	OBE	60		-				OL I			0.6						
_0110		60		_				CH			0.6						
				 6													
				_													
											8.0						
				- 8													
				-													
				_							1.1						
				-													
	_	1		 10		et below ground surface.											
					Analytical samples co SB-8 2-4 ft: PVOC +												
					SB-8_6-8 ft: PVOC +												
	I here	by certif	fy that	the info	ormation on this form is	true and correct to the be	st of my k	nowled	lge.								
	Signa	ture	01	٠ ـــــ ٠	ıa Q. Sehrt	Firm Barr	Engine	ring (CO								Tel:
		(Mu	sun	ia Li Sent	.	\mathcal{L}	\mathcal{C}									East.

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

					Temediation/	Redevelopment 🛚	Other							Pag		of 1			
		acility/Project Name Nemadji Substation Phase III Investigation							Monito	ring Nu	mber	Boring Number SB-09							
					f crew chief (first, last) a	81600 Date Dril			Dat	e Drilli	ng Com		D- 05	Drilling Method					
	Jim	- Johns	son		, , ,		_												
		Twin Ports Testing WI Unique Well No. DNR Well ID No. Common Well Name Local Grid Origin (estimated:) or Boring Location							1/6/2020 Final Static Water Level Sur					1/6/2020 face Elevation					
	WIU								iter Leve	21 2	surrace		ion .9 Fee	t	В	Borehole Diameter 2.3 inches			
	Local								CO 41	0.2 "	Local G				2.3 menes				
		Plane			N,	E S/C/N	Lat <u>46° 41' 20.3"</u> Long <u>-92° 4' 8.1"</u>							□ N		□ E			
	SW Facilit		of N	W 1	/4 of Section 36,	T 49 N, R 14 W		de <u>-92</u>	2° 4		8.1"	Village	Feet			F	eet W		
	1 aciii	ty ID			Douglas		County Code Civil Town/City/ or Village Superior												
	Sar	nple											Soil I	Prope	erties				
		& in)	įsą.	et	Soil/I	Rock Description						e							
	r Se	Att.	ount	n Fe	And G	eologic Origin For		S	0	п	(mc	ssiv	e _	9,		£	suts		
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Ea	ch Major Unit		SCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments		
-000			BIG	De				SP-SN	Grap	Well Diagr	PIII	Co	C M	9/5	ರ	Pla	2 R		
EOPR)BE	60 42		- 1	trace organics; (fill); (th silt; fine; dark brown; r).4 feet of ice/snow.	noist;	01 -01											
					Fat clay; stiff; red-brow	wn; moist; high plasticity.					0.3								
				_2															
				-															
				-							0.3								
				- 1															
EOPR	OBF	60		-			СН				0.3	2							
		60		-															
				- 6															
				-							0.4								
				-							0								
				- 8															
				-							0.4								
	Ц	1		-10	End of Boring at 10 fe	et below ground surface.													
					Analytical samples co SB-9 6-8 ft: PVOC +														
					000_0011 100	raphiliaiono, bro													
		<u> </u>							<u> </u>										
		4				true and correct to the be													
	Signa	ure /	2/	· + ·	a O Sohat	_ Firm Barr	Enginee	ring	CO								Tel:		

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

														Pag		of	1				
		cility/Project Name						License/Permit/Monitoring Number							Boring Number SB-10						
		Nemadji Substation Phase III Investigation oring Drilled By: Name of crew chief (first, last) and Firm							816009590 Date Drilling Started Date D							Drilling Method					
		Jim Johnson Twin Ports Testing						1/6/2020						фис		Drining Wethod					
														020		Direct push					
	WI Uı	WI Unique Well No. DNR Well ID No. Common					Final Static Water Level Surf					e Elevat	ion .1 Fee	ıt.	Bo	Borehole Diameter 2.3 inches					
	Local	Local Grid Origin (estimated:) or Boring Location						4.6	5° 41		0.0"	Local C				2.5 menes					
		Plane			N,	La	9.8"			\square N		□ E									
	SW Facilit		of N	W 1	/4 of Section 36,	T 49 N, R 14 W	Long County Co	g <u>-92</u>		<u>' </u>	6.9"	/illaga	Feet	□ S		F	Feet W				
	гасш	ly ID			Douglas		County Co	de	Supe		y/ Of V	v mage									
	Sar	nple			<u> </u>								Soil	Prope	erties						
		& (in)	s	et	Soil/R	tock Description						0									
	. e	Att.	ount	n Fe	And Go	eologic Origin For				u	m)	SSIVe	. بو	\o		<u> </u>	nts				
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Eac	ch Major Unit		SCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments				
	an N		Blc	De				D		Well Diagr	PII	Col	Co.	Ö	ပိ	Pla Ind	Co.				
OPR	OBE	60 34.8		_	Poorly graded sand windown	th silt; dark-brown; mois t of ice/snow.	st; trace	SP-SM													
				-	Fat clay; stiff; red-brow Apparent slag, vesicul	at 0.6				0.6											
					feet.																
				_	1.3-2 feet.	ar, gray, metallic luster	ITOTTI														
				_							0.7										
				_4																	
				- '																	
OPR	OBE	60		_				СН			0.6										
		60		- 6																	
				-																	
				_							0.5										
				-																	
				 8																	
				_							0.3										
	ц			 10		et below ground surface) .			1											
					Analytical samples col SB-10_1-2 ft: PVOC +	- Naphthalene, DRO															
					SB-10_5-6 ft: PVOC + SB-10_6-8 ft: PVOC +	- Naphthalene, DRO - Naphthalene, DRO															
					_																

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro			Vastewater Redevelopment	\boxtimes	Waste I		ement												
							1									Pag	ge 1	of 1	1				
	Facility/Project Name Nemadji Substation Phase III Investigation Boring Drilled By: Name of crew chief (first, last) and Firm							I	License/F			ing Nu	mber	ber Boring Number									
								I	81600 Date Dril				Date	e Drillii	ng Com	B-11	Drilling Method						
	Jim Johnson								Dute Din	mg St	urteu		Dat	c Dillill	ing Com	ipicica		Diffilling Wethod					
	Twin Ports Testing WI Unique Well No. DNR Well ID No. Common Well Name Local Grid Origin ☐ (estimated: ☐) or Boring Location ☒ State Plane N, E S/C/N										2020				1/6/20	020		Direct push					
								ame I	Final Sta	tic Wa	ter Leve	1 5	Surface	Elevat	ion .3 Fee	Bo	Borehole Diameter 2.3 inches						
									1				I		rid Loc		2.3 menes						
									La				8.8"				□ E						
	SW Facilit		of N	W 1	/4 of Section		T 49 N, R 14		Long	-92			7.8"	illaga	Feet		F	eet W					
	raciiii	y ID			I	ouglas			ior	· Village													
	Sar	nple				8									Soil I	Prope	erties						
		& jin)	s	et		Soil/F	Rock Description					CA	rist	ina			hrt	-					
	ر و	ت ب	Blow Counts	Depth In Feet		And Go	Geologic Origin For			7.0		g	(m)	Compressive Strength	8 1	, •		<u> </u>	ints				
	Number and Type	Length Att. Recovered	w C	pth I		Ea	ch Major Unit			SCS	Graphic Log	Well Diagram	PID (ppm)	npre ength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments				
			Blc	De						n		Well Diagr	PII	Cor Stre	Co W	S/9	ပိ	Plastic Index	RQ Co				
EOPR	OBE	60 30		-	│ Poorly grae │(fill); 0.2 fe	ided sand wi eet of ice/sn	th silt; fine; dark br ow.	own; m	oist; /	SP-SM													
				-	Fat clay; v	ery stiff; red	n plastic	ity.				0.1											
				2																			
				_																			
				_									0.3										
	OBE	60 60		4 _																			
EOPR				_						СН			0.3										
				-																			
				 6 																			
				-									0.4										
				-																			
				 8																			
				-									0.6										
				-									0.0										
	Ц	1		 10			et below ground su	ırface.															
					SB-11_2-4		+ Naphthalene, DR																
					SB-11_6-8	8 ft: PVOC -	Naphthalene, DR	.0															
	I herel	by certif	fy that	the info	rmation on t	his form is	true and correct to	the best	of my k	nowled	lge.												
	Signat	hire					Firm		Enginee										Tel:				
			pri	stin	a J	Sehrt	-		<i>U</i>	0									Fax:				

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		Wastewater □ n/Redevelopment ⊠	Waste Other		ement								
						•								Pag	ge 1	of .	1
		y/Projec			DI 111.1	·•	License/			ring Nu	mber		Boring		er		
					Phase III Investig		81600 Date Dri				Dat	e Drilli	ng Com		B-12		ng Method
	Jim	Johns	son										_				8
		in Port			DNR Well ID No.	Common Well Name	Final Sta		2020	.1 (Same a	e Elevat	1/6/20	020	D.		rect push Diameter
	WIU	nique w	en No.		DINK WEII ID NO.	Common wen name	rinai Sta	ilic wa	ter Leve	21	Suriace		ion .2 Fee	t	В		inches
		Grid Oı	rigin	(es		oring Location 🖂	T.	nt 46	5° 41	' 1	8.5 "	Local G					
	State SW	Plane	of N	X 7 1	N, /4 of Section 36,	E s/c/n t 49 n, r 14 w	La	g <u>-92</u>			9.5"		East	□ N□ S	-	т	☐ E Teet ☐ W
	Facilit		01 IN	vv 1	County		County Co		Civil To			illage	гееі	<u> </u>		Г	eet 🗀 w
					Douglas				Super	ior							
	Sar	nple											Soil	Prope	erties		
		t. & 1 (in)	nts	eet		Rock Description						ve					
	oer ype	h At	Cou	l In F		Geologic Origin For ach Major Unit		S	nic	am	ppm	ressi	ure	%		city	, nents
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	E	acii Major Omt		USC	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
EOPR		60	Щ	П		y; moist; angular; (fill); 0.2	feet of	-	7.79	<u> </u>		O S	<u> </u>			H	<u> </u>
		54		_	ice/snow.			GM			0.1						
				_				Givi	60C		0.1						
				_2	Doorly graded cand:	dense; fine; red-tan; mois	4.										
				_	rounded; (fill).	uense, inie, reu-tan, moisi	ι,				0.2						
				_				SP			0.2						
				- 4													
EOPR	OBE	60		_	Fat clay; stiff; red-bro	own; moist; high plasticity.											
TOPK		60		_							0.2						
				 6 													
				_				СН			0.4						
								СП			0						
				 8													
				_							0.4						
				-													
				 10	End of Boring at 10 f	eet below ground surface	-										
						+ Naphthalene, DRO											
	I here					true and correct to the be											
	Signa		hru	stin	a J. Sehrt	Firm Barr	Engine	ering	CO								Tel: Fax:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro			Vastewater □ /Redevelopment ⊠	Waste Other	e Manag	gement								
					Kemedi	ation	redevelopment 23	Other							Pag	re 1	of	1
	Facilit	y/Projec	et Nam	e					e/Permit		ring Nu	ımber		Boring	Numbe	er		
					Phase III Inves)09590				- 111			B-13		
		_	-	Name o	of crew chief (first,	last) a	and Firm	Date D	rilling S	tarted		Dat	te Drilli	ng Com	pleted		Drilli	ng Method
		Johns in Port		ting					1/6	/2020				1/6/20	020		Di	rect push
•		nique W			DNR Well ID N	0.	Common Well Name	Final S	tatic Wa		el	Surface	e Elevat	ion		Во	orehole l	Diameter
														.7 Fee			2.3	inches
	Local State	Grid O	rigin	∐ (es		r Bo N,	ring Location 🛛 E S/C/N	I	at4	6° 41	l' 1	8.9"	Local G	irid Loc				
	SW		of N	W 1		6,	T 49 N, R 14 W		ng92		 1'	9.8"		Feet	□ N □ S		F	□ E Feet □ W
•	Facilit		01 11	** -	County	υ,	1 15 1911 11	County C		Civil T	_		illage	1 001				
					Dougla	S				Supe	rior							
	Sar	nple												Soil	Prope	erties		
		(in)	ts	t t		Soil/I	Rock Description											
	r Se	Att. red	uno	n Fe	A	and G	eologic Origin For		S		l g	(m	SSiv	e _	vo.		<u>ح</u> ا	suts
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet		Ea	ch Major Unit		S C S	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
	Nu and		BIC	De					n S	Grap Log	Well Diagr	PII	Cor	Co	% 5	చ	Pla Ind	RQ Co
EOPR	OBE	60 40.8		-	Silty gravel; fine; ice/snow.	gray	; moist; angular; (fill); 0.	8 feet of	GM		1							
				F					GIVI	19		0.1						
				-	large gravel clas				/		:							
				-2	rounded; (fill)	and; d	ense; fine; red-tan; moi	st;			:							
				L					SP			0.1						
				- 4														
				-														
EOPR	OBE	60		-	Fat clay; stiff; re	d-bro	wn; moist; high plasticit	y.				0.1						
		62.4		6														
				F								0.1						
				-					СН			0.1						
				-8														
				_														
												0.2						
	Ц			-10		10.5												
					Analytical sampl	es co	eet below ground surfact llected:	e.										
					SB-13_6-8 ft: P\	VOC -	+ Naphthalene, DRO											
	T.1 .		2 .1	<u> </u>					1 .	1								
	I herel Signat		y that	ine info	ormation on this for	m is	true and correct to the b											
	Signal	(Mr	istin	ıa J. Se	hrt	E Bar	rr Engin	eering	CO								Tel: Fax:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		d/Wastewater □ on/Redevelopment ⊠	Waste Other	_	ement								
						_								Pag	ge 1	of	1
		y/Projec					License			ring Nu	mber		Boring	Numb	er		
					Phase III Investi			09590			D /	D :11:	-		B-14		M d 1
		Johns	-	Name o	f crew chief (first, las	t) and Firm	Date Dr	illing Si	arted		Dat	e Drilli	ng Com	ipietea		Drilli	ng Method
		in Port		ting				1/6/	2020				1/6/20	020		Di	rect push
		nique W			DNR Well ID No.	Common Well Name	Final St			el S	Surface	Elevat			Во	orehole l	Diameter
													.4 Fee			2.3	inches
	Local State	Grid Or	rigin	☐ (es	stimated: \square) or N	Boring Location 🖂	L	at <u>46</u>	° 41	' 1	9.3"	Local G	irid Loc		_		
	SW		of N	W 1	1/4 of Section 36,			g -92	.° 4	<u> </u>	0.3 "		Feet	□ N □ S		F	□ E Feet □ W
	Facilit		01 11	** 1	County	1 15 11,10 11 11	County Co		Civil To			illage	1 661			1	<u> </u>
					Douglas				Super	ior							
	San	nple											Soil	Prope	erties		
		& (in)	S	et	So	il/Rock Description						၂					
	. e	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	And	Geologic Origin For				u	(m	ssiv	ر و ا	\o		<u> </u>	nts
	nber Typ	Length Att. Recovered (× C	th L		Each Major Unit		CS	Graphic Log	Well Diagram	PID (ppm)	npre	Moisture Content	G/S/F %	Color	Plasticity Index	D/
	Number and Type	Len Rec	Blo	Dep				C S	Grap Log	Well Diagr	PID	Compressive Strength	Mo	S/S	Col	Plastic Index	RQD/ Comments
EOPR	OBE	60 49.2		_	Silty gravel; fine; gr	ay; moist; angular; with sa	ınd; (fill).		0								
		49.2		_				GM	P		0.1						
				_	Poorly graded sand	l; medium dense; red-tan;	moist [.]		by C		0.1						
				-2	rounded; (fill).	, modium donos, rod tan, i	moiot,										
				_				SP									
											0.1						
				<u>–</u> 4	Estable of the stable												
				-	Fat clay; soft; red-t	prown; wet; high plasticity.											
EOPR	OBE	60		_							0.1						
		26.4		_													
				 6													
								СН									
				_							0.2						
				- 8													
				_													
				_							0.3						
	Ш																
				10	End of Boring at 10 Analytical samples) feet below ground surface	e.										
					SB-14_6-8 ft: PVO	C + Naphthalene, DRO											
			y that	the info	ormation on this form	is true and correct to the b	est of my l	knowled	ige.								
	Signat	ure	Mrs	istin	ia J. Seh	et Firm Bai	rr Engine	ering	СО								Tel: Fax:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		Vastewater □ Redevelopment ⊠	Waste I Other	_	ement								
					Remediation	redevelopment Z	Other							Pag	ge 1	of .	1
	Facilit	ty/Projec	ct Nam	e			License/I			ring Nu	mber		Boring	Numbe	er		
					Phase III Investigat		81600				-	D :11:			B-15		36.1.1
		g Drilled Johns	-	Name of	f crew chief (first, last) a	nd Firm	Date Dri	ling Si	arted		Dat	e Drillii	ng Com	pleted		Drilli	ng Method
		in Port		ting				1/6/	2020				1/6/20	020		Di	rect push
		nique W			DNR Well ID No.	Common Well Name	Final Sta			el S	Surface	e Elevat			Вс		Diameter
													2 Fee			2.3	inches
		Grid On Plane	rigin	(es		ring Location 🖂 E S/C/N	La	t 46	° 41	' 1	9.6"	Local G	rid Loc	_			
	SW		of N	W / 1	/4 of Section 36,	T 49 N, R 14 W		g <u>-92</u>			0.6"		Foot	□ N □ S		г	□ E Feet □ W
	Facilit		01 11	VV 1	County		County Co		Civil To			illage	reet	<u> </u>		Г	eet 🗆 w
		,			Douglas		J		Super		,	J					
	Sar	nple			1	•							Soil I	Prope	erties		
		& (in)		 	Soil/R	lock Description											
	o	Att.	ount	т Ее	And Ge	eologic Origin For					m)	SSIVE	0			<u> </u>	nts
	ober Typ	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Eac	ch Major Unit		CS	ohic	l gran	PID (ppm)	npres ngth	sture	Έ%	or	ticit)/ Ime
	Number and Type	Leng	Blov	Dep				S O	Graphic Log	Well Diagram	PID	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
EOPR	OBE	60			Silty gravel; fine; gray;	moist; angular; (fill)		014	P.K.								
		42		_				GM			0.4						
				_	Poorly graded sand; de	ense; fine; red-tan; moist	t;				0.1						
				-2	rounded; (fill)												
				-													
								SP			0.1						
				<u>-4</u>													
				-													
EOPR	OBE	60		_	Fat clay; soft; red-brov	vn; moist; high plasticity.					0.1						
		56.4		_													
				 6 													
				-							0.2						
				_				СН			0.2						
				-8													
											0.2						
	Ц	-		-10	Find of Doning at 40 fo	-											
					Analytical samples coll	et below ground surface. lected:											
					SB-15_6-8 ft: PVOC +	- Naphthalene, DRO											
	Lhara	by corti	fiz that	the info	rmation on this form is t	rue and correct to the be	set of my 1	novile	lae	I						I .	
	Signa	h			_	[Fi											
	مانودد		hou	itin	a O. Sohnt.	. arr	Enginee	ring	CO								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

													Pag		of I	1
	ty/Proje			Dl III I	4:	License/P			ring Nu	mber		Boring		er B-16		
				Phase III Investigated for the crew chief (first, last) a		81600 Date Dril				Dat	e Drillii	ng Con		D-10		ng Method
Jin	Johns	son		· · · · · · · · · · · · · · · · · · ·			_					_				
	rin Port			DNR Well ID No.	Common Well Name	Final Stat		2020	.1 (Sumfo o o	Elevat	1/6/20	020	D.		rect push Diameter
WIU	mque w	eli No.		DINK WEII ID NO.	Common well Name	rinai Stat	ic wa	ter Leve	1	Suriace		ion .5 Fee	t	В		inches
	Grid O	rigin	[] (es		ring Location 🛛		46	5° 41	' 1	9.7"	Local G					
State SW	Plane	.c N	X 1	· · · · · · · · · · · · · · · · · · ·	E S/C/N	Lat Long				1.5 "		F4				□ E
Facili		of N	VV 1.	/4 of Section 36,	T 49 N, R 14 W	County Cod		Civil To			illage	Feet	□ S		F	eet W
	,			Douglas		,		Super		J	υ					
Sa	mple											Soil	Prope	erties		
	% (ii)	ıts	set		Rock Description),e					
er De	Att ered	Cour	In Fe		eologic Origin For		S	္ပ	띮	(md	essiv	ıre ıt	%		ity	ents
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Eac	ch Major Unit		$_{\rm S}$	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
<u>Žä</u> DPROBE	60	B	Ď	Silty gravel: dense: fin	e; gray; moist; angular; (fill)	n	1 0 1 4 0	M Q	<u> </u>	St C	Σŭ	Ď	С	F I	జ ర
JI NOBE	42		-	enty graver, derice, ini	o, gray, moiot, angalar, ().	GM	500								
						(6.11)		, Dt		0.4						
			-2	Poorly graded sand; d	ense; fine; red-tan; moist	i; (fill).										
			-													
							SP			0.5						
			- 4													
			-													
PROBE	60 60									1.2						
			-6	Fat clay; very stiff; red	-brown; moist; high plast	icity.										
			-													
										1.7						
			-8				CH									
			-													
										1.8						
	Ц		-10	End of Daring at 10 fo	at halous ground as of ac											
				Analytical samples col	et below ground surface. lected:											
				SB-16_6-8 ft: PVOC -	⊦ Naphthalene, DRO											
		i .	1					1			1				1	

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		Vastewater □ Redevelopment ⊠	Waste 1	_	ement								
					Remediation	redevelopment Z	Other							Pag	ge 1	of .	1
	Facilit	y/Proje	ct Nam	e			License/I	Permit/	Monito	ring Nu	mber		Boring	Numbe	er		
					Phase III Investigat		81600								B-17		
		_	-	Vame of	f crew chief (first, last) a	nd Firm	Date Dri	lling St	arted		Dat	e Drilli	ng Com	pleted		Drilli	ng Method
		tt Carl in Port		ting				1/7/	2020				1/7/20	020		Dia	rect push
		nique W			DNR Well ID No.	Common Well Name	Final Sta	tic Wa	ter Leve	el S	Surface	Elevat	ion		Bo	rehole l	Diameter
													9 Fee			2.3	inches
		Grid O	rigin	(es		ring Location 🖂	La	t 46	° 41	' 1	8.5"	Local G	rid Loc	ation			
		Plane	. 3.7		,	E S/C/N											□ E
	SW		of N	W 1	/4 of Section 36,	T 49 N, R 14 W		g <u>-92</u>			0.6"	7:11	Feet	□ S		F	eet W
	Facilit	IY ID			County Douglas		County Co	ae	Civil To Super		y/ or v	illage					
	Sar	nple											Soil I	Prope	erties		
		T			Soil/R	lock Description											
		tt. & d (in	ınts	Feet		eologic Origin For						ive					įχ ο
	er ype	h A	Col	면		ch Major Unit		S	ic	am	udc	ress	ure	%		city	nent
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Fect	Eac	in Major Onit		SC	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
	Ź e		Bl	Ŏ	0.00			D	27	ĭ Ž	PI	St	Σŭ	Ò	Č	P I	<u> </u>
EOPR	OBF	60 48		-	Silty gravel; fine; gray;	moist; angular; (fill).		GM									
				-	5 1 1 1 1 6	1.4					0.2						
				-	Poorly graded sand; fir	ne; red-tan; rounded; (fill).										
				-2													
				-				SP									
											0.3						
				_4													
				_	Fat clay; medium stiff; plasticity.	red-brown; moist; high											
-000	ا م			_	plasticity.												
EOPR	OBE	60 60		_							0.2						
				-6													
				-													
				-				CH			0.4						
				-													
				-8													
				-													
											0.3						
				_10													
				10		et below ground surface.	=										
					Analytical samples coll SB-17 6-8 ft: PVOC +	· Naphthalene, DRO											
					_	•											
	<u> </u>	<u> </u>	0.1					<u> </u>									
			ty that	the info	rmation on this form is t												
	Signa	ture /	1601	itin	a O. Sohnt.	- Firm Barı	Engine	ering (CO								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

T 11	· /D :	. 37				T · /r		.		1	T:		Pag		of .	1
	ty/Proje madii			Phase III Investigat	tion	License/I 81600			ng Nu	mber		Boring		er B-18	2	
				Crew chief (first, last) a		Date Dri				Dat	e Drilli	ng Com				ng Method
Tw	tt Carl	ts Tes						2020				1/7/20	020			rect push
WI U	nique W	/ell No.		DNR Well ID No.	Common Well Name	Final Sta	tic Wa	ter Leve	1 S	Surface	Elevat	ion .4 Fee	+	В		Diameter inches
Local	Grid O	rigin	(es		ring Location 🛛	<u> </u>	4.6	0 41	, 1	7.5"	Local G				2.3	inches
SW		of N	W 1/	N, 4 of Section 36,	E S/C/N T 49 N, R 14 W	La Long	g <u>-92</u>	2° 4	<u>'</u> 1	0.1"		Feet	□ N □ S		F	E E W
Facili	ty ID			County Douglas		County Co	de	Civil To Super		y/ or V	illage					
Sar	mple			1	1							Soil	Prope	erties		
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	And Ge	cock Description cologic Origin For ch Major Unit		CS	hic	ram	PID (ppm)	Compressive Strength	ture	%	ı	Plasticity Index	RQD/ Comments
Num and T	Leng	Blow	Deptl	Luc	on major one		OS O	Graphic Log	Well Diagram	PID (Compress Strength	Moisture Content	G/S/F %	Color	Plast	RQD Comi
PROBE	60 42		-	Silty gravel; fine to coa (fill).	rse; gray; dry to moist; a	angular;	GM			0.7	0 01					
			- 2	Poorly graded sand: de	ense; fine; red-tan; mois	t:	SP									
			_	rounded; (fill).	vn; moist; high plasticity.		01									
			- 4							1.0						
PROBE	60 60		- -							1.1						
			- 6				СН									
			_ 8							1.1						
			- -							1.1						
			 10	End of Boring at 10 fe Analytical samples col SB-18_2-4 ft: PVOC + SB-18_6-8 ft: PVOC +	· Naphthalene, DRO											

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		√astewater □ Redevelopment ⊠	Waste 1	_	ement								
					Remediation	redevelopment 23	Other							Pag	e 1	of	1
	Facilit	y/Proje	ct Nam	e			License/I	Permit/	Monito	ring Nu	mber]	Boring	Numbe	er		
					Phase III Investigat		81600								B-19		
		_	-	Name of	f crew chief (first, last) a	nd Firm	Date Dri	lling St	arted		Dat	e Drillii	ng Com	pleted		Drilli	ng Method
		tt Carl in Port		ting				1/7/	2020				1/7/20	020		Di	rect push
		nique W			DNR Well ID No.	Common Well Name	Final Sta			el S	Surface	Elevat	ion		Вс	rehole l	Diameter
				_									2 Fee			2.3	inches
		Grid Or Plane	rigin	∐ (es		ring Location 🖂 E S/C/N	La	t 46	5° 41	<u>'</u> _ 1	7.3 "	Local G	rid Loc	_			
	SW		of N	W 1	/4 of Section 36,	T 49 N, R 14 W	I	g -92	.° 4	<u> </u>	1.3 "		Feet	□ N □ S		F	□ E Feet □ W
	Facilit		01 11	*** 1	County		County Co	de	Civil To			illage	1 000				<u> </u>
					Douglas				Super	ior							
	Sar	nple											Soil I	Prope	rties		
		(E) &	ts	et	Soil/R	ock Description						စ					
	r.	Att.	uno	n Fe	And Ge	eologic Origin For		N		я	(mc	SSSiv	e _	0		<u>\$</u>	snts
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Eac	ch Major Unit		C)	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
	an N		BIc	De				S U	Grap Log	Well Diagr	PII	Col	Σ _O	G/S	<u> చ</u>	Pla Ind	RQ Co
EOPR	OBE	60 45.6		_	Silty gravel; fine to coa	rse; gray; moist; angula	r; (fill).	GM									
				-		ense; fine; red-tan; mois	t;				0.6						
				-	rounded; (fill).												
				_2				SP									
				_							0.7						
				_							0.7						
				 4	Fat clay; very stiff; red	-brown; moist; high plast	ticity.										
							•										
EOPR	OBE	60 60									0.7						
		00		-6													
				_													
				_				CH			0.5						
				- 8													
				_ 0													
				-							0.7						
				_													
	Ц	1		 10		et below ground surface.											
					Analytical samples coll SB-19_6-8 ft: PVOC +	ected: · Naphthalene, DRO											
					_	,											
			fy that	the info	rmation on this form is t		est of my k	nowled	ige.								
	Signa	ture	260	intin	a O. Sohnt.	_ Firm Barr	Engine	ering	СО								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		√astewater □	Waste I	_	ement								
					Remediation/l	Redevelopment 🛚	Other										
7	Facilit	y/Projec	ct Nam	e			License/I	ermit/	Monito	ring Nu	mber		Boring	Pag Numbe		of	l
	Nei	madji	Subst	ation	Phase III Investigat		81600	9590)	0				S	B-20		
Ī		_	-	Name of	f crew chief (first, last) a	nd Firm	Date Dril	ling St	arted		Dat	e Drilli	ng Com	pleted		Drilli	ng Method
		tt Carl in Port		tina				1/7/	2020				1/7/20	020		Di	rect push
7		nique W			DNR Well ID No.	Common Well Name	Final Sta			el S	Surface	Elevat		020	Вс		Diameter
_													4 Fee			2.3	inches
		Grid Oı Plane	rigin	☐ (es		ring Location 🖂 E S/C/N	La	46	° 41	<u>'</u> 1	8.5"	Local G	rid Loc	_			
	SW		of N	W 1.	/4 of Section 36,	T 49 N, R 14 W	Long		. 4	' 1	1.9"		Feet	□ N □ S		F	□ E Teet □ W
	Facilit				County		County Co		Civil To		y/ or V	illage					
_					Douglas				Super	rior		1					
-	Sar	nple											Soil	Prope	erties		
		Length Att. & Recovered (in)	nts	eet		ock Description					_	ve					
	er	h Atr rered	Cou	In F		eologic Origin For		S	ic	am	(mdc	ressi th	ure nt	%	_	city	nents
	Number and Type	Length Att. Recovered (Blow Counts	Depth In Feet	Eac	ch Major Unit		SC	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
EOPRO	ਟ ਫ਼ BE∏	60	В	Д	Silty gravel: fine: grav:	dry to moist; angular; (fi	II).	n	100 T	≱ D	Ь	S C	C N	9		P II	<u> </u>
		50.4			, , , , , , , , , , , , , , , , , , , ,	, , ,	,	GM	546								
									J. O.		0.3						
				-2	rounded; (fill).	ense; fine; red-tan; moist	;										
				-				SP									
											0.4						
				<u> </u>	Fat along atiffy rad brown	vn; moist; high plasticity.											
				_	rat clay, Still, red-blow	m, moist, nigh plasticity.											
EOPRO	BE	60		_							0.6						
		60		_6													
				-													
				-				СН			0.6						
				- 8													
				-							0.6						
				-													
				-10		et below ground surface.											
					Analytical samples coll SB-20_6-8 ft: PVOC +	· Naphthalene, DRO											
- 1	here	by certif	fy that	the info	rmation on this form is t	rue and correct to the be	st of mv k	nowled	lge.	<u> </u>		I		<u> </u>	<u> </u>		
	Signa	-		·.+		Firm -	Enginee										Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		d/Wastewater ☐ on/Redevelopment ⊠	Waste Other		gement								
					Remediation	on redevelopment	omer							Pag	ge 1	of	1
	Facilit	y/Projec	et Nam	ie					/Monito	ring Nu	mber		Boring	Numb	er		
					Phase III Investig			09590			-	D :11:			B-21		36.1.1
		_	-	Name o	f crew chief (first, last	t) and Firm	Date Di	rilling S	tarted		Dat	te Drilli	ng Com	npleted		Drilli	ng Method
		Johns in Port		ting				1/6	/2020				1/6/20	020		Di	rect push
		nique W			DNR Well ID No.	Common Well Name	e Final St			el	Surface	e Elevat			В		Diameter
													.4 Fee			2.3	inches
		Grid Or Plane	rigin	(es	stimated: \square) or N ,	Boring Location 🖂	1	at4	6° 41	' 1	9.0"	Local C	irid Loc	_			
	Sw		of N	W 1	1/4 of Section 36,		I	ng <u>-92</u>			2.7"		Feet	\square N \square S		F	□ E Feet □ W
	Facilit		01 11	., .	County	1 17 11,10 11	County C		Civil To			/illage	1 001				
					Douglas				Super	ior							
	Sar	nple											Soil	Prope	erties		
		& (ii)	S	et	So	il/Rock Description						ပ					
	ے و	Att. red (oun	n Fe	And	Geologic Origin For				ے ا	(mi	ssiv	e	\ 0		<u> </u>	nts
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	:	Each Major Unit		CS	Graphic Log	Well Diagram	PID (ppm)	npre	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
	and Nu		Blo	Dep				S U	Grap Log	Well Diagr	PIE	Compressive Strength	Mo	3/5	ပိ	Plastic Index	RQ Coi
EOPR	OBE	60 38.4		-	Silty gravel; dense;	fine; gray; moist; angular	; (fill).	GM									
				_ _ 2	Poorly graded sand (fill).	; dense; fine; red-brown;	moist;	SP			0.4						
					Fat clay; stiff; red-b	rown; moist; high plasticit	ty.										
				- 4							0.3						
EOPR:	OBE	60		-							0.4						
		60		- 6				СН									
				-							0.4						
				 8													
				-							0.4						
	Ц			 10	Analytical samples		ce.										
					SB-21_6-8 ft: PVO	C + Naphthalene, DRO C + Naphthalene, DRO											
			y that	the info	ormation on this form	is true and correct to the	best of my	knowle	dge.								
	Signat	ure	Phri	istin	ia J. Sehr	et Firm Ba	arr Engine	eering	СО								Tel: Fax:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Kol		Vastewater □ Redevelopment □	Waste I Other		ement					Dag	ge 1	of 1	
	Facili	ty/Proje	ct Nam	e			License/I	Permit/	Monito	ing Nu	mber		Boring	Pag Numbe		01 1	
	Ne	madji	Subst	ation 1	Phase III Investiga		81600			J			J		B-22		
		-	-	Name of	crew chief (first, last) a	nd Firm	Date Dri	lling St	arted		Dat	e Drillii	ng Com	pleted		Drillii	ng Method
		ett Carl in Por		ti				1 /7 /	2020				1/7/20	20		Dia	aat muala
		nique W			DNR Well ID No.	Common Well Name	Final Sta			1 5	Surface	Elevat)20	Вс		ect push Diameter
		1											.4 Fee	t			inches
		Grid O	rigin	(es		ring Location 🛛	,	t 46	° 41	' 1	8.3 "	Local G	rid Loc	ation			
		Plane			· · · · · · · · · · · · · · · · · · ·	E S/C/N	La							□ N	-	_	Ε
	SW Facili		of N	W 1	/4 of Section 36,	T 49 N, R 14 W	Long	g <u>-92</u>	Civil To		4.0"	Village	Feet	□ s		F	eet W
	1 aciii	ty ID			Douglas		county Co	ac	Super		y/ O1 V	mage					
	Sai	mple							<u> </u>				Soil I	Prope	erties		
			,,		Soil/R	lock Description											
	ch.	± 0	Blow Counts	Depth In Feet		eologic Origin For					n	sive					ıts
	Typ.	Length Att. Recovered (CC &	th In	Eac	ch Major Unit		CS	ohic	l gram	ıdd)	pres	sture	¥%	i.	Plasticity Index)/ imei
	Number and Type	Leng	Blov	Dep				S O	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plastic Index	RQD/ Comments
EOPF		60 52.8			Silty gravel; fine to me	dium; gray; dry; angular;	(fill).	GM	070								
		32.0		-	Poorly graded sand wi angular; (fill).	th silt; dark brown; dry to	moist;	SP-SM			0.4						
				<u></u> 2	Fat clay; stiff; red-brow	vn; moist; high plasticity.											
				- - 4							0.4						
EOPF	ROBE	60 60		-							0.6						
				6 - -				CH			0.5						
				8 							0.4						
				- 10	Analytical samples col												
					SB-22_2-4 ft: PVOC + SB-22_6-8 ft: PVOC +												
	I here	by certi	fy that	the info	rmation on this form is t	rue and correct to the be	st of my k	nowled	lge.								
	Signa	ture	26.	· <u> </u>	a O Salat	Firm Barr	Engine	ring	CO								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

					remediation	Redevelopment 🛚	Other							Pag		of 1	
		ty/Proje			DI III (,•	License/P			ing Nu	mber		Boring				
					Phase III Investigate forew chief (first, last) a		81600 Date Dril				Dat	e Drillii	ng Com		B-23		ng Method
		ett Carl	-					8					-6	T			
		in Por							2020				1/7/20)20			ect push
	WI U	nique W	ell No.		DNR Well ID No.	Common Well Name	Final Stat	ic Wa	ter Leve	el S	Surface	Elevat	ion .0 Fee	+	Bo		Diameter inches
	Local	Grid O	rigin	(es	timated:) or Box	ring Location 🛛	1]	Local G				2.3	ilicites
		Plane			N,	E S/C/N	Lat				8.1"			□ N			□Е
	SW Facili		of N	W 1.	/4 of Section 36,	T 49 N, R 14 W	Long				4.2"	7:11	Feet	□ S		F	eet W
	raciii	ty ID			County Douglas		County Coo	ie	Civil To Super		y/ or v	illage					
	Saı	mple			[Soil I	Prope	rties		
		& jin)	s	et	Soil/R	lock Description						0					
	. e	Att.	ount	n Fe	And Go	eologic Origin For				u	(m)	ssive	e .	, 0		2	nts
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Eac	ch Major Unit		SCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
			Blc	De				S D	Grap Log	Well Diagr	PII	Cor	Co Mo	G/S	ပိ	Plastic Index	RQ Co
EOPR	OBE	60 45.6		-	Silty gravel; fine to me angular; (fill).	dium; gray; dry to moist;		GM									
				-							0.1						
				_2	Poorly graded sand; de rounded (fill).	ense; red-tan; dry to mois	st;										
				-	rounded (IIII).												
				-				SP			0.1						
				_4													
				·													
EOPR	OBE	60			Fat clay; medium stiff;	red-brown; dry to moist;	high				0.2						
		60		- -6	plasticity.												
				-													
				-							0.2						
				_。				СН									
				 8 													
				-							0.3						
				-													
				-10	End of Boring at 10 fe Analytical samples col	et below ground surface.											
					SB-23_6-8 ft: PVOC +	- Naphthalene, DRO											
	I here	by certi	fy that	the info	rmation on this form is t	rue and correct to the be	st of my kı	nowled	lge.								
	Signa	ture	26.	·+:	a O Sahat	. Firm Barr	Enginee	ring	CO								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro				_	ement								
					Remediation/	Redevelopment 🗵	Other	Ш									
	Facilit	ty/Projec	et Nam	0			I icense/I	Permit/	Monitor	ring Nu	mher	la la	Boring	Pag	ge 1	of	1
		-			Phase III Investiga	tion				illig ivu	inoci	ľ	Dornig				
	Borin	g Drilleo	l By: 1								Dat	e Drillii	ng Con				ng Method
				ting				1/7/	2020				1/7/2	020		Di	rect nush
					DNR Well ID No.	Common Well Name	Final Sta			el S	Surface			020	Вс		
																2.3	inches
			rigin	☐ (es			La	t 46	° 41	' 1	7.6"	Local G	rid Lo		_		
	SW		of N	W 1					.° 4	' 1	3.6"		Feet			F	
	Facilit				County			de	Civil To		y/ or V	illage					
Security-Project Name Since Sinc																	
Page 1 of 1 Page 1 of 1																	
		t. & 1 (in)	nts	eet		•						ive					100
	er ype	h At	Cou	l In I					nic	am	mdd	ressi	ure	%		city	nent
	fumk nd T	engt	low	epth	Eac	ch Major Onit		S	raph	/ell jagr	D (I	omp	foist onte	'/S/F	olo	lasti ıdex	OD/ omn
EOPR	OBE		В	Д	Silty gravel; fine; gray;	moist; angular; (fill).		<u> </u>	140 170	20	Ь	S C	20	9		P II	<u> </u>
		50.4				,		GM	546								
				_							0.6						
				-2			noist;										
				_	subrounded to rounde	a; (tili).											
								SP-SM	1		0.7						
				<u>–</u> 4													
				_	Fat clay; very stiff; red	-brown; moist to wet; hig	ıh										
EOPR	OBE										0.9						
		48		- 6													
				_				СН			0.9						
				-													
				_							1.0						
				_10													
					SB-24_6-8 ft: PVOC -	Naphthalene, DRO											
	I here	by certif	fy that 1	the info	ormation on this form is t	true and correct to the be	est of my k	nowled	lge.					•	•	Borehole Dia 2.3 inc	
	Signa	ture	26	·.+'	Salat	_ Firm Barr	Enginee	ering	СО								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro				_	ement								
					Remediation/	Redevelopment	Otner							D	1	C	1
	Facilit	ty/Proje	ct Nam	e			License/l	Permit/	Monito	ring Nu	mber	[]	Boring			of	l
	Nei	madji	Subst	ation			81600	9590)	υ			_	S	B-25		
		-	-	Name o	f crew chief (first, last) a	nd Firm	Date Dri	lling St	arted		Dat	e Drillii	ng Com	npleted		Drilli	ng Method
				ting				1/7/	2020				1/7/20	020		Di	rect push
					DNR Well ID No.	Common Well Name	Final Sta			el S	Surface			<u></u>	Во		
																2.3	inches
			rigin	☐ (es			La	t 46	° 41	<u>'</u> 1	6.9"	Local G	rid Loc				
	SW		of N	W 1			I			.' 1	3.3 "		Feet			I	
	Facilit				County				Civil To		y/ or V	illage					
Sample Soil/Rock Descrip Ti T									Super	rior		1					
Local Grid Origin (estimated:) or Boring Location State Plane State Plane N, E S/C/N Lat 46° 41' 16.9" Local Grid Location N, E S/C/N Lat 46° 41' 16.9" Local Grid Location N, E S/C/N Lat 46° 41' 16.9" Local Grid Location N, E S/C/N Lat 46° 41' 16.9" Local Grid Location N, E S/C/N Lat 46° 41' 16.9" Local Grid Location N, E S/C/N Lat 46° 41' 16.9" Local Grid Location N, E S/C/N Lat 46° 41' 16.9" Local Grid Location N, E S/C/N Lat 46° 41' 16.9" Local Grid Location N, E S/C/N Lat 46° 41' 16.9" Local Grid Location N, E S/C/N Lat 46° 41' 16.9" Local Grid Location N, E S/C/N Lat 46° 41' 16.9" Local Grid Location N, E S/C/N Lat 46° 41' 16.9" Local Grid Location N, E S/C/N Local Grid Lo																	
		% : &	nts	eet		-					_	ve					
	er /pe	Att ered	Cour	In F					.c	un un	(md	ressi	ure nt	%		ity	ents
	umb Id Ty	ecov	low	epth	Eac	ch Major Unit		S	raph	'ell iagra	D (F	ompi	onte	/S/F	olor	astic	QD/ omm
=OPR	Z ä OBF∏		В	Ω	Silty gravel: fine: grav:	dry to moist: angular: (f	ill)	D	140 740	≱ O	<u> </u>	SC	CZ	Ü	0	P] Ir	¥ 0
20111				_	only graver, rine, gray,	ary to molot, angular, (r	,	GM	500								
								0			0.9						
				-2	Poorly graded sand wi	th silt; fine; red-brown; c	Iry to										
				-	moist (fill).												
								SP-SM			1.1						
				-4													
				F	Fat clay, stiff, red-brow	vn, moist, high plasticity	:										
EOPR	OBE	60		-							1.2						
		60		<u> </u>													
				L Č													
				-				СН			1.1						
				_8													
				F							1.2						
				-													
	Ц			 10			.< <cr></cr>										
					Analytical samples col	lected:											
					SB-25_6-8 ft: PVOC +	· Naphthalene, DRO											
	I here	by certit	fy that	the info	ormation on this form is t	rue and correct to the be	est of mv k	nowlea	lge.						<u> </u>		
Silty gravel; fine; gray; dry to moist; angular; (fill) Poorty graded sand with silt; fine; red-brown; dry to moist (fill). Poorty graded sand with silt; fine; red-brown; dry to moist (fill). SP-SM 1.1 Fat clay, stiff, red-brown, moist, high plasticity. CH 1.1 End of Boring at 10 feet below ground surface.< <cr>Analytical samples collected: Analytical samples collected: SB-25_6-8 ft. PvOC + Naphthalene, DRO</cr>																	
	_	(ho	istis	ia (L. Sohrt	_ Dai	Ligino	amg '									1el:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro				_	ement								
					Remediation/	Redevelopment 🖂	Other	Ш						D	. 1	ع.	1
	Facili	ty/Proje	ct Nam	e			License/l	Permit/	Monito	ring Nu	mber]	Boring			01	1
	Ne	madji	Subst	ation	Phase III Investigat	tion											
		_	-	Vame o	of crew chief (first, last) a	and Firm	Date Dri	ling St	arted		Dat	e Drillii	ng Com	pleted		Drilli	ng Method
				ting				1/7/	2020				1/7/20	020		Di	rect push
					DNR Well ID No.	Common Well Name	Final Sta			el S	Surface				Во	rehole	Diameter
		~									- 1					2.3	inches
			rıgın	∐ (es			La	t <u>46</u>	° 41	<u>'</u> 1	6.1"	Local G	rid Loc				
	SW		of N	W 1	,					<u>'</u> 1	2.4"		Feet			I	
					County				Civil To	own/Cit		illage					
					Douglas				Super	rior		ı					
Cocal Grid Origin																	
		%. (in)	ıts	eet		-						, e					
	er /pe	Att ered	Cour	In F		= =			ic.	띮	(md	ressi	ure nt	%		ity	ents
	umb Id Ty	engtl ecov	low	epth	Eac	ch Major Unit		S	raph	ell	D (F	ompi	oist	/S/F	olor	astic dex	QD/
=OPR	Z ä OBF∏		B	Q	Silty gravel: fine: grav:	dry to moist: angular: (fi	II)· 0 5		1 C	≱ ∩		S C	ΣŬ	Ğ	0	Pl	<u> </u>
_0110				_	feet of ice/snow.			GIVI									
					Fat clay; stiff; red-brov	vn; dry to moist; high pla	sticity.				1.0						
				-2													
				_													
				_							1.0						
				_4													
				ļ .													
EOPR	OBE H	60		_				СН			1 1						
								0									
				0													
				_							1.0						
				_													
				 8													
				_							1.1						
				_							1.1						
	Ц	1		 10			=										
					SB-26_2-4 ft: PVOC +	⊦ Naphthalene, DRO											
					35-20_0-011.1 VOC 1	Naprilialerie, Di											
	T.1	<u> </u>	C .1	1					1							Direct Direct 2.3 in Fee	
	I here Signa	-	ry that	the info	ormation on this form is t	In:											
	Signa	iure /	Chr	intis	na O. Sohnt	Firm Barr	Engine	ring	CO								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro				_	ement								
					Remediation/	Redevelopment 🛚	Other										
														Pag	ge 1	of	1
		Sample Sample Soil/Rock Description Soil/Rock		4:				ring Nu	mber		Boring		er B-27	7			
											Dat	te Drilli	ng Com				ing Method
		-	-	varrie o	r orew emer (mst, kast) a	1 11111	Date Dir	ining or	artea		Du	о Бини	ng con	фіссо	•		ing weined
	Tw	in Port	s Tes										1/7/20	020			rect push
•	WI U	nique W	ell No.		DNR Well ID No.	Common Well Name	Final Sta	tic Wa	ter Leve	el S	Surface				В		Diameter
	Local	Grid Or	igin		stimated: \(\sqrt{} \) or Por	ring Location										2.3	inches
			ıgııı	☐ (c:			La	t <u>46</u>	<u>°</u> 41		7.3 "	Local	nia Loc		ī		□ Е
	SW	State Plane SW 1/4 of NW 1/4 of Section 36, T 49 N Facility ID County Douglas Sample Soil/Rock Descri And Geologic Orig Each Major U BE 60 48 Poorly graded sand; fine; red-tan;		T 49 N, R 14 W	Long	g <u>-92</u>	<u>° 4</u>	<u>' 1</u>	4.9"		Feet]	Feet W		
•	Facili	ty ID			'			de	Civil To		y/ or V	/illage					
					Douglas				Super	ior							T
	Sar	nple											Soil	Prope	erties		
		(in)	ıts	eet		-						e e					
	Number and Type Length Att. & Secovered (in) Blow Counts				And Ge	eologic Origin For		ν,	ပ	я	(mc	essiv	r e	%		Ę.	ents
FacilityProject Name Nemadji Substation Phase III Investigation Site Option Pacility Project Name Nemadji Substation Phase III Investigation Site Option Pacility Project Name Pacilit		Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments											
Facility/Project Name License/Permit/Monitorin Security S		We	PII	Str	S M	J/D	ပိ	Pla	RC Co								
EOPR) DBE			L	Silty gravel; fine; gray;	moist; angular; (fill).											
				-				GIVI	96		1.2						
				- 2	Poorly graded sand; fir	ne; red-tan; moist; round	led; (fill).	SP	<u> </u>								
				_	Fat clay; very stiff; red	-brown; moist; high plast	ticity.										
				-							1.2						
				4 _													
EOPR	OBE			-							1.5						
				 6 				СН									
				-							1.5						
				- 8													
				_	Wet from 9-10 feet.						1.4						
				-10													
					Analytical samples col	lected:	-										
					SB-27_2-4 ft: PVOC + SB-27_6-8 ft: PVOC +	Naphthalene, DRO Naphthalene, DRO											
					02 20 0												
•	I here	by certif	fy that	the info	ormation on this form is t	rue and correct to the be	est of mv k	nowled	lge.	ı		1	ı		1	1	1
						171											Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				<u>Ro</u>					_	ement								
Brett Carlson Twin Ports Testing WI Unique Well No. DNR Well ID No. Common Well Name Final Static Water Level Surface Elevation 658.5 Feet 2.3 Local Grid Origin □ (estimated: □) or Boring Location ⊠ State Plane N, E S/C/N Lat 46° 41' 17.7" Local Grid Location □ N		1																
					Phase III	Investiga	tion	1			ilig Nu	moer	-	Doring			}	
												Dat	e Drilli	ng Con				ng Method
	Tw	in Port	s Tes											1/7/20	020			rect push
	WI U	nique W	ell No.		DNR We	ell ID No.	Common Well Name	Final Sta	tic Wa	ter Leve	el S	Surface				Во		
	Lasal	Ciri I O	.;;		timatad. [7) ar Da	ring Lagation 🔽					1					2.3	inches
Facility/Project Name Nemadji Substation Phase III Investigation 816009590			' 1	7.7"	Local G	rria Loc		r		Пг								
Remediation/Redevelopment				F	□ E Feet □ W													
Facility/Project Name Nemadji Substation Phase III Investigation 816009590 SB-25																		
Douglas Superior Sample Soil Properties																		
	Sai	Τ΄ Τ				~ 44.00								2011	Prope	lies		
		t. & 1 (in)	nts	eet			-						ive					100
	er ype	h At	Cou	In F						ic	am) Dimo	ressi th	ure	%		city	nents
Facility/Project Name Remediation/Redevelopment License/Permit/Monitoring Number Boring Number Nemadji Substation Phase III Investigation 816009590 Date Drilling Started Date Drilling Started Date Drilling Complete By: Name of crew chief (first, last) and Firm Date Drilling Started Date Drilling Complete Brett Carlson Twin Ports Testing 1/7/2020		/S/F	olor	astic	RQD/ Comments													
Remediation/Redevelopment		≱ വ	[A	St C	Z Ü	Ŋ	0	P H	¥ 0									
_0110				-	Poorly gr	aded sand wi		vet;	J									
					rounded;	(fill).						0.6						
	Nemadji Subst Boring Drilled By: N Brett Carlson Twin Ports Test WI Unique Well No. Local Grid Origin State Plane SW 1/4 of N Facility ID Sample OPROBE 60 51.6 OPROBE 60 60		-2															
				-														
				_					SP-SN	1		0.9						
				-														
				- 4														
	Ц																	
EOPR	OBE			_	Fat clay;	soft; red-brov	wn; moist; high plasticity	-				1.1						
				-6														
				_														
												1.2						
				_8					CH									
				-								1.0						
				-														
	Ц	1		 10				l <u>.</u>										
					Analytica	ıl samples col -8 ft: PVOC -	llected: + Naphthalene. DRO											
					52 25_5		raprimaiorio, 2. to											
	I here	by certif	fy that	the info	rmation on	this form is	true and correct to the be	est of my k	nowled	lge.					_			
	Signa	ture	<u> </u>			S / /	Firm Bar	r Engine	ering	CO								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro				Wast Other		gement								
					Kem	iculation/	Redevelopment 23	Other							Pag	ge 1	of	1
	Facilit	y/Projec	et Nam	ie						/Monito	ring Nu	mber		Boring	Numb	er		1
									00959			15	D :11:			B-29		36.1.1
			-	Name o	f crew chief (fir	st, last) a	and Firm	Date D	rilling S	started		Dat	te Drilli	ng Com	pleted		Drilli	ng Method
				ting					1/7	/2020				1/7/20	020		Di	rect push
					DNR Well ID	No.	Common Well Name	e Final S	tatic W	ater Lev	el	Surface	e Elevat			Во	orehole l	Diameter
	T 1	C::10:				D.						1		.8 Fee			2.3	inches
			ngın	(es	stimated: [)			I	at <u>4</u>	6° 41	<u>.'</u> 1	7.9"	Local C	iria Loc	_	r		Пв
	SW		of N	W 1	/4 of Section	36,	T 49 N, R 14 W	, _{Lo}	ng <u>-9</u>	2°	<u>' 1</u>	4.6"		Feet	\square N \square S		F	□ E Feet □ W
	Facilit	y ID			1			County C	Code	Civil T		y/ or V	/illage					
					Doug	glas				Supe	rior		T	0 "				
	Sar													Soil	Prope	erties		
		t. & l (in)	nts	eet			-					_	s v					
	er ype	λ Ατ ered	Cour	In F					N	.c	HI HI	(uudo	ressi th	ure	%		ity	ents
	umb Id Ty	ength	low (epth		Ea	ch Major Unit		SC	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
			B	Ã	Silty gravel w	ith cand:	fine: aray: dry: angula	r: /fill\	D	<u>1 0 1</u>	ĭ Ď	PI	<u>2</u> 2	Σŏ	Ğ	0	P d	<u> </u>
_0110		49.2		-	Only graver w	itii Saiiu,	ille, gray, dry, arigula	i, (iiii <i>)</i> .	GM	80]							
				Ĺ								0.9						
	Facility/Project Name Nemadji Substation Phase III Investigation					wn; moist; high plastici	ty.											
	DBE 60 49.2 - Silty gravel with sand; fine; gray; dry; and 49.2 - Fat clay; stiff; red-brown; moist; high plas 4																	
									0.8									
				<u>ا</u> ا														
				4 -														
	OBE H	60		-														
IOPK				-					СН			8.0						
				- 6					CH									
				_								1.0						
				8														
				_														
												0.9						
	Ш			-10														
								ce.										
					SB-29_6-8 ft:	: PVOC ·	+ Naphthalene, DRO											
	I herel	by certif	y that	the info	ormation on this	form is	true and correct to the	best of my	knowle	dge.	•							
	Signat	ure	_				Firm D	arr Engin										Tel:
		(MI	stin	ra (j. 5	enrt		8	8									Fax:

Attachment E Soil Laboratory Analytical Reports



January 24, 2020

Jim Taraldsen Barr Engineering Company 325 S Lake Ave Duluth, MN 55802

RE: Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Dear Jim Taraldsen:

Enclosed are the analytical results for sample(s) received by the laboratory on January 10, 2020. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Amanda Albrecht amanda.albrecht@pacelabs.com

(612)607-6382 Project Manager

amanda & albeecht

Enclosures

cc: BarrDM, Barr Engineering Company Data Management, Barr Engineering Accounts Payable, Barr Engineering







CERTIFICATIONS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Pace Analytical Services Minneapolis

A2LA Certification #: 2926.01 Alabama Certification #: 40770

Alaska Contaminated Sites Certification #: 17-009

Alaska DW Certification #: MN00064 Arizona Certification #: AZ0014 Arkansas DW Certification #: MN00064 Arkansas WW Certification #: 88-0680

California Certification #: 2929 CNMI Saipan Certification #: MP0003 Colorado Certification #: MN00064 Connecticut Certification #: PH-0256

EPA Region 8+Wyoming DW Certification #: via MN 027-

053-137

Florida Certification #: E87605 Georgia Certification #: 959 Guam EPA Certification #: MN00064 Hawaii Certification #: MN00064 Idaho Certification #: MN00064

Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064

Maine Certification #: MN00064 Maryland Certification #: 322

Massachusetts Certification #: M-MN064

Massachusetts DWP Certification #: via MN 027-053-137

Michigan Certification #: 9909

Minnesota Certification #: 027-053-137

Minnesota Dept of Ag Certifcation #: via MN 027-053-137

Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647

North Carolina DW Certification #: 27700 North Carolina WW Certification #: 530 North Dakota Certification #: R-036 Ohio DW Certification #: 41244 Ohio VAP Certification #: CL101 Oklahoma Certification #: 9507

Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Vermont Certification #: VT-027053137
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C

Wyoming UST Certification #: via A2LA 2926.01

Wisconsin Certification #: 999407970



SAMPLE SUMMARY

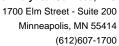
Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10504984001	SB-14_6-8	Solid	01/06/20 10:50	01/10/20 08:50
10504984002	SB-15_6-8	Solid	01/06/20 11:10	01/10/20 08:50
10504984003	SB-13_6-8	Solid	01/06/20 11:40	01/10/20 08:50
10504984004	SB-12_6-8	Solid	01/06/20 12:10	01/10/20 08:50
10504984005	SB-8_2-4	Solid	01/06/20 12:20	01/10/20 08:50
10504984006	SB-8_6-8	Solid	01/06/20 12:40	01/10/20 08:50
10504984007	SB-11_2-4	Solid	01/06/20 13:05	01/10/20 08:50
10504984008	SB-11_6-8	Solid	01/06/20 13:10	01/10/20 08:50
10504984009	SB-10_6-8	Solid	01/06/20 13:20	01/10/20 08:50
10504984010	SB-10_5-6	Solid	01/06/20 13:40	01/10/20 08:50
10504984011	SB-10_1-2	Solid	01/06/20 13:45	01/10/20 08:50
10504984012	SB-9_6-8	Solid	01/06/20 14:00	01/10/20 08:50
10504984013	SB-7_2-4	Solid	01/06/20 14:30	01/10/20 08:50
10504984014	SB-7_6-8	Solid	01/06/20 14:40	01/10/20 08:50
10504984015	SB-16_6-8	Solid	01/06/20 14:55	01/10/20 08:50
10504984016	SB-6_1.5-2	Solid	01/06/20 15:10	01/10/20 08:50
10504984017	SB-6_5-6	Solid	01/06/20 15:15	01/10/20 08:50
10504984018	SB-21_2-4	Solid	01/06/20 15:40	01/10/20 08:50
10504984019	SB-21_6-8	Solid	01/06/20 15:50	01/10/20 08:50
10504984020	Field Blank	Solid	01/06/20 15:20	01/10/20 08:50
10504984021	SB-22_2-4	Solid	01/07/20 09:15	01/10/20 08:50
10504984022	SB-22_6-8	Solid	01/07/20 09:25	01/10/20 08:50
10504984023	SB-23_6-8	Solid	01/07/20 09:50	01/10/20 08:50
10504984024	SB-29_2-4	Solid	01/07/20 10:20	01/10/20 08:50
10504984025	SB-29_6-8	Solid	01/07/20 10:25	01/10/20 08:50
10504984026	SB-27_2-4	Solid	01/07/20 10:40	01/10/20 08:50
10504984027	SB-27_6-8	Solid	01/07/20 10:45	01/10/20 08:50
10504984028	SB-28_6-8	Solid	01/07/20 11:00	01/10/20 08:50
10504984029	SB-24_6-8	Solid	01/07/20 11:20	01/10/20 08:50
10504984030	SB-25_6-8	Solid	01/07/20 11:45	01/10/20 08:50
10504984031	SB-26_2-4	Solid	01/07/20 12:35	01/10/20 08:50
10504984032	SB-26_6-8	Solid	01/07/20 12:45	01/10/20 08:50
10504984033	SB-19_6-8	Solid	01/07/20 13:10	01/10/20 08:50
10504984034	SB-18_2-4	Solid	01/07/20 13:30	01/10/20 08:50
10504984035	SB-18_6-8	Solid	01/07/20 13:40	01/10/20 08:50
10504984036	SB-17_6-8	Solid	01/07/20 14:05	01/10/20 08:50

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.





SAMPLE SUMMARY

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10504984038	Trip Blank	Solid	01/07/20 00:00	01/10/20 08:50



SAMPLE ANALYTE COUNT

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10504984001	SB-14_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984002	SB-15_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984003	SB-13_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984004	SB-12_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984005	SB-8_2-4	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984006	SB-8_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984007	SB-11_2-4	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984008	SB-11_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984009	SB-10_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984010	SB-10_5-6	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984011	SB-10_1-2	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984012	SB-9_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M



SAMPLE ANALYTE COUNT

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
10504984014	SB-7_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984015	SB-16_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984016	SB-6_1.5-2	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984017	SB-6_5-6	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984018	SB-21_2-4	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984019	SB-21_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984020	Field Blank	EPA 8260B	AB2	11	PASI-M
0504984021	SB-22_2-4	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	CD2	11	PASI-M
0504984022	SB-22_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	CD2	11	PASI-M
0504984023	SB-23_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	CD2	11	PASI-M
0504984024	SB-29_2-4	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	CD2	11	PASI-M
0504984025	SB-29_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	CD2	11	PASI-M
10504984026	SB-27_2-4	WI MOD DRO	JVM	2	PASI-M



SAMPLE ANALYTE COUNT

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		ASTM D2974	JDL		PASI-M
		EPA 8260B	CD2	11	PASI-M
0504984027	SB-27_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	CD2	11	PASI-M
0504984028	SB-28_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	CD2	11	PASI-M
0504984029	SB-24_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	CD2	11	PASI-M
0504984030	SB-25_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984031	SB-26_2-4	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2, CD2	11	PASI-M
0504984032	SB-26_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2, CD2	11	PASI-M
0504984033	SB-19_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2, CD2	11	PASI-M
0504984034	SB-18_2-4	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2, CD2	11	PASI-M
0504984035	SB-18_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2, CD2	11	PASI-M
0504984036	SB-17_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2, CD2	11	PASI-M
0504984037	SB-20_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2, CD2	11	PASI-M
10504984038	Trip Blank	EPA 8260B	CD2	11	PASI-M



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-14_6-8 Lab ID: 10504984001 Collected: 01/06/20 10:50 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	6.0J	mg/kg	17.9	5.4	1	01/10/20 15:03	01/12/20 16:47		
n-Triacontane (S)	86	%.	50-150		1	01/10/20 15:03	01/12/20 16:47	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974						
Percent Moisture	33.9	%	0.10	0.10	1		01/14/20 12:27		N2
8260B MSV UST	Analytical	Method: EPA	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<4.9	ug/kg	16.3	4.9	1	01/10/20 19:00	01/14/20 06:46	71-43-2	
Ethylbenzene	<4.7	ug/kg	15.7	4.7	1	01/10/20 19:00	01/14/20 06:46	100-41-4	
Methyl-tert-butyl ether	<10.3	ug/kg	34.4	10.3	1	01/10/20 19:00	01/14/20 06:46	1634-04-4	
Naphthalene	<81.2	ug/kg	270	81.2	1	01/10/20 19:00	01/14/20 06:46	91-20-3	
Toluene	<21.2	ug/kg	70.5	21.2	1	01/10/20 19:00	01/14/20 06:46	108-88-3	
1,2,4-Trimethylbenzene	<17.4	ug/kg	57.8	17.4	1	01/10/20 19:00	01/14/20 06:46	95-63-6	
1,3,5-Trimethylbenzene	<13.8	ug/kg	46.0	13.8	1	01/10/20 19:00	01/14/20 06:46	108-67-8	
Xylene (Total)	<20.1	ug/kg	67.0	20.1	1	01/10/20 19:00	01/14/20 06:46	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	104	%.	75-125		1	01/10/20 19:00	01/14/20 06:46	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/10/20 19:00	01/14/20 06:46	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/10/20 19:00	01/14/20 06:46	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-15_6-8 Lab ID: 10504984002 Collected: 01/06/20 11:10 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pr	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.0	mg/kg	16.6	5.0	1	01/10/20 15:03	01/12/20 16:54		
n-Triacontane (S)	85	%.	50-150		1	01/10/20 15:03	01/12/20 16:54	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	35.5	%	0.10	0.10	1		01/14/20 12:28		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<4.4	ug/kg	14.6	4.4	1	01/10/20 19:00	01/14/20 07:05	71-43-2	
Ethylbenzene	<4.2	ug/kg	14.0	4.2	1	01/10/20 19:00	01/14/20 07:05	100-41-4	
Methyl-tert-butyl ether	<9.2	ug/kg	30.7	9.2	1	01/10/20 19:00	01/14/20 07:05	1634-04-4	
Naphthalene	<72.6	ug/kg	242	72.6	1	01/10/20 19:00	01/14/20 07:05	91-20-3	
Toluene	<18.9	ug/kg	63.0	18.9	1	01/10/20 19:00	01/14/20 07:05	108-88-3	
1,2,4-Trimethylbenzene	<15.5	ug/kg	51.6	15.5	1	01/10/20 19:00	01/14/20 07:05	95-63-6	
1,3,5-Trimethylbenzene	<12.4	ug/kg	41.2	12.4	1	01/10/20 19:00	01/14/20 07:05	108-67-8	
Xylene (Total)	<18.0	ug/kg	59.9	18.0	1	01/10/20 19:00	01/14/20 07:05	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	105	%.	75-125		1	01/10/20 19:00	01/14/20 07:05	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/10/20 19:00	01/14/20 07:05	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/10/20 19:00	01/14/20 07:05	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-13_6-8 Lab ID: 10504984003 Collected: 01/06/20 11:40 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual		
WIDRO GCS	Analytical	Method: WI	MOD DRO P	reparation N	/lethod	: WI MOD DRO					
WDRO C10-C28 Surrogates	<4.8	mg/kg	15.8	4.8	1	01/10/20 15:03	01/12/20 17:01				
n-Triacontane (S)	87	%.	50-150		1	01/10/20 15:03	01/12/20 17:01	638-68-6			
Dry Weight / %M by ASTM D2974	Analytical	Analytical Method: ASTM D2974									
Percent Moisture	24.7	%	0.10	0.10	1		01/14/20 12:28		N2		
8260B MSV UST	Analytical Method: EPA 8260B Preparation Method: EPA 5035/5030B										
Benzene	<3.9	ug/kg	12.9	3.9	1	01/10/20 19:00	01/14/20 04:34	71-43-2			
Ethylbenzene	<3.7	ug/kg	12.4	3.7	1	01/10/20 19:00	01/14/20 04:34	100-41-4			
Methyl-tert-butyl ether	<8.1	ug/kg	27.1	8.1	1	01/10/20 19:00	01/14/20 04:34	1634-04-4			
Naphthalene	<64.0	ug/kg	213	64.0	1	01/10/20 19:00	01/14/20 04:34	91-20-3			
Toluene	<16.7	ug/kg	55.6	16.7	1	01/10/20 19:00	01/14/20 04:34	108-88-3			
1,2,4-Trimethylbenzene	<13.7	ug/kg	45.6	13.7	1	01/10/20 19:00	01/14/20 04:34	95-63-6			
1,3,5-Trimethylbenzene	<10.9	ug/kg	36.3	10.9	1	01/10/20 19:00	01/14/20 04:34	108-67-8			
Xylene (Total)	<15.9	ug/kg	52.9	15.9	1	01/10/20 19:00	01/14/20 04:34	1330-20-7			
Surrogates											
1,2-Dichloroethane-d4 (S)	105	%.	75-125		1	01/10/20 19:00	01/14/20 04:34	17060-07-0			
Toluene-d8 (S)	101	%.	75-125		1	01/10/20 19:00	01/14/20 04:34	2037-26-5			
4-Bromofluorobenzene (S)	100	%.	75-125		1	01/10/20 19:00	01/14/20 04:34	460-00-4			



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-12_6-8 Lab ID: 10504984004 Collected: 01/06/20 12:10 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.0	mg/kg	16.6	5.0	1	01/10/20 15:03	01/12/20 17:08		
n-Triacontane (S)	85	%.	50-150		1	01/10/20 15:03	01/12/20 17:08	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	23.9	%	0.10	0.10	1		01/14/20 12:28		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.9	ug/kg	12.8	3.9	1	01/13/20 10:56	01/14/20 08:40	71-43-2	
Ethylbenzene	<3.7	ug/kg	12.4	3.7	1	01/13/20 10:56	01/14/20 08:40	100-41-4	
Methyl-tert-butyl ether	<8.1	ug/kg	27.1	8.1	1	01/13/20 10:56	01/14/20 08:40	1634-04-4	
Naphthalene	<63.9	ug/kg	213	63.9	1	01/13/20 10:56	01/14/20 08:40	91-20-3	
Toluene	<16.7	ug/kg	55.5	16.7	1	01/13/20 10:56	01/14/20 08:40	108-88-3	
1,2,4-Trimethylbenzene	<13.7	ug/kg	45.5	13.7	1	01/13/20 10:56	01/14/20 08:40	95-63-6	
1,3,5-Trimethylbenzene	<10.9	ug/kg	36.2	10.9	1	01/13/20 10:56	01/14/20 08:40	108-67-8	
Xylene (Total)	<15.8	ug/kg	52.7	15.8	1	01/13/20 10:56	01/14/20 08:40	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	104	%.	75-125		1	01/13/20 10:56	01/14/20 08:40	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/13/20 10:56	01/14/20 08:40	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125		1	01/13/20 10:56	01/14/20 08:40	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-8_2-4 Lab ID: 10504984005 Collected: 01/06/20 12:20 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	8.2J	mg/kg	15.6	4.7	1	01/10/20 15:03	01/12/20 16:33		
n-Triacontane (S)	86	%.	50-150		1	01/10/20 15:03	01/12/20 16:33	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	26.6	%	0.10	0.10	1		01/14/20 12:28		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<4.0	ug/kg	13.3	4.0	1	01/13/20 10:56	01/14/20 08:59	71-43-2	
Ethylbenzene	<3.9	ug/kg	12.8	3.9	1	01/13/20 10:56	01/14/20 08:59	100-41-4	
Methyl-tert-butyl ether	<8.4	ug/kg	28.1	8.4	1	01/13/20 10:56	01/14/20 08:59	1634-04-4	
Naphthalene	<66.3	ug/kg	221	66.3	1	01/13/20 10:56	01/14/20 08:59	91-20-3	
Toluene	<17.3	ug/kg	57.6	17.3	1	01/13/20 10:56	01/14/20 08:59	108-88-3	
1,2,4-Trimethylbenzene	<14.2	ug/kg	47.2	14.2	1	01/13/20 10:56	01/14/20 08:59	95-63-6	
1,3,5-Trimethylbenzene	<11.3	ug/kg	37.6	11.3	1	01/13/20 10:56	01/14/20 08:59	108-67-8	
Xylene (Total)	<16.4	ug/kg	54.7	16.4	1	01/13/20 10:56	01/14/20 08:59	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	104	%.	75-125		1	01/13/20 10:56	01/14/20 08:59	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/13/20 10:56	01/14/20 08:59	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125		1	01/13/20 10:56	01/14/20 08:59	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-8_6-8 Lab ID: 10504984006 Collected: 01/06/20 12:40 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
WIDRO GCS	Analytical	Method: WI I	MOD DRO P	reparation N	/lethod	: WI MOD DRO				
WDRO C10-C28 Surrogates	<4.8	mg/kg	15.9	4.8	1	01/10/20 15:03	01/12/20 17:15			
n-Triacontane (S)	81	%.	50-150		1	01/10/20 15:03	01/12/20 17:15	638-68-6		
Dry Weight / %M by ASTM D2974	Analytical	Method: AST	M D2974							
Percent Moisture	27.3	%	0.10	0.10	1		01/14/20 12:28		N2	
8260B MSV UST	Analytical Method: EPA 8260B Preparation Method: EPA 5035/5030B									
Benzene	<3.9	ug/kg	12.8	3.9	1	01/13/20 10:56	01/14/20 09:18	71-43-2		
Ethylbenzene	<3.7	ug/kg	12.4	3.7	1	01/13/20 10:56	01/14/20 09:18	100-41-4		
Methyl-tert-butyl ether	<8.1	ug/kg	27.1	8.1	1	01/13/20 10:56	01/14/20 09:18	1634-04-4		
Naphthalene	<63.9	ug/kg	213	63.9	1	01/13/20 10:56	01/14/20 09:18	91-20-3		
Toluene	<16.7	ug/kg	55.5	16.7	1	01/13/20 10:56	01/14/20 09:18	108-88-3		
1,2,4-Trimethylbenzene	<13.7	ug/kg	45.5	13.7	1	01/13/20 10:56	01/14/20 09:18	95-63-6		
1,3,5-Trimethylbenzene	<10.9	ug/kg	36.3	10.9	1	01/13/20 10:56	01/14/20 09:18	108-67-8		
Xylene (Total)	<15.8	ug/kg	52.8	15.8	1	01/13/20 10:56	01/14/20 09:18	1330-20-7		
Surrogates										
1,2-Dichloroethane-d4 (S)	105	%.	75-125		1	01/13/20 10:56	01/14/20 09:18	17060-07-0		
Toluene-d8 (S)	102	%.	75-125		1	01/13/20 10:56	01/14/20 09:18	2037-26-5		
4-Bromofluorobenzene (S)	97	%.	75-125		1	01/13/20 10:56	01/14/20 09:18	460-00-4		



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-11_2-4 Lab ID: 10504984007 Collected: 01/06/20 13:05 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	19.5J	mg/kg	20.5	6.2	1	01/10/20 15:03	01/12/20 16:40		T6
n-Triacontane (S)	101	%.	50-150		1	01/10/20 15:03	01/12/20 16:40	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	36.3	%	0.10	0.10	1		01/14/20 12:28		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<5.3	ug/kg	17.7	5.3	1	01/13/20 10:56	01/14/20 14:23	71-43-2	
Ethylbenzene	<5.1	ug/kg	17.1	5.1	1	01/13/20 10:56	01/14/20 14:23	100-41-4	
Methyl-tert-butyl ether	<11.2	ug/kg	37.4	11.2	1	01/13/20 10:56	01/14/20 14:23	1634-04-4	
Naphthalene	<88.4	ug/kg	294	88.4	1	01/13/20 10:56	01/14/20 14:23	91-20-3	
Toluene	<23.0	ug/kg	76.7	23.0	1	01/13/20 10:56	01/14/20 14:23	108-88-3	
1,2,4-Trimethylbenzene	<18.9	ug/kg	62.9	18.9	1	01/13/20 10:56	01/14/20 14:23	95-63-6	
1,3,5-Trimethylbenzene	<15.0	ug/kg	50.1	15.0	1	01/13/20 10:56	01/14/20 14:23	108-67-8	
Xylene (Total)	<21.9	ug/kg	72.9	21.9	1	01/13/20 10:56	01/14/20 14:23	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	103	%.	75-125		1	01/13/20 10:56	01/14/20 14:23	17060-07-0	
Toluene-d8 (S)	99	%.	75-125		1	01/13/20 10:56	01/14/20 14:23	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	75-125		1	01/13/20 10:56	01/14/20 14:23	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-11_6-8 Lab ID: 10504984008 Collected: 01/06/20 13:10 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.3	mg/kg	17.8	5.3	1	01/10/20 15:03	01/12/20 17:22		
n-Triacontane (S)	85	%.	50-150		1	01/10/20 15:03	01/12/20 17:22	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	27.7	%	0.10	0.10	1		01/14/20 12:28		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.9	ug/kg	13.0	3.9	1	01/13/20 10:56	01/14/20 14:41	71-43-2	
Ethylbenzene	<3.8	ug/kg	12.5	3.8	1	01/13/20 10:56	01/14/20 14:41	100-41-4	
Methyl-tert-butyl ether	<8.2	ug/kg	27.3	8.2	1	01/13/20 10:56	01/14/20 14:41	1634-04-4	
Naphthalene	<64.6	ug/kg	215	64.6	1	01/13/20 10:56	01/14/20 14:41	91-20-3	
Toluene	<16.8	ug/kg	56.1	16.8	1	01/13/20 10:56	01/14/20 14:41	108-88-3	
1,2,4-Trimethylbenzene	<13.8	ug/kg	46.0	13.8	1	01/13/20 10:56	01/14/20 14:41	95-63-6	
1,3,5-Trimethylbenzene	<11.0	ug/kg	36.6	11.0	1	01/13/20 10:56	01/14/20 14:41	108-67-8	
Xylene (Total)	<16.0	ug/kg	53.3	16.0	1	01/13/20 10:56	01/14/20 14:41	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 14:41	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/13/20 10:56	01/14/20 14:41	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	75-125		1	01/13/20 10:56	01/14/20 14:41	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-10_6-8 Lab ID: 10504984009 Collected: 01/06/20 13:20 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.3	mg/kg	17.7	5.3	1	01/10/20 15:03	01/12/20 17:29		
n-Triacontane (S)	82	%.	50-150		1	01/10/20 15:03	01/12/20 17:29	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	26.4	%	0.10	0.10	1		01/14/20 12:29		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.9	ug/kg	13.1	3.9	1	01/13/20 10:56	01/14/20 15:00	71-43-2	
Ethylbenzene	<3.8	ug/kg	12.7	3.8	1	01/13/20 10:56	01/14/20 15:00	100-41-4	
Methyl-tert-butyl ether	<8.3	ug/kg	27.7	8.3	1	01/13/20 10:56	01/14/20 15:00	1634-04-4	
Naphthalene	<65.5	ug/kg	218	65.5	1	01/13/20 10:56	01/14/20 15:00	91-20-3	
Toluene	<17.1	ug/kg	56.9	17.1	1	01/13/20 10:56	01/14/20 15:00	108-88-3	
1,2,4-Trimethylbenzene	<14.0	ug/kg	46.6	14.0	1	01/13/20 10:56	01/14/20 15:00	95-63-6	
1,3,5-Trimethylbenzene	<11.2	ug/kg	37.1	11.2	1	01/13/20 10:56	01/14/20 15:00	108-67-8	
Xylene (Total)	<16.2	ug/kg	54.1	16.2	1	01/13/20 10:56	01/14/20 15:00	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 15:00	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 15:00	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 15:00	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-10_5-6 Lab ID: 10504984010 Collected: 01/06/20 13:40 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.4	mg/kg	18.1	5.4	1	01/10/20 15:03	01/12/20 17:36		
n-Triacontane (S)	86	%.	50-150		1	01/10/20 15:03	01/12/20 17:36	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	27.7	%	0.10	0.10	1		01/14/20 12:29		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<4.0	ug/kg	13.3	4.0	1	01/13/20 10:56	01/14/20 15:19	71-43-2	
Ethylbenzene	<3.9	ug/kg	12.9	3.9	1	01/13/20 10:56	01/14/20 15:19	100-41-4	
Methyl-tert-butyl ether	<8.5	ug/kg	28.1	8.5	1	01/13/20 10:56	01/14/20 15:19	1634-04-4	
Naphthalene	<66.5	ug/kg	221	66.5	1	01/13/20 10:56	01/14/20 15:19	91-20-3	
Toluene	<17.3	ug/kg	57.7	17.3	1	01/13/20 10:56	01/14/20 15:19	108-88-3	
1,2,4-Trimethylbenzene	<14.2	ug/kg	47.3	14.2	1	01/13/20 10:56	01/14/20 15:19	95-63-6	
1,3,5-Trimethylbenzene	<11.3	ug/kg	37.7	11.3	1	01/13/20 10:56	01/14/20 15:19	108-67-8	
Xylene (Total)	<16.5	ug/kg	54.9	16.5	1	01/13/20 10:56	01/14/20 15:19	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	103	%.	75-125		1	01/13/20 10:56	01/14/20 15:19	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 15:19	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 15:19	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-10_1-2 Lab ID: 10504984011 Collected: 01/06/20 13:45 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	121J	mg/kg	149	44.8	10	01/10/20 15:03	01/12/20 16:12		T6
n-Triacontane (S)	0	%.	50-150		10	01/10/20 15:03	01/12/20 16:12	638-68-6	S4
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974						
Percent Moisture	23.1	%	0.10	0.10	1		01/14/20 12:29		N2
8260B MSV UST	Analytical	Method: EPA	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.7	ug/kg	12.3	3.7	1	01/13/20 10:56	01/14/20 15:38	71-43-2	
Ethylbenzene	<3.6	ug/kg	11.9	3.6	1	01/13/20 10:56	01/14/20 15:38	100-41-4	
Methyl-tert-butyl ether	<7.8	ug/kg	26.1	7.8	1	01/13/20 10:56	01/14/20 15:38	1634-04-4	
Naphthalene	<61.5	ug/kg	205	61.5	1	01/13/20 10:56	01/14/20 15:38	91-20-3	
Toluene	<16.0	ug/kg	53.4	16.0	1	01/13/20 10:56	01/14/20 15:38	108-88-3	
1,2,4-Trimethylbenzene	<13.2	ug/kg	43.8	13.2	1	01/13/20 10:56	01/14/20 15:38	95-63-6	
1,3,5-Trimethylbenzene	<10.5	ug/kg	34.9	10.5	1	01/13/20 10:56	01/14/20 15:38	108-67-8	
Xylene (Total) Surrogates	<15.3	ug/kg	50.8	15.3	1	01/13/20 10:56	01/14/20 15:38	1330-20-7	
1,2-Dichloroethane-d4 (S)	103	%.	75-125		1	01/13/20 10:56	01/14/20 15:38	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/13/20 10:56	01/14/20 15:38	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 15:38	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-9_6-8 Lab ID: 10504984012 Collected: 01/06/20 14:00 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	I: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.1	mg/kg	16.9	5.1	1	01/10/20 15:03	01/12/20 17:43		
n-Triacontane (S)	95	%.	50-150		1	01/10/20 15:03	01/12/20 17:43	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974						
Percent Moisture	27.3	%	0.10	0.10	1		01/14/20 12:29		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<4.0	ug/kg	13.4	4.0	1	01/13/20 10:56	01/14/20 16:17	71-43-2	
Ethylbenzene	<3.9	ug/kg	12.9	3.9	1	01/13/20 10:56	01/14/20 16:17	100-41-4	
Methyl-tert-butyl ether	<8.5	ug/kg	28.3	8.5	1	01/13/20 10:56	01/14/20 16:17	1634-04-4	
Naphthalene	<66.8	ug/kg	222	66.8	1	01/13/20 10:56	01/14/20 16:17	91-20-3	
Toluene	<17.4	ug/kg	58.0	17.4	1	01/13/20 10:56	01/14/20 16:17	108-88-3	
1,2,4-Trimethylbenzene	<14.3	ug/kg	47.5	14.3	1	01/13/20 10:56	01/14/20 16:17	95-63-6	
1,3,5-Trimethylbenzene	<11.4	ug/kg	37.9	11.4	1	01/13/20 10:56	01/14/20 16:17	108-67-8	
Xylene (Total)	<16.6	ug/kg	55.1	16.6	1	01/13/20 10:56	01/14/20 16:17	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	104	%.	75-125		1	01/13/20 10:56	01/14/20 16:17	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 16:17	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	75-125		1	01/13/20 10:56	01/14/20 16:17	460-00-4	



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-7_2-4 Lab ID: 10504984013 Collected: 01/06/20 14:30 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<4.8	mg/kg	15.8	4.8	1	01/10/20 15:03	01/12/20 17:50		
n-Triacontane (S)	84	%.	50-150		1	01/10/20 15:03	01/12/20 17:50	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	23.0	%	0.10	0.10	1		01/14/20 12:29		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.7	ug/kg	12.3	3.7	1	01/13/20 10:56	01/14/20 15:58	71-43-2	
Ethylbenzene	<3.6	ug/kg	11.9	3.6	1	01/13/20 10:56	01/14/20 15:58	100-41-4	
Methyl-tert-butyl ether	<7.8	ug/kg	26.0	7.8	1	01/13/20 10:56	01/14/20 15:58	1634-04-4	
Naphthalene	<61.3	ug/kg	204	61.3	1	01/13/20 10:56	01/14/20 15:58	91-20-3	
Toluene	<16.0	ug/kg	53.2	16.0	1	01/13/20 10:56	01/14/20 15:58	108-88-3	
1,2,4-Trimethylbenzene	<13.1	ug/kg	43.6	13.1	1	01/13/20 10:56	01/14/20 15:58	95-63-6	
1,3,5-Trimethylbenzene	<10.4	ug/kg	34.8	10.4	1	01/13/20 10:56	01/14/20 15:58	108-67-8	
Xylene (Total)	<15.2	ug/kg	50.6	15.2	1	01/13/20 10:56	01/14/20 15:58	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	103	%.	75-125		1	01/13/20 10:56	01/14/20 15:58	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 15:58	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	75-125		1	01/13/20 10:56	01/14/20 15:58	460-00-4	



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-7_6-8 Lab ID: 10504984014 Collected: 01/06/20 14:40 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO P	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.1	mg/kg	16.9	5.1	1	01/10/20 15:03	01/12/20 17:57		
n-Triacontane (S)	84	%.	50-150		1	01/10/20 15:03	01/12/20 17:57	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974						
Percent Moisture	27.2	%	0.10	0.10	1		01/14/20 12:30		N2
8260B MSV UST	Analytical	Method: EPA	N 8260B Prep	aration Met	hod: El	PA 5035/5030B			
Benzene	<4.0	ug/kg	13.4	4.0	1	01/13/20 10:56	01/14/20 16:35	71-43-2	
Ethylbenzene	<3.9	ug/kg	13.0	3.9	1	01/13/20 10:56	01/14/20 16:35	100-41-4	
Methyl-tert-butyl ether	<8.5	ug/kg	28.4	8.5	1	01/13/20 10:56	01/14/20 16:35	1634-04-4	
Naphthalene	<67.0	ug/kg	223	67.0	1	01/13/20 10:56	01/14/20 16:35	91-20-3	
Toluene	<17.5	ug/kg	58.2	17.5	1	01/13/20 10:56	01/14/20 16:35	108-88-3	
1,2,4-Trimethylbenzene	<14.3	ug/kg	47.7	14.3	1	01/13/20 10:56	01/14/20 16:35	95-63-6	
1,3,5-Trimethylbenzene	<11.4	ug/kg	38.0	11.4	1	01/13/20 10:56	01/14/20 16:35	108-67-8	
Xylene (Total)	<16.6	ug/kg	55.3	16.6	1	01/13/20 10:56	01/14/20 16:35	1330-20-7	
Surrogates		- •							
1,2-Dichloroethane-d4 (S)	105	%.	75-125		1	01/13/20 10:56	01/14/20 16:35	17060-07-0	
Toluene-d8 (S)	102	%.	75-125		1	01/13/20 10:56	01/14/20 16:35	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 16:35	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-16_6-8 Lab ID: 10504984015 Collected: 01/06/20 14:55 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	26.5	mg/kg	16.9	5.1	1	01/10/20 15:03	01/12/20 16:26		T6
n-Triacontane (S)	90	%.	50-150		1	01/10/20 15:03	01/12/20 16:26	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	25.4	%	0.10	0.10	1		01/14/20 12:30		N2
8260B MSV UST	Analytical	Method: EPA	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.9	ug/kg	13.1	3.9	1	01/13/20 10:56	01/14/20 16:54	71-43-2	
Ethylbenzene	<3.8	ug/kg	12.6	3.8	1	01/13/20 10:56	01/14/20 16:54	100-41-4	
Methyl-tert-butyl ether	<8.3	ug/kg	27.6	8.3	1	01/13/20 10:56	01/14/20 16:54	1634-04-4	
Naphthalene	<65.2	ug/kg	217	65.2	1	01/13/20 10:56	01/14/20 16:54	91-20-3	
Toluene	<17.0	ug/kg	56.6	17.0	1	01/13/20 10:56	01/14/20 16:54	108-88-3	
1,2,4-Trimethylbenzene	<13.9	ug/kg	46.4	13.9	1	01/13/20 10:56	01/14/20 16:54	95-63-6	
1,3,5-Trimethylbenzene	<11.1	ug/kg	37.0	11.1	1	01/13/20 10:56	01/14/20 16:54	108-67-8	
Xylene (Total)	<16.2	ug/kg	53.8	16.2	1	01/13/20 10:56	01/14/20 16:54	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	104	%.	75-125		1	01/13/20 10:56	01/14/20 16:54	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/13/20 10:56	01/14/20 16:54	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 16:54	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-6_1.5-2 Lab ID: 10504984016 Collected: 01/06/20 15:10 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	23.6	mg/kg	17.9	5.4	1	01/10/20 15:03	01/12/20 16:19		T6
n-Triacontane (S)	85	%.	50-150		1	01/10/20 15:03	01/12/20 16:19	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	24.1	%	0.10	0.10	1		01/14/20 12:56		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	39.9	ug/kg	12.5	3.8	1	01/13/20 10:56	01/14/20 17:13	71-43-2	
Ethylbenzene	<3.6	ug/kg	12.1	3.6	1	01/13/20 10:56	01/14/20 17:13	100-41-4	
Methyl-tert-butyl ether	<7.9	ug/kg	26.4	7.9	1	01/13/20 10:56	01/14/20 17:13	1634-04-4	
Naphthalene	166J	ug/kg	208	62.4	1	01/13/20 10:56	01/14/20 17:13	91-20-3	
Toluene	51.2J	ug/kg	54.1	16.3	1	01/13/20 10:56	01/14/20 17:13	108-88-3	
1,2,4-Trimethylbenzene	<13.3	ug/kg	44.4	13.3	1	01/13/20 10:56	01/14/20 17:13	95-63-6	
1,3,5-Trimethylbenzene	<10.6	ug/kg	35.4	10.6	1	01/13/20 10:56	01/14/20 17:13	108-67-8	
Xylene (Total)	<15.5	ug/kg	51.5	15.5	1	01/13/20 10:56	01/14/20 17:13	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	103	%.	75-125		1	01/13/20 10:56	01/14/20 17:13	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 17:13	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/13/20 10:56	01/14/20 17:13	460-00-4	



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-6_5-6 Lab ID: 10504984017 Collected: 01/06/20 15:15 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI I	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<4.9	mg/kg	16.3	4.9	1	01/10/20 15:03	01/12/20 18:19		
n-Triacontane (S)	83	%.	50-150		1	01/10/20 15:03	01/12/20 18:19	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AST	M D2974						
Percent Moisture	26.4	%	0.10	0.10	1		01/14/20 12:57		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: El	PA 5035/5030B			
Benzene	<4.0	ug/kg	13.2	4.0	1	01/14/20 10:02	01/15/20 14:30	71-43-2	
Ethylbenzene	<3.8	ug/kg	12.7	3.8	1	01/14/20 10:02	01/15/20 14:30	100-41-4	
Methyl-tert-butyl ether	<8.4	ug/kg	27.9	8.4	1	01/14/20 10:02	01/15/20 14:30	1634-04-4	
Naphthalene	<65.8	ug/kg	219	65.8	1	01/14/20 10:02	01/15/20 14:30	91-20-3	
Toluene	<17.2	ug/kg	57.2	17.2	1	01/14/20 10:02	01/15/20 14:30	108-88-3	
1,2,4-Trimethylbenzene	<14.1	ug/kg	46.9	14.1	1	01/14/20 10:02	01/15/20 14:30	95-63-6	
1,3,5-Trimethylbenzene	<11.2	ug/kg	37.3	11.2	1	01/14/20 10:02	01/15/20 14:30	108-67-8	
Xylene (Total)	<16.3	ug/kg	54.3	16.3	1	01/14/20 10:02	01/15/20 14:30	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	98	%.	75-125		1	01/14/20 10:02	01/15/20 14:30	17060-07-0	
Toluene-d8 (S)	99	%.	75-125		1	01/14/20 10:02	01/15/20 14:30	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	75-125		1	01/14/20 10:02	01/15/20 14:30	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-21_2-4 Lab ID: 10504984018 Collected: 01/06/20 15:40 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	I: WI MOD DRO			
WDRO C10-C28 Surrogates	<6.0	mg/kg	19.9	6.0	1	01/10/20 15:03	01/12/20 18:05		
n-Triacontane (S)	86	%.	50-150		1	01/10/20 15:03	01/12/20 18:05	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	24.8	%	0.10	0.10	1		01/14/20 12:57		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.6	ug/kg	12.1	3.6	1	01/14/20 10:02	01/17/20 04:57	71-43-2	
Ethylbenzene	<3.5	ug/kg	11.7	3.5	1	01/14/20 10:02	01/17/20 04:57	100-41-4	
Methyl-tert-butyl ether	<7.7	ug/kg	25.6	7.7	1	01/14/20 10:02	01/17/20 04:57	1634-04-4	
Naphthalene	<60.5	ug/kg	201	60.5	1	01/14/20 10:02	01/17/20 04:57	91-20-3	
Toluene	<15.8	ug/kg	52.5	15.8	1	01/14/20 10:02	01/17/20 04:57	108-88-3	
1,2,4-Trimethylbenzene	<12.9	ug/kg	43.0	12.9	1	01/14/20 10:02	01/17/20 04:57	95-63-6	
1,3,5-Trimethylbenzene	<10.3	ug/kg	34.3	10.3	1	01/14/20 10:02	01/17/20 04:57	108-67-8	
Xylene (Total)	<15.0	ug/kg	49.9	15.0	1	01/14/20 10:02	01/17/20 04:57	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	104	%.	75-125		1	01/14/20 10:02	01/17/20 04:57	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/14/20 10:02	01/17/20 04:57	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125		1	01/14/20 10:02	01/17/20 04:57	460-00-4	



Project: 49161477.00 Nemadji PH II

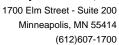
Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-21_6-8 Lab ID: 10504984019 Collected: 01/06/20 15:50 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<4.9	mg/kg	16.2	4.9	1	01/10/20 15:03	01/12/20 18:12		
n-Triacontane (S)	89	%.	50-150		1	01/10/20 15:03	01/12/20 18:12	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	25.2	%	0.10	0.10	1		01/14/20 12:57		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.8	ug/kg	12.8	3.8	1	01/14/20 10:02	01/17/20 04:38	71-43-2	
Ethylbenzene	<3.7	ug/kg	12.3	3.7	1	01/14/20 10:02	01/17/20 04:38	100-41-4	
Methyl-tert-butyl ether	<8.1	ug/kg	26.9	8.1	1	01/14/20 10:02	01/17/20 04:38	1634-04-4	
Naphthalene	<63.6	ug/kg	212	63.6	1	01/14/20 10:02	01/17/20 04:38	91-20-3	
Toluene	<16.6	ug/kg	55.2	16.6	1	01/14/20 10:02	01/17/20 04:38	108-88-3	
1,2,4-Trimethylbenzene	<13.6	ug/kg	45.3	13.6	1	01/14/20 10:02	01/17/20 04:38	95-63-6	
1,3,5-Trimethylbenzene	<10.8	ug/kg	36.1	10.8	1	01/14/20 10:02	01/17/20 04:38	108-67-8	
Xylene (Total)	<15.8	ug/kg	52.5	15.8	1	01/14/20 10:02	01/17/20 04:38	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	102	%.	75-125		1	01/14/20 10:02	01/17/20 04:38	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/14/20 10:02	01/17/20 04:38	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	75-125		1	01/14/20 10:02	01/17/20 04:38	460-00-4	





Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: Field Blank Lab ID: 10504984020 Collected: 01/06/20 15:20 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	nod: E	PA 5035/5030B			
Benzene	<2.8	ug/kg	9.4	2.8	1	01/14/20 10:02	01/15/20 06:26	71-43-2	
Ethylbenzene	<2.7	ug/kg	9.1	2.7	1	01/14/20 10:02	01/15/20 06:26	100-41-4	
Methyl-tert-butyl ether	<6.0	ug/kg	19.8	6.0	1	01/14/20 10:02	01/15/20 06:26	1634-04-4	
Naphthalene	<46.8	ug/kg	156	46.8	1	01/14/20 10:02	01/15/20 06:26	91-20-3	
Toluene	<12.2	ug/kg	40.6	12.2	1	01/14/20 10:02	01/15/20 06:26	108-88-3	
1,2,4-Trimethylbenzene	<10.0	ug/kg	33.3	10.0	1	01/14/20 10:02	01/15/20 06:26	95-63-6	
1,3,5-Trimethylbenzene	<8.0	ug/kg	26.5	8.0	1	01/14/20 10:02	01/15/20 06:26	108-67-8	
Xylene (Total)	<11.6	ug/kg	38.6	11.6	1	01/14/20 10:02	01/15/20 06:26	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	75-125		1	01/14/20 10:02	01/15/20 06:26	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/14/20 10:02	01/15/20 06:26	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125		1	01/14/20 10:02	01/15/20 06:26	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-22_2-4 Lab ID: 10504984021 Collected: 01/07/20 09:15 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<4.5	mg/kg	14.9	4.5	1	01/10/20 15:03	01/12/20 18:26		
n-Triacontane (S)	88	%.	50-150		1	01/10/20 15:03	01/12/20 18:26	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	24.3	%	0.10	0.10	1		01/14/20 12:57		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.7	ug/kg	12.2	3.7	1	01/15/20 11:36	01/18/20 02:41	71-43-2	
Ethylbenzene	<3.5	ug/kg	11.8	3.5	1	01/15/20 11:36	01/18/20 02:41	100-41-4	
Methyl-tert-butyl ether	<7.7	ug/kg	25.8	7.7	1	01/15/20 11:36	01/18/20 02:41	1634-04-4	
Naphthalene	<60.9	ug/kg	203	60.9	1	01/15/20 11:36	01/18/20 02:41	91-20-3	
Toluene	<15.9	ug/kg	52.9	15.9	1	01/15/20 11:36	01/18/20 02:41	108-88-3	
1,2,4-Trimethylbenzene	<13.0	ug/kg	43.3	13.0	1	01/15/20 11:36	01/16/20 02:08	95-63-6	
1,3,5-Trimethylbenzene	<10.4	ug/kg	34.5	10.4	1	01/15/20 11:36	01/18/20 02:41	108-67-8	
Xylene (Total)	<15.1	ug/kg	50.3	15.1	1	01/15/20 11:36	01/18/20 02:41	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 02:41	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 02:41	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/15/20 11:36	01/18/20 02:41	460-00-4	



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-22_6-8 Lab ID: 10504984022 Collected: 01/07/20 09:25 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.6	mg/kg	18.8	5.6	1	01/10/20 15:42	01/12/20 13:53		
n-Triacontane (S)	83	%.	50-150		1	01/10/20 15:42	01/12/20 13:53	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	25.2	%	0.10	0.10	1		01/14/20 12:57		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.7	ug/kg	12.4	3.7	1	01/15/20 11:36	01/18/20 03:00	71-43-2	
Ethylbenzene	<3.6	ug/kg	11.9	3.6	1	01/15/20 11:36	01/18/20 03:00	100-41-4	
Methyl-tert-butyl ether	<7.8	ug/kg	26.1	7.8	1	01/15/20 11:36	01/18/20 03:00	1634-04-4	
Naphthalene	<61.7	ug/kg	206	61.7	1	01/15/20 11:36	01/18/20 03:00	91-20-3	
Toluene	<16.1	ug/kg	53.6	16.1	1	01/15/20 11:36	01/18/20 03:00	108-88-3	
1,2,4-Trimethylbenzene	<13.2	ug/kg	43.9	13.2	1	01/15/20 11:36	01/16/20 02:27	95-63-6	
1,3,5-Trimethylbenzene	<10.5	ug/kg	35.0	10.5	1	01/15/20 11:36	01/18/20 03:00	108-67-8	
Xylene (Total)	<15.3	ug/kg	51.0	15.3	1	01/15/20 11:36	01/18/20 03:00	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	102	%.	75-125		1	01/15/20 11:36	01/18/20 03:00	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 03:00	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/15/20 11:36	01/18/20 03:00	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-23_6-8 Lab ID: 10504984023 Collected: 01/07/20 09:50 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<4.4	mg/kg	14.7	4.4	1	01/10/20 15:42	01/12/20 13:39		
n-Triacontane (S)	85	%.	50-150		1	01/10/20 15:42	01/12/20 13:39	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	23.4	%	0.10	0.10	1		01/14/20 12:57		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.7	ug/kg	12.5	3.7	1	01/15/20 11:36	01/18/20 03:19	71-43-2	
Ethylbenzene	<3.6	ug/kg	12.0	3.6	1	01/15/20 11:36	01/18/20 03:19	100-41-4	
Methyl-tert-butyl ether	<7.9	ug/kg	26.3	7.9	1	01/15/20 11:36	01/18/20 03:19	1634-04-4	
Naphthalene	<62.1	ug/kg	207	62.1	1	01/15/20 11:36	01/18/20 03:19	91-20-3	
Toluene	<16.2	ug/kg	53.9	16.2	1	01/15/20 11:36	01/18/20 03:19	108-88-3	
1,2,4-Trimethylbenzene	<13.3	ug/kg	44.2	13.3	1	01/15/20 11:36	01/16/20 02:46	95-63-6	
1,3,5-Trimethylbenzene	<10.6	ug/kg	35.2	10.6	1	01/15/20 11:36	01/18/20 03:19	108-67-8	
Xylene (Total)	<15.4	ug/kg	51.3	15.4	1	01/15/20 11:36	01/18/20 03:19	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	102	%.	75-125		1	01/15/20 11:36	01/18/20 03:19	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 03:19	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/15/20 11:36	01/18/20 03:19	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-29_2-4 Lab ID: 10504984024 Collected: 01/07/20 10:20 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	14.0J	mg/kg	15.4	4.6	1	01/10/20 15:42	01/12/20 13:46		
n-Triacontane (S)	84	%.	50-150		1	01/10/20 15:42	01/12/20 13:46	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	24.0	%	0.10	0.10	1		01/14/20 12:57		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.6	ug/kg	12.0	3.6	1	01/15/20 11:36	01/18/20 03:38	71-43-2	
Ethylbenzene	<3.5	ug/kg	11.6	3.5	1	01/15/20 11:36	01/18/20 03:38	100-41-4	
Methyl-tert-butyl ether	<7.6	ug/kg	25.4	7.6	1	01/15/20 11:36	01/18/20 03:38	1634-04-4	
Naphthalene	<60.0	ug/kg	200	60.0	1	01/15/20 11:36	01/18/20 03:38	91-20-3	
Toluene	<15.6	ug/kg	52.1	15.6	1	01/15/20 11:36	01/18/20 03:38	108-88-3	
1,2,4-Trimethylbenzene	<12.8	ug/kg	42.7	12.8	1	01/15/20 11:36	01/16/20 03:24	95-63-6	
1,3,5-Trimethylbenzene	<10.2	ug/kg	34.0	10.2	1	01/15/20 11:36	01/18/20 03:38	108-67-8	
Xylene (Total)	<14.9	ug/kg	49.5	14.9	1	01/15/20 11:36	01/18/20 03:38	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	102	%.	75-125		1	01/15/20 11:36	01/18/20 03:38	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 03:38	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	75-125		1	01/15/20 11:36	01/18/20 03:38	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-29_6-8 Lab ID: 10504984025 Collected: 01/07/20 10:25 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO P	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.3	mg/kg	17.7	5.3	1	01/10/20 15:42	01/12/20 14:00		
n-Triacontane (S)	88	%.	50-150		1	01/10/20 15:42	01/12/20 14:00	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974						
Percent Moisture	29.3	%	0.10	0.10	1		01/14/20 12:57		N2
8260B MSV UST	Analytical	Method: EPA	A 8260B Prep	aration Met	hod: El	PA 5035/5030B			
Benzene	<3.9	ug/kg	12.9	3.9	1	01/15/20 11:36	01/18/20 03:57	71-43-2	
Ethylbenzene	<3.7	ug/kg	12.4	3.7	1	01/15/20 11:36	01/18/20 03:57	100-41-4	
Methyl-tert-butyl ether	<8.2	ug/kg	27.1	8.2	1	01/15/20 11:36	01/18/20 03:57	1634-04-4	
Naphthalene	<64.1	ug/kg	213	64.1	1	01/15/20 11:36	01/18/20 03:57	91-20-3	
Toluene	<16.7	ug/kg	55.7	16.7	1	01/15/20 11:36	01/18/20 03:57	108-88-3	
1,2,4-Trimethylbenzene	<13.7	ug/kg	45.6	13.7	1	01/15/20 11:36	01/16/20 03:05	95-63-6	
1,3,5-Trimethylbenzene	<10.9	ug/kg	36.4	10.9	1	01/15/20 11:36	01/18/20 03:57	108-67-8	
Xylene (Total)	<15.9	ug/kg	52.9	15.9	1	01/15/20 11:36	01/18/20 03:57	1330-20-7	
Surrogates		- -							
1,2-Dichloroethane-d4 (S)	102	%.	75-125		1	01/15/20 11:36	01/18/20 03:57	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 03:57	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125		1	01/15/20 11:36	01/18/20 03:57	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-27_2-4 Lab ID: 10504984026 Collected: 01/07/20 10:40 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.0	mg/kg	16.8	5.0	1	01/10/20 15:42	01/12/20 14:07		
n-Triacontane (S)	91	%.	50-150		1	01/10/20 15:42	01/12/20 14:07	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	25.8	%	0.10	0.10	1		01/14/20 12:58		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.7	ug/kg	12.3	3.7	1	01/15/20 11:36	01/18/20 04:16	71-43-2	
Ethylbenzene	<3.6	ug/kg	11.9	3.6	1	01/15/20 11:36	01/18/20 04:16	100-41-4	
Methyl-tert-butyl ether	<7.8	ug/kg	26.0	7.8	1	01/15/20 11:36	01/18/20 04:16	1634-04-4	
Naphthalene	<61.3	ug/kg	204	61.3	1	01/15/20 11:36	01/18/20 04:16	91-20-3	
Toluene	<16.0	ug/kg	53.2	16.0	1	01/15/20 11:36	01/18/20 04:16	108-88-3	
1,2,4-Trimethylbenzene	<13.1	ug/kg	43.6	13.1	1	01/15/20 11:36	01/16/20 03:43	95-63-6	
1,3,5-Trimethylbenzene	<10.4	ug/kg	34.8	10.4	1	01/15/20 11:36	01/18/20 04:16	108-67-8	
Xylene (Total)	<15.2	ug/kg	50.6	15.2	1	01/15/20 11:36	01/18/20 04:16	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 04:16	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 04:16	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125		1	01/15/20 11:36	01/18/20 04:16	460-00-4	



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-27_6-8 Lab ID: 10504984027 Collected: 01/07/20 10:45 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO P	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<4.8	mg/kg	16.1	4.8	1	01/10/20 15:42	01/12/20 14:14		
n-Triacontane (S)	85	%.	50-150		1	01/10/20 15:42	01/12/20 14:14	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AST	ΓM D2974						
Percent Moisture	26.4	%	0.10	0.10	1		01/14/20 12:58		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: El	PA 5035/5030B			
Benzene	<3.8	ug/kg	12.5	3.8	1	01/15/20 11:36	01/18/20 04:35	71-43-2	
Ethylbenzene	<3.6	ug/kg	12.1	3.6	1	01/15/20 11:36	01/18/20 04:35	100-41-4	
Methyl-tert-butyl ether	<7.9	ug/kg	26.4	7.9	1	01/15/20 11:36	01/18/20 04:35	1634-04-4	
Naphthalene	<62.4	ug/kg	208	62.4	1	01/15/20 11:36	01/18/20 04:35	91-20-3	
Toluene	<16.3	ug/kg	54.2	16.3	1	01/15/20 11:36	01/18/20 04:35	108-88-3	
1,2,4-Trimethylbenzene	<13.3	ug/kg	44.4	13.3	1	01/15/20 11:36	01/16/20 04:02	95-63-6	
1,3,5-Trimethylbenzene	<10.6	ug/kg	35.4	10.6	1	01/15/20 11:36	01/18/20 04:35	108-67-8	
Xylene (Total)	<15.5	ug/kg	51.5	15.5	1	01/15/20 11:36	01/18/20 04:35	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	102	%.	75-125		1	01/15/20 11:36	01/18/20 04:35	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 04:35	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/15/20 11:36	01/18/20 04:35	460-00-4	



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-28_6-8 Lab ID: 10504984028 Collected: 01/07/20 11:00 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.1	mg/kg	17.0	5.1	1	01/10/20 15:42	01/12/20 14:21		
n-Triacontane (S)	84	%.	50-150		1	01/10/20 15:42	01/12/20 14:21	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	27.1	%	0.10	0.10	1		01/14/20 12:58		N2
8260B MSV UST	Analytical	Method: EPA	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.7	ug/kg	12.3	3.7	1	01/15/20 11:36	01/18/20 04:54	71-43-2	
Ethylbenzene	<3.6	ug/kg	11.8	3.6	1	01/15/20 11:36	01/18/20 04:54	100-41-4	
Methyl-tert-butyl ether	<7.8	ug/kg	25.9	7.8	1	01/15/20 11:36	01/18/20 04:54	1634-04-4	
Naphthalene	<61.2	ug/kg	204	61.2	1	01/15/20 11:36	01/18/20 04:54	91-20-3	
Toluene	<16.0	ug/kg	53.1	16.0	1	01/15/20 11:36	01/18/20 04:54	108-88-3	
1,2,4-Trimethylbenzene	<13.1	ug/kg	43.5	13.1	1	01/15/20 11:36	01/16/20 04:21	95-63-6	
1,3,5-Trimethylbenzene	<10.4	ug/kg	34.7	10.4	1	01/15/20 11:36	01/18/20 04:54	108-67-8	
Xylene (Total)	<15.2	ug/kg	50.5	15.2	1	01/15/20 11:36	01/18/20 04:54	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 04:54	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 04:54	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/15/20 11:36	01/18/20 04:54	460-00-4	



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-24_6-8 Lab ID: 10504984029 Collected: 01/07/20 11:20 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<4.9	mg/kg	16.4	4.9	1	01/10/20 15:42	01/12/20 13:10		
n-Triacontane (S)	84	%.	50-150		1	01/10/20 15:42	01/12/20 13:10	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AST	TM D2974						
Percent Moisture	23.6	%	0.10	0.10	1		01/14/20 12:58		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: El	PA 5035/5030B			
Benzene	<3.7	ug/kg	12.4	3.7	1	01/15/20 11:36	01/18/20 05:13	71-43-2	
Ethylbenzene	<3.6	ug/kg	12.0	3.6	1	01/15/20 11:36	01/18/20 05:13	100-41-4	
Methyl-tert-butyl ether	<7.9	ug/kg	26.2	7.9	1	01/15/20 11:36	01/18/20 05:13	1634-04-4	
Naphthalene	<62.0	ug/kg	206	62.0	1	01/15/20 11:36	01/18/20 05:13	91-20-3	
Toluene	<16.2	ug/kg	53.8	16.2	1	01/15/20 11:36	01/18/20 05:13	108-88-3	
1,2,4-Trimethylbenzene	<13.2	ug/kg	44.1	13.2	1	01/15/20 11:36	01/16/20 04:39	95-63-6	
1,3,5-Trimethylbenzene	<10.6	ug/kg	35.1	10.6	1	01/15/20 11:36	01/18/20 05:13	108-67-8	
Xylene (Total)	<15.4	ug/kg	51.1	15.4	1	01/15/20 11:36	01/18/20 05:13	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	102	%.	75-125		1	01/15/20 11:36	01/18/20 05:13	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 05:13	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125		1	01/15/20 11:36	01/18/20 05:13	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-25_6-8 Lab ID: 10504984030 Collected: 01/07/20 11:45 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	15.5J	mg/kg	18.4	5.5	1	01/10/20 15:42	01/12/20 13:32		
n-Triacontane (S)	79	%.	50-150		1	01/10/20 15:42	01/12/20 13:32	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974						
Percent Moisture	34.5	%	0.10	0.10	1		01/14/20 12:58		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<4.6	ug/kg	15.2	4.6	1	01/17/20 09:57	01/18/20 05:32	71-43-2	
Ethylbenzene	<4.4	ug/kg	14.7	4.4	1	01/17/20 09:57	01/18/20 05:32	100-41-4	
Methyl-tert-butyl ether	<9.7	ug/kg	32.1	9.7	1	01/17/20 09:57	01/18/20 05:32	1634-04-4	
Naphthalene	<75.9	ug/kg	253	75.9	1	01/17/20 09:57	01/18/20 05:32	91-20-3	
Toluene	<19.8	ug/kg	65.9	19.8	1	01/17/20 09:57	01/18/20 05:32	108-88-3	
1,2,4-Trimethylbenzene	<16.2	ug/kg	54.0	16.2	1	01/17/20 09:57	01/18/20 05:32	95-63-6	
1,3,5-Trimethylbenzene	<12.9	ug/kg	43.1	12.9	1	01/17/20 09:57	01/18/20 05:32	108-67-8	
Xylene (Total)	<18.8	ug/kg	62.7	18.8	1	01/17/20 09:57	01/18/20 05:32	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	102	%.	75-125		1	01/17/20 09:57	01/18/20 05:32	17060-07-0	
Toluene-d8 (S)	99	%.	75-125		1	01/17/20 09:57	01/18/20 05:32	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125		1	01/17/20 09:57	01/18/20 05:32	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-26_2-4 Lab ID: 10504984031 Collected: 01/07/20 12:35 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<4.8	mg/kg	16.1	4.8	1	01/10/20 15:42	01/12/20 14:28		
n-Triacontane (S)	85	%.	50-150		1	01/10/20 15:42	01/12/20 14:28	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	25.5	%	0.10	0.10	1		01/14/20 12:58		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.9	ug/kg	13.0	3.9	1	01/15/20 11:36	01/18/20 05:50	71-43-2	
Ethylbenzene	<3.8	ug/kg	12.6	3.8	1	01/15/20 11:36	01/18/20 05:50	100-41-4	
Methyl-tert-butyl ether	<8.3	ug/kg	27.5	8.3	1	01/15/20 11:36	01/18/20 05:50	1634-04-4	
Naphthalene	<64.9	ug/kg	216	64.9	1	01/15/20 11:36	01/18/20 05:50	91-20-3	
Toluene	<16.9	ug/kg	56.4	16.9	1	01/15/20 11:36	01/18/20 05:50	108-88-3	
1,2,4-Trimethylbenzene	<13.9	ug/kg	46.2	13.9	1	01/15/20 11:36	01/16/20 05:17	95-63-6	
1,3,5-Trimethylbenzene	<11.1	ug/kg	36.8	11.1	1	01/15/20 11:36	01/18/20 05:50	108-67-8	
Xylene (Total)	<16.1	ug/kg	53.6	16.1	1	01/15/20 11:36	01/18/20 05:50	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 05:50	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 05:50	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/15/20 11:36	01/18/20 05:50	460-00-4	



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-26_6-8 Lab ID: 10504984032 Collected: 01/07/20 12:45 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO P	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.3	mg/kg	17.6	5.3	1	01/10/20 15:42	01/12/20 14:35		
n-Triacontane (S)	89	%.	50-150		1	01/10/20 15:42	01/12/20 14:35	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical I	Method: AS	ΓM D2974						
Percent Moisture	29.5	%	0.10	0.10	1		01/14/20 12:59		N2
8260B MSV UST	Analytical I	Method: EPA	A 8260B Prep	aration Met	hod: El	PA 5035/5030B			
Benzene	<3.9	ug/kg	13.0	3.9	1	01/15/20 11:36	01/18/20 06:09	71-43-2	
Ethylbenzene	<3.8	ug/kg	12.5	3.8	1	01/15/20 11:36	01/18/20 06:09	100-41-4	
Methyl-tert-butyl ether	<8.2	ug/kg	27.4	8.2	1	01/15/20 11:36	01/18/20 06:09	1634-04-4	
Naphthalene	<64.7	ug/kg	215	64.7	1	01/15/20 11:36	01/18/20 06:09	91-20-3	
Toluene	<16.9	ug/kg	56.2	16.9	1	01/15/20 11:36	01/18/20 06:09	108-88-3	
1,2,4-Trimethylbenzene	<13.8	ug/kg	46.0	13.8	1	01/15/20 11:36	01/16/20 05:36	95-63-6	
1,3,5-Trimethylbenzene	<11.0	ug/kg	36.7	11.0	1	01/15/20 11:36	01/18/20 06:09	108-67-8	
Xylene (Total)	<16.0	ug/kg	53.4	16.0	1	01/15/20 11:36	01/18/20 06:09	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 06:09	17060-07-0	
Toluene-d8 (S)	99	%.	75-125		1	01/15/20 11:36	01/18/20 06:09	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/15/20 11:36	01/18/20 06:09	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-19_6-8 Lab ID: 10504984033 Collected: 01/07/20 13:10 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.0	mg/kg	16.7	5.0	1	01/10/20 15:42	01/12/20 14:56		
n-Triacontane (S)	82	%.	50-150		1	01/10/20 15:42	01/12/20 14:56	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	24.5	%	0.10	0.10	1		01/14/20 12:59		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.9	ug/kg	12.9	3.9	1	01/15/20 11:36	01/18/20 06:28	71-43-2	
Ethylbenzene	<3.7	ug/kg	12.5	3.7	1	01/15/20 11:36	01/18/20 06:28	100-41-4	
Methyl-tert-butyl ether	<8.2	ug/kg	27.3	8.2	1	01/15/20 11:36	01/18/20 06:28	1634-04-4	
Naphthalene	<64.4	ug/kg	214	64.4	1	01/15/20 11:36	01/18/20 06:28	91-20-3	
Toluene	<16.8	ug/kg	55.9	16.8	1	01/15/20 11:36	01/18/20 06:28	108-88-3	
1,2,4-Trimethylbenzene	<13.8	ug/kg	45.8	13.8	1	01/15/20 11:36	01/16/20 05:55	95-63-6	
1,3,5-Trimethylbenzene	<11.0	ug/kg	36.5	11.0	1	01/15/20 11:36	01/18/20 06:28	108-67-8	
Xylene (Total)	<16.0	ug/kg	53.1	16.0	1	01/15/20 11:36	01/18/20 06:28	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 06:28	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 06:28	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125		1	01/15/20 11:36	01/18/20 06:28	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-18_2-4 Lab ID: 10504984034 Collected: 01/07/20 13:30 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI I	MOD DRO P	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.1	mg/kg	16.9	5.1	1	01/10/20 15:42	01/12/20 15:03		
n-Triacontane (S)	88	%.	50-150		1	01/10/20 15:42	01/12/20 15:03	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AST	M D2974						
Percent Moisture	24.8	%	0.10	0.10	1		01/14/20 12:59		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: El	PA 5035/5030B			
Benzene	<3.8	ug/kg	12.6	3.8	1	01/15/20 11:36	01/18/20 06:47	71-43-2	
Ethylbenzene	<3.6	ug/kg	12.2	3.6	1	01/15/20 11:36	01/18/20 06:47	100-41-4	
Methyl-tert-butyl ether	<8.0	ug/kg	26.6	8.0	1	01/15/20 11:36	01/18/20 06:47	1634-04-4	
Naphthalene	<62.8	ug/kg	209	62.8	1	01/15/20 11:36	01/18/20 06:47	91-20-3	
Toluene	<16.4	ug/kg	54.5	16.4	1	01/15/20 11:36	01/18/20 06:47	108-88-3	
1,2,4-Trimethylbenzene	<13.4	ug/kg	44.7	13.4	1	01/15/20 11:36	01/16/20 06:13	95-63-6	
1,3,5-Trimethylbenzene	<10.7	ug/kg	35.6	10.7	1	01/15/20 11:36	01/18/20 06:47	108-67-8	
Xylene (Total)	<15.6	ug/kg	51.8	15.6	1	01/15/20 11:36	01/18/20 06:47	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 06:47	17060-07-0	
Toluene-d8 (S)	99	%.	75-125		1	01/15/20 11:36	01/18/20 06:47	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125		1	01/15/20 11:36	01/18/20 06:47	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-18_6-8 Lab ID: 10504984035 Collected: 01/07/20 13:40 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.1	mg/kg	17.1	5.1	1	01/10/20 15:42	01/12/20 15:10		
n-Triacontane (S)	85	%.	50-150		1	01/10/20 15:42	01/12/20 15:10	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	27.2	%	0.10	0.10	1		01/14/20 12:59		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.9	ug/kg	12.9	3.9	1	01/15/20 11:36	01/18/20 07:06	71-43-2	
Ethylbenzene	<3.7	ug/kg	12.5	3.7	1	01/15/20 11:36	01/18/20 07:06	100-41-4	
Methyl-tert-butyl ether	<8.2	ug/kg	27.3	8.2	1	01/15/20 11:36	01/18/20 07:06	1634-04-4	
Naphthalene	<64.4	ug/kg	214	64.4	1	01/15/20 11:36	01/18/20 07:06	91-20-3	
Toluene	<16.8	ug/kg	55.9	16.8	1	01/15/20 11:36	01/18/20 07:06	108-88-3	
1,2,4-Trimethylbenzene	<13.8	ug/kg	45.8	13.8	1	01/15/20 11:36	01/16/20 06:32	95-63-6	
1,3,5-Trimethylbenzene	<11.0	ug/kg	36.5	11.0	1	01/15/20 11:36	01/18/20 07:06	108-67-8	
Xylene (Total)	<16.0	ug/kg	53.2	16.0	1	01/15/20 11:36	01/18/20 07:06	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	99	%.	75-125		1	01/15/20 11:36	01/18/20 07:06	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 07:06	2037-26-5	
4-Bromofluorobenzene (S)	96	%.	75-125		1	01/15/20 11:36	01/18/20 07:06	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-17_6-8 Lab ID: 10504984036 Collected: 01/07/20 14:05 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.1	mg/kg	17.1	5.1	1	01/10/20 15:42	01/12/20 15:17		
n-Triacontane (S)	88	%.	50-150		1	01/10/20 15:42	01/12/20 15:17	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	26.2	%	0.10	0.10	1		01/15/20 10:12		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.8	ug/kg	12.8	3.8	1	01/15/20 11:36	01/18/20 07:25	71-43-2	
Ethylbenzene	<3.7	ug/kg	12.4	3.7	1	01/15/20 11:36	01/18/20 07:25	100-41-4	
Methyl-tert-butyl ether	<8.1	ug/kg	27.0	8.1	1	01/15/20 11:36	01/18/20 07:25	1634-04-4	
Naphthalene	<63.9	ug/kg	213	63.9	1	01/15/20 11:36	01/18/20 07:25	91-20-3	
Toluene	<16.7	ug/kg	55.5	16.7	1	01/15/20 11:36	01/18/20 07:25	108-88-3	
1,2,4-Trimethylbenzene	<13.6	ug/kg	45.5	13.6	1	01/15/20 11:36	01/16/20 06:51	95-63-6	
1,3,5-Trimethylbenzene	<10.9	ug/kg	36.2	10.9	1	01/15/20 11:36	01/18/20 07:25	108-67-8	
Xylene (Total)	<15.8	ug/kg	52.7	15.8	1	01/15/20 11:36	01/18/20 07:25	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 07:25	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 07:25	2037-26-5	
4-Bromofluorobenzene (S)	96	%.	75-125		1	01/15/20 11:36	01/18/20 07:25	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

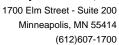
Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-20_6-8 Lab ID: 10504984037 Collected: 01/07/20 14:20 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<4.9	mg/kg	16.4	4.9	1	01/10/20 15:42	01/12/20 14:42		
n-Triacontane (S)	82	%.	50-150		1	01/10/20 15:42	01/12/20 14:42	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974						
Percent Moisture	25.7	%	0.10	0.10	1		01/15/20 10:12		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.7	ug/kg	12.4	3.7	1	01/15/20 11:36	01/18/20 07:44	71-43-2	
Ethylbenzene	<3.6	ug/kg	11.9	3.6	1	01/15/20 11:36	01/18/20 07:44	100-41-4	
Methyl-tert-butyl ether	<7.8	ug/kg	26.1	7.8	1	01/15/20 11:36	01/18/20 07:44	1634-04-4	
Naphthalene	<61.7	ug/kg	205	61.7	1	01/15/20 11:36	01/18/20 07:44	91-20-3	
Toluene	<16.1	ug/kg	53.5	16.1	1	01/15/20 11:36	01/18/20 07:44	108-88-3	
1,2,4-Trimethylbenzene	<13.2	ug/kg	43.9	13.2	1	01/15/20 11:36	01/16/20 07:10	95-63-6	
1,3,5-Trimethylbenzene	<10.5	ug/kg	35.0	10.5	1	01/15/20 11:36	01/18/20 07:44	108-67-8	
Xylene (Total)	<15.3	ug/kg	50.9	15.3	1	01/15/20 11:36	01/18/20 07:44	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 07:44	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 07:44	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/15/20 11:36	01/18/20 07:44	460-00-4	





Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: Trip Blank Lab ID: 10504984038 Collected: 01/07/20 00:00 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV UST	Analytical	Method: EPA	\ 8260B Prep	aration Metl	nod: E	PA 5035/5030B			
Benzene	<2.8	ug/kg	9.4	2.8	1	01/15/20 11:36	01/18/20 02:04	71-43-2	
Ethylbenzene	<2.7	ug/kg	9.1	2.7	1	01/15/20 11:36	01/18/20 02:04	100-41-4	
Methyl-tert-butyl ether	<6.0	ug/kg	19.8	6.0	1	01/15/20 11:36	01/18/20 02:04	1634-04-4	
Naphthalene	<46.8	ug/kg	156	46.8	1	01/15/20 11:36	01/18/20 02:04	91-20-3	
Toluene	<12.2	ug/kg	40.6	12.2	1	01/15/20 11:36	01/18/20 02:04	108-88-3	
1,2,4-Trimethylbenzene	<10.0	ug/kg	33.3	10.0	1	01/15/20 11:36	01/16/20 01:49	95-63-6	
1,3,5-Trimethylbenzene	<8.0	ug/kg	26.5	8.0	1	01/15/20 11:36	01/18/20 02:04	108-67-8	
Xylene (Total)	<11.6	ug/kg	38.6	11.6	1	01/15/20 11:36	01/18/20 02:04	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 02:04	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 02:04	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 02:04	460-00-4	





49161477.00 Nemadji PH II Project:

Pace Project No.: 10504984

QC Batch: 654419 Analysis Method: **ASTM D2974**

%

QC Batch Method: **ASTM D2974** Analysis Description: Dry Weight / %M by ASTM D2974

10504984001, 10504984002, 10504984003, 10504984004, 10504984005, 10504984006, 10504984007, Associated Lab Samples:

10504984008, 10504984009, 10504984010, 10504984011, 10504984012, 10504984013, 10504984014,

10504984015

SAMPLE DUPLICATE: 3518067

Parameter

10504984015 Dup Max RPD **RPD** Units Result Result Qualifiers 25.4 25.0 2 30 N2

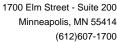
SAMPLE DUPLICATE: 3518350

Date: 01/24/2020 03:21 PM

Percent Moisture

10504967006 Dup Max Parameter Units Result Result **RPD** RPD Qualifiers Percent Moisture % 16.3 16.2 0 30 N2

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

QC Batch: 654420 Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974 Analysis Description: Dry Weight / %M by ASTM D2974

Associated Lab Samples: 10504984016, 10504984017, 10504984018, 10504984019, 10504984021, 10504984022, 10504984023,

10504984024, 10504984025, 10504984026, 10504984027, 10504984028, 10504984029, 10504984030,

 $10504984031,\, 10504984032,\, 10504984033,\, 10504984034,\, 10504984035$

SAMPLE DUPLICATE: 3518069

Parameter

10504984016 Dup Max
Units Result Result RPD RPD Qualifiers

Percent Moisture % 24.1 26.0 7 30 N2

SAMPLE DUPLICATE: 3518070

Date: 01/24/2020 03:21 PM

10504984035 Dup Max Parameter Units Result Result **RPD** RPD Qualifiers Percent Moisture % 27.2 25.9 30 N2 5

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALITY CONTROL DATA

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

QC Batch: 654665 Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974 Analysis Description: Dry Weight / %M by ASTM D2974

Associated Lab Samples: 10504984036, 10504984037

SAMPLE DUPLICATE: 3519132

 Percent Moisture
 Units
 10505286001 Result
 Dup Result
 Max Result
 RPD
 Qualifiers

 16.8
 17.4
 4
 30 N2

SAMPLE DUPLICATE: 3519254

Date: 01/24/2020 03:21 PM

10504984037 Dup Max RPD RPD Parameter Units Result Result Qualifiers Percent Moisture % 25.7 27.4 7 30 N2

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

QC Batch: 654083 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035/5030B Analysis Description: 8260B MSV UST

Associated Lab Samples: 10504984001, 10504984002, 10504984003

METHOD BLANK: 3516236 Matrix: Solid

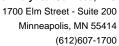
Associated Lab Samples: 10504984001, 10504984002, 10504984003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<10.0	33.3	01/13/20 14:24	
1,3,5-Trimethylbenzene	ug/kg	<8.0	26.5	01/13/20 14:24	
Benzene	ug/kg	<2.8	9.4	01/13/20 14:24	
Ethylbenzene	ug/kg	<2.7	9.1	01/13/20 14:24	
Methyl-tert-butyl ether	ug/kg	<6.0	19.8	01/13/20 14:24	
Naphthalene	ug/kg	<46.8	156	01/13/20 14:24	
Toluene	ug/kg	<12.2	40.6	01/13/20 14:24	
Xylene (Total)	ug/kg	<11.6	38.6	01/13/20 14:24	
1,2-Dichloroethane-d4 (S)	%.	103	75-125	01/13/20 14:24	
4-Bromofluorobenzene (S)	%.	100	75-125	01/13/20 14:24	
Toluene-d8 (S)	%.	101	75-125	01/13/20 14:24	

LABORATORY CONTROL SAMPLE:	3516237					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	652	65	63-126	
1,3,5-Trimethylbenzene	ug/kg	1000	652	65	64-125	
Benzene	ug/kg	1000	609	61	59-125	
Ethylbenzene	ug/kg	1000	670	67	62-125	
Methyl-tert-butyl ether	ug/kg	1000	651	65	58-125	
Naphthalene	ug/kg	1000	588	59	57-125	
Toluene	ug/kg	1000	629	63	59-125	
Xylene (Total)	ug/kg	3000	1950	65	65-125	
1,2-Dichloroethane-d4 (S)	%.			98	75-125	
4-Bromofluorobenzene (S)	%.			101	75-125	
Toluene-d8 (S)	%.			100	75-125	

MATRIX SPIKE & MATRIX S	SPIKE DUPLIC	CATE: 3516	238 MS	MSD	3516239							
Parameter	1 Units	0504908001 Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/kg	ND	1080	1080	969	996	90	92	53-150	3	30	
1,3,5-Trimethylbenzene	ug/kg	ND	1080	1080	960	985	89	91	60-150	3	30	
Benzene	ug/kg	ND	1080	1080	839	811	78	75	46-150	3	30	
Ethylbenzene	ug/kg	ND	1080	1080	950	952	88	88	59-150	0	30	
Methyl-tert-butyl ether	ug/kg	ND	1080	1080	937	921	87	85	50-150	2	30	
Naphthalene	ug/kg	ND	1080	1080	982	1030	91	96	50-150	5	30	
Toluene	ug/kg	ND	1080	1080	858	865	80	80	55-150	1	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

MATRIX SPIKE & MATRIX SF	PIKE DUPL	.ICATE: 3516			3516239							
		10504908001	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	% Rec	RPD	RPD	Qual
												- Quai
Xylene (Total)	ug/kg	ND	3230	3240	2810	2840	87	88	60-150	1	30	
1,2-Dichloroethane-d4 (S)	%.						100	98	75-125			
4-Bromofluorobenzene (S)	%.						99	100	75-125			
Toluene-d8 (S)	%.						100	100	75-125			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

QC Batch: 654110 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035/5030B Analysis Description: 8260B MSV UST

Associated Lab Samples: 10504984004, 10504984005, 10504984006, 10504984007, 10504984008, 10504984009, 10504984010,

10504984011, 10504984012, 10504984013, 10504984014, 10504984015, 10504984016

METHOD BLANK: 3516647 Matrix: Solid

Associated Lab Samples: 10504984004, 10504984005, 10504984006, 10504984007, 10504984008, 10504984009, 10504984010,

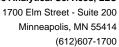
10504984011, 10504984012, 10504984013, 10504984014, 10504984015, 10504984016

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<10.0	33.3	01/14/20 00:29	
1,3,5-Trimethylbenzene	ug/kg	<8.0	26.5	01/14/20 00:29	
Benzene	ug/kg	<2.8	9.4	01/14/20 00:29	
Ethylbenzene	ug/kg	<2.7	9.1	01/14/20 00:29	
Methyl-tert-butyl ether	ug/kg	<6.0	19.8	01/14/20 00:29	
Naphthalene	ug/kg	<46.8	156	01/14/20 00:29	
Toluene	ug/kg	<12.2	40.6	01/14/20 00:29	
Xylene (Total)	ug/kg	<11.6	38.6	01/14/20 00:29	
1,2-Dichloroethane-d4 (S)	%.	101	75-125	01/14/20 00:29	
4-Bromofluorobenzene (S)	%.	100	75-125	01/14/20 00:29	
Toluene-d8 (S)	%.	101	75-125	01/14/20 00:29	

LABORATORY CONTROL SAMPLE:	3516648					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	891	89	63-126	
1,3,5-Trimethylbenzene	ug/kg	1000	885	89	64-125	
Benzene	ug/kg	1000	752	75	59-125	
Ethylbenzene	ug/kg	1000	879	88	62-125	
Methyl-tert-butyl ether	ug/kg	1000	864	86	58-125	
Naphthalene	ug/kg	1000	915	92	57-125	
Toluene	ug/kg	1000	794	79	59-125	
Xylene (Total)	ug/kg	3000	2590	86	65-125	
1,2-Dichloroethane-d4 (S)	%.			99	75-125	
4-Bromofluorobenzene (S)	%.			97	75-125	
Toluene-d8 (S)	%.			100	75-125	

MATRIX SPIKE & MATRIX S	PIKE DUPL	ICATE: 3516	649		3516650							
		1050505007	MS	MSD					0/ D			
		10505053007	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
1,2,4-Trimethylbenzene	ug/kg	ND	1310	1320	1830	1440	140	110	53-150	24	30	
1,3,5-Trimethylbenzene	ug/kg	ND	1310	1320	1790	1430	137	108	60-150	23	30	
Benzene	ug/kg	ND	1310	1320	1440	1090	110	82	46-150	28	30	
Ethylbenzene	ug/kg	ND	1310	1320	1720	1320	132	100	59-150	27	30	
Methyl-tert-butyl ether	ug/kg	ND	1310	1320	1640	1290	125	98	50-150	24	30	
Naphthalene	ug/kg	ND	1310	1320	2010	1600	154	121	50-150	23	30	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

MATRIX SPIKE & MATRIX SF		CATE: 3516	MS	MSD	3516650							
	1	0505053007	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Toluene	ug/kg	ND	1310	1320	1500	1150	115	87	55-150	26	30	
Xylene (Total)	ug/kg	ND	3910	3950	5080	3900	130	99	60-150	26	30	
1,2-Dichloroethane-d4 (S)	%.						99	97	75-125			
4-Bromofluorobenzene (S)	%.						99	100	75-125			
Toluene-d8 (S)	%.						100	101	75-125			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

QC Batch: 654411 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035/5030B Analysis Description: 8260B MSV UST

Associated Lab Samples: 10504984017, 10504984018, 10504984019, 10504984020

METHOD BLANK: 3518038 Matrix: Solid

Associated Lab Samples: 10504984017, 10504984018, 10504984019, 10504984020

		Blank	Reporting		Qualifiers		
Parameter	Units	Result	Limit	Analyzed			
1,2,4-Trimethylbenzene	ug/kg	<10.0	33.3	01/15/20 02:01			
1,3,5-Trimethylbenzene	ug/kg	<8.0	26.5	01/15/20 02:01			
Benzene	ug/kg	<2.8	9.4	01/15/20 02:01			
Ethylbenzene	ug/kg	<2.7	9.1	01/15/20 02:01			
Methyl-tert-butyl ether	ug/kg	<6.0	19.8	01/15/20 02:01			
Naphthalene	ug/kg	<46.8	156	01/15/20 02:01			
Toluene	ug/kg	<12.2	40.6	01/15/20 02:01			
Xylene (Total)	ug/kg	<11.6	38.6	01/15/20 02:01			
1,2-Dichloroethane-d4 (S)	%.	98	75-125	01/15/20 02:01			
4-Bromofluorobenzene (S)	%.	99	75-125	01/15/20 02:01			
Toluene-d8 (S)	%.	100	75-125	01/15/20 02:01			

LABORATORY	CONTROL	SAMPLE:	3518039
LABORATORI	CONTROL	SAIVIF LL.	3310039

Date: 01/24/2020 03:21 PM

E DOTATION OUT TOO WIN EE	. 0010000					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	203	167	82	63-126	
1,3,5-Trimethylbenzene	ug/kg	203	164	80	64-125	
Benzene	ug/kg	203	161	79	59-125	
Ethylbenzene	ug/kg	203	167	82	62-125	
Methyl-tert-butyl ether	ug/kg	203	155	76	58-125	
Naphthalene	ug/kg	203	165	81	57-125	
Toluene	ug/kg	203	160	79	59-125	
Xylene (Total)	ug/kg	610	493	81	65-125	
1,2-Dichloroethane-d4 (S)	%.			99	75-125	
4-Bromofluorobenzene (S)	%.			100	75-125	
Toluene-d8 (S)	%.			100	75-125	

MATRIX SPIKE & MATRIX S	SPIKE DUPL	ICATE: 3518	040	3518041								
Parameter	Units	10504962001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/kg	16000	1160	1150	17200	20700	102	410	53-150	18	30	E,M1
1,3,5-Trimethylbenzene	ug/kg	4640	1160	1150	6380	7830	149	278	60-150	20	30	M1
Benzene	ug/kg	ND	1160	1150	1190	1280	102	112	46-150	7	30	
Ethylbenzene	ug/kg	8320	1160	1150	10100	12500	158	365	59-150	21	30	M1
Methyl-tert-butyl ether	ug/kg	ND	1160	1150	1140	1230	98	107	50-150	8	30	
Naphthalene	ug/kg	3970	1160	1150	5940	7330	170	293	50-150	21	30	M1
Toluene	ug/kg	287	1160	1150	1480	1730	103	126	55-150	16	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

QUALITY CONTROL DATA

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

MATRIX SPIKE & MATRIX SF	PIKE DUPL	ICATE: 3518	040		3518041							
			MS	MSD								
		10504962001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Xylene (Total)	ug/kg	31100	3480	3430	36700	44600	162	395	60-150	19	30	ES,MS
1,2-Dichloroethane-d4 (S)	%.						100	104	75-125			
4-Bromofluorobenzene (S)	%.						99	100	75-125			
Toluene-d8 (S)	%.						100	100	75-125			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

(612)607-1700



QUALITY CONTROL DATA

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

QC Batch: 654717 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035/5030B Analysis Description: 8260B MSV UST

Associated Lab Samples: 10504984021, 10504984022, 10504984023, 10504984024, 10504984025, 10504984026, 10504984027,

10504984028, 10504984029, 10504984030, 10504984031, 10504984032, 10504984033, 10504984034,

10504984035, 10504984036, 10504984037, 10504984038

METHOD BLANK: 3519456 Matrix: Solid

Associated Lab Samples: 10504984021, 10504984022, 10504984023, 10504984024, 10504984025, 10504984026, 10504984027,

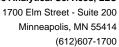
 $10504984035,\, 10504984036,\, 10504984037,\, 10504984038$

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<10.0	33.3	01/16/20 01:31	
1,3,5-Trimethylbenzene	ug/kg	<8.0	26.5	01/18/20 01:45	
Benzene	ug/kg	<2.8	9.4	01/18/20 01:45	
Ethylbenzene	ug/kg	<2.7	9.1	01/18/20 01:45	
Methyl-tert-butyl ether	ug/kg	<6.0	19.8	01/18/20 01:45	
Naphthalene	ug/kg	<46.8	156	01/18/20 01:45	
Toluene	ug/kg	<12.2	40.6	01/18/20 01:45	
Xylene (Total)	ug/kg	<11.6	38.6	01/18/20 01:45	
1,2-Dichloroethane-d4 (S)	%.	100	75-125	01/18/20 01:45	
4-Bromofluorobenzene (S)	%.	97	75-125	01/18/20 01:45	
Toluene-d8 (S)	%.	101	75-125	01/18/20 01:45	

LABORATORY CONTROL SAMPLE:	3519457					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	868	87	63-126	
1,3,5-Trimethylbenzene	ug/kg	1000	894	89	64-125	
Benzene	ug/kg	1000	587	59	59-125	
Ethylbenzene	ug/kg	1000	754	75	62-125	
Methyl-tert-butyl ether	ug/kg	1000	696	70	58-125	
Naphthalene	ug/kg	1000	939	94	57-125	
Toluene	ug/kg	1000	628	63	59-125	
Xylene (Total)	ug/kg	3000	2330	78	65-125	
1,2-Dichloroethane-d4 (S)	%.			97	75-125	
4-Bromofluorobenzene (S)	%.			101	75-125	
Toluene-d8 (S)	%.			99	75-125	

MATRIX SPIKE & MATRIX S	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3519458 3519459											
		40504004004	MS	MSD	140	MOD	140	MOD	0/ D			
		10504984021	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
1,2,4-Trimethylbenzene	ug/kg	<13.0	1270	1270	1530	1430	120	112	53-150	7	30	
1,3,5-Trimethylbenzene	ug/kg	<10.4	1270	1270	1220	1240	96	97	60-150	2	30	
Benzene	ug/kg	<3.7	1270	1270	1100	1120	86	88	46-150	2	30	
Ethylbenzene	ug/kg	<3.5	1270	1270	1160	1170	91	92	59-150	2	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





QUALITY CONTROL DATA

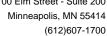
Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

			MS	MSD								
		10504984021	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Methyl-tert-butyl ether	ug/kg	<7.7	1270	1270	1000	969	79	76	50-150	4	30	
Naphthalene	ug/kg	<60.9	1270	1270	1040	1060	82	83	50-150	2	30	
Toluene	ug/kg	<15.9	1270	1270	1090	1090	85	86	55-150	0	30	
Xylene (Total)	ug/kg	<15.1	3820	3820	3620	3650	95	96	60-150	1	30	
1,2-Dichloroethane-d4 (S)	%.						98	98	75-125			
4-Bromofluorobenzene (S)	%.						100	98	75-125			
Toluene-d8 (S)	%.						99	99	75-125			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





QUALITY CONTROL DATA

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

QC Batch: 654058 Analysis Method: WI MOD DRO
QC Batch Method: WI MOD DRO Analysis Description: WIDRO GCS

Associated Lab Samples: 10504984001, 10504984002, 10504984003, 10504984004, 10504984005, 10504984006, 10504984007,

10504984008, 10504984009, 10504984010, 10504984011, 10504984012, 10504984013, 10504984014,

10504984015, 10504984016, 10504984017, 10504984018, 10504984019, 10504984021

METHOD BLANK: 3515985 Matrix: Solid

Associated Lab Samples: 10504984001, 10504984002, 10504984003, 10504984004, 10504984005, 10504984006, 10504984007,

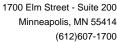
10504984008, 10504984009, 10504984010, 10504984011, 10504984012, 10504984013, 10504984014,

10504984015, 10504984016, 10504984017, 10504984018, 10504984019, 10504984021

Blank Reporting Parameter Units Result Limit Qualifiers Analyzed **WDRO C10-C28** <3.9 01/12/20 15:58 mg/kg 106 50-150 01/12/20 15:58 n-Triacontane (S) %.

LABORATORY CONTROL SAMPLE & I	LCSD: 3515986		35	15987						
		Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	
Parameter	Units	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qualifiers
WDRO C10-C28 n-Triacontane (S)	mg/kg %.	80	69.0	86.3	86 93	108	70-120 50-150	22	20	R1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





QUALITY CONTROL DATA

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

QC Batch: 654060 Analysis Method: WI MOD DRO
QC Batch Method: WI MOD DRO Analysis Description: WIDRO GCS

Associated Lab Samples: 10504984022, 10504984023, 10504984024, 10504984025, 10504984026, 10504984027, 10504984028,

10504984029, 10504984030, 10504984031, 10504984032, 10504984033, 10504984034, 10504984035,

10504984036, 10504984037

METHOD BLANK: 3515988 Matrix: Solid

Associated Lab Samples: 10504984022, 10504984023, 10504984024, 10504984025, 10504984026, 10504984027, 10504984028,

10504984029, 10504984030, 10504984031, 10504984032, 10504984033, 10504984034, 10504984035,

10504984036, 10504984037

Blank Reporting Parameter Units Result Limit Qualifiers Analyzed **WDRO C10-C28** <3.9 01/12/20 12:49 mg/kg 50-150 01/12/20 12:49 n-Triacontane (S) %. 85

LABORATORY CONTROL SAMPLE & LCSD: 3515989 3515990										
		Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	
Parameter	Units	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qualifiers
WDRO C10-C28	mg/kg	80	67.0	62.9	84	79	70-120	6	20	
n-Triacontane (S)	%.				89	83	50-150			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALIFIERS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

Date: 01/24/2020 03:21 PM

Е	Analyte concentration exceeded the calibration range. The reported result is estimated.
ES	The reported result is estimated because one or more of the constituent results are qualified as such.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MS	Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
R1	RPD value was outside control limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
T6	High boiling point hydrocarbons are present in the sample.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

ab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch		
0504984001	SB-14_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984002	SB-15_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984003	SB-13_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984004	SB-12_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984005	SB-8_2-4	WI MOD DRO	654058	WI MOD DRO	654166		
0504984006	SB-8_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984007	SB-11 2-4	WI MOD DRO	654058	WI MOD DRO	654166		
0504984008	SB-11_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984009	SB-10_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984010	SB-10_5-6	WI MOD DRO	654058	WI MOD DRO	654166		
0504984011	SB-10_1-2	WI MOD DRO	654058	WI MOD DRO	654166		
0504984012	SB-9_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984013	SB-7_2-4	WI MOD DRO	654058	WI MOD DRO	654166		
0504984014	SB-7_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984015	SB-16_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984016	SB-6_1.5-2	WI MOD DRO	654058	WI MOD DRO	654166		
0504984017	SB-6 5-6	WI MOD DRO	654058	WI MOD DRO	654166		
0504984018	SB-21 2-4	WI MOD DRO	654058	WI MOD DRO	654166		
0504984019	SB-21_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984021	SB-22_2-4	WI MOD DRO	654058	WI MOD DRO	654166		
	_						
0504984022	SB-22_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984023	SB-23_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984024	SB-29_2-4	WI MOD DRO	654060	WI MOD DRO	654165		
0504984025	SB-29_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984026	SB-27_2-4	WI MOD DRO	654060	WI MOD DRO	654165		
0504984027	SB-27_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984028	SB-28_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984029	SB-24_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984030	SB-25_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984031	SB-26_2-4	WI MOD DRO	654060	WI MOD DRO	654165		
0504984032	SB-26_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984033	SB-19_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984034	SB-18_2-4	WI MOD DRO	654060	WI MOD DRO	654165		
0504984035	SB-18_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984036	SB-17_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984037	SB-20_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984001	SB-14_6-8	ASTM D2974	654419				
0504984002	SB-15_6-8	ASTM D2974	654419				
0504984003	SB-13_6-8	ASTM D2974	654419				
504984004	SB-12_6-8	ASTM D2974	654419				
504984005	SB-8_2-4	ASTM D2974	654419				
504984006	SB-8_6-8	ASTM D2974	654419				
504984007	SB-11_2-4	ASTM D2974	654419				
0504984008	SB-11_6-8	ASTM D2974	654419				
0504984009	SB-10_6-8	ASTM D2974	654419				
0504984010	SB-10_5-6	ASTM D2974	654419				
0504984011	SB-10_3-0 SB-10_1-2	ASTM D2974 ASTM D2974	654419				
0504984012	SB-9_6-8	ASTM D2974 ASTM D2974	654419				

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch	
10504984013	SB-7_2-4	ASTM D2974	654419	_		
0504984014	SB-7_6-8	ASTM D2974	654419			
0504984015	SB-16_6-8	ASTM D2974	654419			
0504984016	SB-6_1.5-2	ASTM D2974	654420			
0504984017	SB-6_5-6	ASTM D2974	654420			
0504984018	SB-21 2-4	ASTM D2974	654420			
0504984019	SB-21_6-8	ASTM D2974	654420			
0504984021	SB-22_2-4	ASTM D2974	654420			
0504984022	SB-22_6-8	ASTM D2974	654420			
0504984023	SB-23_6-8	ASTM D2974	654420			
0504984024	SB-29_2-4	ASTM D2974	654420			
0504984025	SB-29_6-8	ASTM D2974	654420			
0504984026	SB-27_2-4	ASTM D2974	654420			
0504984027	SB-27_6-8	ASTM D2974	654420			
0504984028	SB-28_6-8	ASTM D2974	654420			
0504984029	SB-24_6-8	ASTM D2974	654420			
0504984030	SB-25_6-8	ASTM D2974	654420			
0504984031	SB-26_2-4	ASTM D2974	654420			
0504984032	SB-26 6-8	ASTM D2974	654420			
0504984033	SB-19_6-8	ASTM D2974	654420			
0504984034	SB-18_2-4	ASTM D2974	654420			
0504984035	SB-18_6-8	ASTM D2974	654420			
0504984036	SB-17_6-8	ASTM D2974	654665			
0504984037	SB-20_6-8	ASTM D2974	654665			
0504984001	SB-14_6-8	EPA 5035/5030B	654083	EPA 8260B	654097	
0504984002	SB-15_6-8	EPA 5035/5030B	654083	EPA 8260B	654097	
0504984003	SB-13_6-8	EPA 5035/5030B	654083	EPA 8260B	654097	
0504984004	SB-12_6-8	EPA 5035/5030B	654110	EPA 8260B	654264	
0504984005	SB-8_2-4	EPA 5035/5030B	654110	EPA 8260B	654264	
0504984006	SB-8_6-8	EPA 5035/5030B	654110	EPA 8260B	654264	
0504984007	SB-11_2-4	EPA 5035/5030B	654110	EPA 8260B	654264	
0504984008	SB-11_6-8	EPA 5035/5030B	654110	EPA 8260B	654264	
0504984009	SB-10_6-8	EPA 5035/5030B	654110	EPA 8260B	654264	
0504984010	SB-10_5-6	EPA 5035/5030B	654110	EPA 8260B	654264	
0504984011	SB-10_1-2	EPA 5035/5030B	654110	EPA 8260B	654264	
0504984012	SB-9_6-8	EPA 5035/5030B	654110	EPA 8260B	654264	
0504984013	SB-7_2-4	EPA 5035/5030B	654110	EPA 8260B	654264	
0504984014	SB-7_6-8	EPA 5035/5030B	654110	EPA 8260B	654264	
0504984015	SB-16_6-8	EPA 5035/5030B	654110	EPA 8260B	654264	
0504984016	SB-6_1.5-2	EPA 5035/5030B	654110	EPA 8260B	654264	
0504984017	SB-6_5-6	EPA 5035/5030B	654411	EPA 8260B	654476	
0504984018	SB-21_2-4	EPA 5035/5030B	654411	EPA 8260B	654476	
0504984019	SB-21_6-8	EPA 5035/5030B	654411	EPA 8260B	654476	
0504984020	Field Blank	EPA 5035/5030B	654411	EPA 8260B	654476	
0504984021	SB-22_2-4	EPA 5035/5030B	654717	EPA 8260B	654743	
0504984022	SB-22_6-8	EPA 5035/5030B	654717	EPA 8260B	654743	

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.

(612)607-1700



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Lab ID	Sample ID	QC Batch Method	QC Batch Method QC Batch Analytica				
10504984023	SB-23_6-8	EPA 5035/5030B	654717	EPA 8260B	654743		
10504984024	SB-29_2-4	EPA 5035/5030B	654717	EPA 8260B	654743		
10504984025	SB-29_6-8	EPA 5035/5030B	654717	EPA 8260B	654743		
10504984026	SB-27_2-4	EPA 5035/5030B	654717	EPA 8260B	654743		
10504984027	SB-27_6-8	EPA 5035/5030B	654717	EPA 8260B	654743		
10504984028	SB-28_6-8	EPA 5035/5030B	654717	EPA 8260B	654743		
10504984029	SB-24_6-8	EPA 5035/5030B	654717	EPA 8260B	654743		
10504984030	SB-25_6-8	EPA 5035/5030B	654717	EPA 8260B	654743		
10504984031	SB-26_2-4	EPA 5035/5030B	654717	EPA 8260B	654743		
10504984032	SB-26_6-8	EPA 5035/5030B	654717	EPA 8260B	654743		
10504984033	SB-19_6-8	EPA 5035/5030B	654717	EPA 8260B	654743		
10504984034	SB-18_2-4	EPA 5035/5030B	654717	EPA 8260B	654743		
10504984035	SB-18_6-8	EPA 5035/5030B	654717	EPA 8260B	654743		
10504984036	SB-17_6-8	EPA 5035/5030B	654717	EPA 8260B	654743		
10504984037	SB-20_6-8	EPA 5035/5030B	654717	EPA 8260B	654743		
10504984038	Trip Blank	EPA 5035/5030B	654717	EPA 8260B	654743		

Barr Engineering Co. (Chain	of	Cust	todv Sami	ole Origination	State:				Analysis Reque	ctod		т		
] Hibbing	,	☐ Minr	□ KS]UT ∤WI er:			w	ater.	Soil			nber: 56	
REPORT TO				INVOICE 1			7							Code:	Preservative Code:
Company: Barr Engineering		Comp	pany:	same .		0 F 4	1_				Alast blates	7	GW = Gro	oundwater face Water	A = None B = HCl
Address: 325 5 Lake Ave Duly	tn MN	Addre	ess:		JO#:1	USU) 4	· y	84		1		WW = Wa	ste Water nking Wate	C = HNO ₃
Name: Lynette Carney		Name	e:						,	1	-		S = Soi	l/Solid	E = NaOH
email: LCarney & barr-com		email	l:		0504984							2	SD = Sec O = Otl	liment ner	F = MeOH G = NaHSO₄
Copy to: datamgt@barr.com		P.O.		1	0504984					r 1 1 1	4	-			$H = Na_2S_2O_3$ I = Ascorbic Acid
Project Name: Namadii PH TT				No: 4916147	7.00	Matrix Code	MS,	qu				DRO Solids			J ≈ NH₄CI
Location	San	iple De		Collection	Collection	Matrix	rin	z			6	2 % CA %			K = Zn Acetate O = Other
Location	Start	Stop	Unit (m./ft.	Date (mm/dd/yyyy)	Time (hh:mm)	Code	erfo	otal				AA			
1.			or in.)	(IIII) dayyyy)	(IIII.IIIII)		١	ř			į	1 N N	Field Filter	ed Y/N	
SB - 14	S	8	47	01/06/2020	1050	S	N	5			2	. 2 1			601
SB-15	6	Q 3		\	1110							1,			007
3. SB-13	6	8			1140							1111			663
4 SB-12	6	ક			1210			\parallel			$+ \parallel$	##			504
5. SB-8	2	4			(220			$\dagger \dagger$				+			
6. SB-8		6						\prod		_	-	HH	<u> </u>		605
7.	6	8			1240		Ш	\coprod							D06
7. SB-11 8.	2	4			1305										400
SB-11	6	છ			1310										068
9. SB-10	6	8			1320			\parallel							068
10. SB-10	5	6			1346	1		\parallel							$\frac{00}{00}$
BARR USE ONLY		Relingu	uished b		/ On I	ce? D	ate	\dashv	Time	Possi Ot 14		3-4	10000		1 7
Sampled by: C353 / MAB				Uhrestin S.	eut 🛇	N 1/8	/20	, _	1500	Received		JiM	KACE	1/8/	Date 15:00
Barr Proj. Manager: LMC		Kelinqu	uished b	y:	On Id		ate		Time	Received by	/: 		0 / / ~		Date Time
Barr DQ Manager: ブピて		Sample	s Shipp	ed VIA: 🗌 Cou		eral Expr	ess		'Sampler	Air Bill Nun	nber:	(PACE		10/20 8:56
Lab Name: Pace				Oth											ested Due Date: rd Turn Around Time
Lab Location: Minneufolis		Lab W			emperature on				Cust	ody Seal Intact?	Y	□N	☑None	□ Rush	S
stribution - White-Original: Accompanies	s Shipme	ent to i	aborato	ry: Yellow Copy:	Include in Field	Docume		- n:		-					(mm/dd/yyyy) age 63 of 103

hite-Original: Accompanies Shipment to Laboratory; Yellow Copy: Include in Field Documents; Pink Copy: Send to Data Management Administrators.

0.862.6,4.463.2 C

T=6.2,2.0,2.0,2.1,0.5

Barr Engineering Co. (Chain	of	Cust	ody	Sampl	e Origination		П			Ana	alysis Re	equest	ed		П	COC Numb	er E	en an		\neg
☐ Ann Arbor ☐ Duluth ☐ BARR ☐ Bismarck ☐ Grand Rapids ☐] Hibbing] Jefferso) on City	☐ Minr	neapolis Lake City	□ KS □ MI □ MN		UT WI er:				Water			Soil		\exists	coc <u>2</u>				
REPORT TO				IN'	VOICE TO)		1									Matrix (vative Code	<u>=</u> :
Company: Barr Engineering	le	Comp	any:	same				1	er s					ene		1	SW = Surf	ace Wate	er B =	None HCl	l
Address: 325 & Lake Ave Dulu	th MN	Addre	ess:	1				z	aine					با			WW = Was			HNO₃ H₂SO₄	
Name: Lynette Carney		Name	:	1				>	Container					ap hthale			S = Soil/ SD = Sedi	Solid	E =	NaOH MeOH	
email: LCarney & barr. com		email:				· ·		Δ						ź			O = Othe		G =	NaHSO₄	
Copy to: datamgt@barr.com		P.O.		V					er Of					+-		S			I =	Na ₂ S ₂ O ₃ Ascorbic A	∖ci d
Project Name: Namadji Substation				No: 4	916147	7.00	Matrix Code	MS.	qui					PVoc	PRO	Solid				NH₄Cl Zn Acetate	
	Sam	ple De			ction	Collection	Matrix	٦٤	Z					9	2	%				Other	
Location	Start	Stop	Unit (m./ft.		ate d/yyyy)	Time (hh:mm)	Code	erfo	otal						Α		Preservative				
1.			or in.)			(111.17111)		□	_	++		\dashv	\dashv	N	7	7	Field Filtered		- \		_
SB-10	1	2	++	01/06	12620	1345	S	N	5			.		2	2	1	method			·	{
2. SB-9	6	8	1	١		1400		١	j					1	1	1	DRG by 1 8015D	nethod	WI W		
^{3.} SB - 7	2	4				1430										\parallel	30130	(-,0	[013	
4. SB-7	0	8				1440														014	
5. SB-16	8	8				1455											-			015	
6. SB-6	1.5	2				1510			\prod							\parallel	-			D[6	
7. SB - 6	5	ی				1515						-					-			017	
8. SB - 2\	2	T				1540															
9. SB-21	6	B				1550			1					1						Ula	C C
10. Field Blank					12020	1520														671	
BARR USE ONLY		Relinq	uished l	oy: [⁻]) . ,	t-g- 8e	l L On 1		Date		Tin		Receiv	eg by	7	$\overline{}$	-16			Date	Time	
Sampled by: C3S3 / MAB			uished l		t-y- se	hot On 1		l 20 Date		15 Tin		Receiv	17/	يم (<i>][</i>]		1 fAC€	//3	B/2028 Date	<i>15-100</i> Time	
Barr Proj. Manager: LMC				· .		Y	,					, ecely			ىر و	-15	PACE	\ b	11020	8150	S, Cha
Barr DQ Manager: 3ET			es Shipp	oed VIA:	☐ Cou		deral Exp	ress		Samp	ler	Air Bill	Num	ber:					uested D	ue Date:	
Lab Name: Pace		Other: Standard Turn Around Time									SYSTD!										
Lab Location: Minnespolis Lab WO: Temperature on Receipt (°C): Custody Seal Intact? Y None Rush (mm/dd/y) Distribution - White-Original: Accompanies Shipment to Laboratory: Yellow Copy: Include in Field Documents: Pink Copy: Send to Data Management Administrators									yy) Page 04 of	40d ž											

Barr Engineering Co. C	hain	of	Cust	ody Sam	ple Origination			A	nalysis Requested	<u>.</u>		COC Number:	6075		
☐ Ann Arbor ☑ Duluth ☐ BARR ☐ Bismarck ☐ Grand Rapids ☐	Hibbing Jefferso	g on City	☐ Mini	— ☐ KS neapolis ☐ Mi Lake City ☐ Mi] UT (WI er:		Wate	r S	Soil		coc _3	f <u>4</u>		
REPORT TO				INVOICE	то		1					Matrix Code:	Preservati		
Company: Barr Engineering		Comp	any:	Same			irs			ခု	ŀ	GW = Groundwate SW = Surface Wa	ter B = HC	:1	
Address: 325 S Lake Ave Duluth,	MN	Addre	ess:	1			/ N ntainers			aphthalen		WW = Waste Wate DW = Drinking W			
Name: Lynette Carney		Name	:				Y /			44		S = Soil/Solid SD = Sediment	E = Na	ОН	
email: LCarney & barr. com		email					10 p			ap		O = Other	F = Me G = Na	HSO₄	
Copy to: datamgt@barr.com		P.O.		1			ΣL						H = Na I = Ase	₂S₂O₃ corbic Acid	
Project Name: Nemadji Substation P				No: 491614	17.00		m MS/ Numbe			ر	Solids		J = NH	I₄CI Acetate	
Location	Sam	nple De	epth Unit	Collection	Collection	Matrix	n N				Sol Sol		O = Ot		
Location	Start	Stop	(m./ft. or in.)	Date (mm/dd/yyyy)	Time (hh:mm)	Code						Preservative Code Field Filtered Y/N		i	
1. 6.0		, ;			- 2 -							Proc + Napht	halene by		
SB-22	2	4	++	01/07/2020	0915	S	N 5			2	2 1	method EPA		Bot 9	
2. SB-22	6	8			0925		ì				1	DRC by meth 80150 (C	od WI MO! 10 - 628)		
3. SB-23	6	8			0950								Ì	-607 0	
4. SB-29	2	4			1020									004/0	
5. SB-29	6	8			1025									025	
6. SB-27	2	4			1040									676	
7. SB - 27	G	8			1045									627	
8. 58-28	6	8			1100									8 8 01/02/	
9. SB-24	6	B			1120									15 RLG R	
10. SB - 25	و	8			1145								1	2 , 2	
BARR USE ONLY		Relinq	uished l	by: Christin J.	o I k		Date	Time	Received by	,		6 /0:	Date	Time g	
D			uished I	by:	Sehrt (B)		12020 Date	1 ≤ 66 Time	106	<u>. C</u>	Ull	19NCE 1/8/2020 5:00			
Barr Proj. Manager: LMC			district i		Y			111110	Received by:		De	PACE	KIONO S	Time Signal Sign	
Barr DQ Manager: 3ET	Sampl	es Ship _l			deral Exp	ress 👤	ess Sampler Air Bill Number:					Requested Due Date:			
Lab Name: Pace				O									ndard Turn Arou	nd Time	
Lab Location: Minneupolis	<i>Cl</i> :	Lab V		V II -	Temperature on				dy Seal Intact? [(mm/dd/yyyy)	ge 65 of 103	
Distribution - White-Original: Accompanie	s snipm	ient to	Laborat	ory; Yellow Cop y	: Include in Fiel	Docum のき	ents; P	Copy; S	iend to Data Ma	anage , 3	ment とって	Administrators.	12.012.116.5	•	

Barr Engineering Co. C	Chain	of	Cust	ody	Samp	le Origination		П			An	alysis Request	ted			COC Numb	er E	5092	
☐ Ann Arbor ズ Duluth ☐ BARR ☐ Bismarck ☐ Grand Rapids ☐] Hibbing] Jefferso	} on City	☐ Minr ☐ Salt I	neapolis Lake City	☐ KS ☐ MI ☐ MN	□ ND 🍒] UT f WI er:				Water		Soil			сос <u>Ч</u>	of	<u> </u>	
REPORT TO			INVOICE TO													<u>Matrix</u> GW = Grou			ative Code:
Company: Barr Engineering		Comp	oany:	Sam	ne								9	eric		SW = Surf	ace Wate	r B =	-ICI
Address: 325 S Lake Ave Dula	th MN	Addre	ess:					z	aine					<u>ح</u>		WW = Was DW = Drin	te Water king Wat	C = er D =	HNO₃ H₂SO₄
Name: Lynette Carney		Name	e:					1 ≻	Container				1			S = Soil/ SD = Sedi	'Solid	E = F =	VaOH
email: LCarney & barr.com		email	:						<u>+</u>				Mar Little	2		0 = Oth		G =	NaHSO₄
Copy to: datamgt@barr.com		P.O.		1				₩S	<u> </u>	5			_	_					Na₂S₂O₃ Asc o rbic Acid
Project Name: Nemadji Substation P	ΗI	Barr	Project I	No: 4	116147	7.00	Matrix Code	MS,	mp						olids			J =	NH₄Cl Zn Acetate
	Sam	ple De		Colle	ection	Collection	Matrix	E	z			PVoc						O = 1	
Location	Start	Stop	Unit (m./ft.		ate dd/yyyy)	Time (hh:mm)	Code	er f	otal					A		Preservative		-	
1. ,			or in.)	(11111)	uu/yyyy)	(HA.HIHI)	 	ď	ř	+			l A	IN	N	Field Filtered			
SB-26	2	7	++	01/07	1/2020	1235	S	N	5				2	_ 2	1	PVOC t method		2 2 4 4 -	• ነ i
2. SB - 26	6	8				1245	(1					1	1	1	DRS by	method (CIO	WI MO - C29)	D DRO 037
3. SB-19	6	B				1310													633
4. 58-18	2	4				1330													634
5. SB-18	6	8				1340													635
6. 58-17	6	8				1405							1						036
7. SB-20	6	8				1420										i			037
8. Trip Blank				01/0-	7/2020												-		038
9.																			
10.														-					
BARR USE ONLY		Relina	uished b	DV: On	. ^ ^	On On	Ice? [Date		Tin	ne	رط Receiyed	7.	7	\square	/		, Date	Time
			uished b	- Uhrist	bin J. 8.		N 1/8	120	20	150		to	<u>. C</u>	WL	<u> </u>	PRICE	1/3	8/2020	15;01
Barr Proj. Manager: LMC			uisnea D	Jy.		On 1		Date		Tin	ıe	Received by	/: ≪y≪S	7.	آ_ر	A/A	167	Date (10/2()	Time 87 S/2
Barr DQ Manager: JET	Sample	es Shipp	oed VIA:	□Со		deral Exp	ress	7	Sampl	er	Air Bill Nun	אטע nber:			ACU		uested Du	-7	
Lab Name: Pace	Other: Standard Turn Around Time																		
Lab Location: Minneapolis		Lab W	/O:			Temperature on	Receipt	(°C):	•	C	ustody	Seal Intact?	□Y]N	☑None	☐ Rush	(mm/dd/yyyy	-
istribution - White-Original: Accompanie	s Shinm	ent to	Laborato	one Volle	ow Conve	Include in Fiel	d Da		ъ.					_					age 66 of 100

Include in Field Documents; Pink Copy: Send to Data Management Administrators.

Page 67 of 103

Pace Analytical*

Document Name: Sample Condition Upon Receipt Form

Document No.: F-MN-L-213-rev.30 Document Revised: 14Nov2019 Page 1 of 1

Pace Analytical Services - Minneapolis

Sample Condition Client Name:			Pro	oject #:	ΞΛ	# · 1	05	049	84
Upon Receipt Barr Engine	a oriv							Dun Date	: 01/24/20
		,			PM:			Jue Davi	
Courier:	Us		∐Cli al√See Exc	13	CLIE	NT: BAF	₹R		į
Tracking Number: 6779 8897 9362	19341	1/9351	<u>A</u> 330 [·			
Custody Seal on Cooler/Box Present? Yes]No	Sea	is Intact	Yes	□No	Biolog	gical Tis	sue Frozen?	Yes No N/A
Packing Material: Bubble Wrap Bubble Ba	gs 🗌]None	□Oth	er:			Te	emp Blank?	Yes No
Thermometer: ☐ T1(0461) ☐ T2(1336) ☐ T3(0459) ☐ T4(0254) ☐ T5(0489)		Type of I	7	Wet □E	Blue	□None	□Dn	/ Melte	ed
Note: Each West Virginia Sample must have temp take	n (no ter	mp bian	ks)						
Temp should be above freezing to 6°C Cooler Temp Rea	d w/tem	ıp blank	: <u>0.7 j</u>	1.8/19/1	13	ºC	Averag	ge Corrected	l Temp
407	/ .		40	0021	16		(no	•	only): See Exceptions
Correction Factor: 10 Cooler Temp Correcte	d w/tem	p blank	: 0,7		0.5	ºC		0	C 1 Container
USDA Regulated Soil: (N/A, water sample/Other:)				erson Exan			1/10/26 15
Did samples originate in a quarantine zone within the Unite							_	-	ationally, including
ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check ma			√No Idi> (5	Hawaii a				Yes JAN	
If Yes toleither question, fill out a R	eguiated	Soli Cn	ecklist (F	-MN-Q-338)	and inc	lude with S			ork.
							COMM	ENTS:	
Chain of Custody Present and Filled Out?	✓Ýes	No		1.					
Chain of Custody Relinquished?	Yes	□No	-	2.					
Sampler Name and/or Signature on COC?	Yes	□No	□n/a	3.					
Samples Arrived within Hold Time?	Yes	□No		4.					
Short Hold Time Analysis (<72 hr)?	Yes	ØÑo						orm/E coli 🔲 B thophos 🗍 Oth	OD/cBOD Hex Chrome
Rush Turn Around Time Requested?	□Yes	⊠N₀		6.					
Sufficient Volume?	ZÝes	□No		7.					***
Correct Containers Used?	Yes	□No		8.					*
-Pace Containers Used?	Yes	□No							
Containers Intact?	Yes	□No		9.					
Field Filtered Volume Received for Dissolved Tests?			N/A	10 Is sad	im ont vi	cible in the	dissalva	d containes?	Dvas Dva
Is sufficient information available to reconcile the samples	Yes	∐No	JEJN/A	10. Is sed 11. If no, w				d container?	Yes No See Exception
to the COC?	Yes	□No		1 11. 11 110, W	inte ibj b	ate/ fillie on	Containe	i below.	
	وعارق								
Matrix: Water Soil Oil Other All containers needing acid/base preservation have been				12 Campula		•			
checked?	□Yes	□No	N/A □	12. Sample	#				
· ·									
All containers needing preservation are found to be in	□Yes	□No	⊠N/A		NaOH	☐ HN	O ₃	∐H₂SO₄	Zinc Acetate
compliance with EPA recommendation?			/					_	
(HNO ₃ , H ₂ SO ₄ , <2pH, NaOH >9 Sulfide, NaOH>12 Cyanide)					_				
Fuzzations MOA California Too/Doc City Lo	□Yes	□No	⊠ N/A	Positive for	=	Yes			See Exception
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease, DRO/8015 (water) and Dioxin/PFAS			٨١٠/٨	Chlorine?	— 〒		pH Pape		
DNO/8013 (Water) and Dioxilly FFA3				Res. Chlorin	ie	0-6 Roll		0-6 Strip	0-14 Strip
Extra labels present on soil VOA or WIDRO containers?				13.					See Exception
Headspace in VOA Vials (greater than 6mm)?	Z Yes □Yes	□No □No	□n/a □n/a	13.					
Trip Blank Present?	Z ives	□No	□N/A	14.				1,20	<u> </u>
Trip Blank Custody Seals Present?	Yes	□No	□N/A		rip Blan	k Lot # (if p	urchased	1): 10 CB	19-3
CLIENT NOTIFICATION/RESOLUTION						Field	l Data 🛭	lequired?	Yes No
Person Contacted:				Date/Time	e:	rielt	. Data N	equireur	□1e3 □140
Comments/Resolution:				,					
•	-							.	
Project Manager Review:	10	Obro	chit		Date:	1/10	/20		
Note: Whenever there is a discrepancy affecting North Carolina hold, incorrect preservative, out of temp, incorrect containers)	complianc	e sample	s, a copy o	of this form wil	ll be sent			a DEHNR Cert	ification Office (i.e out of

Labeled by:

Date : 12-JAN-2020 16:47

Client ID: SB-14_6-8

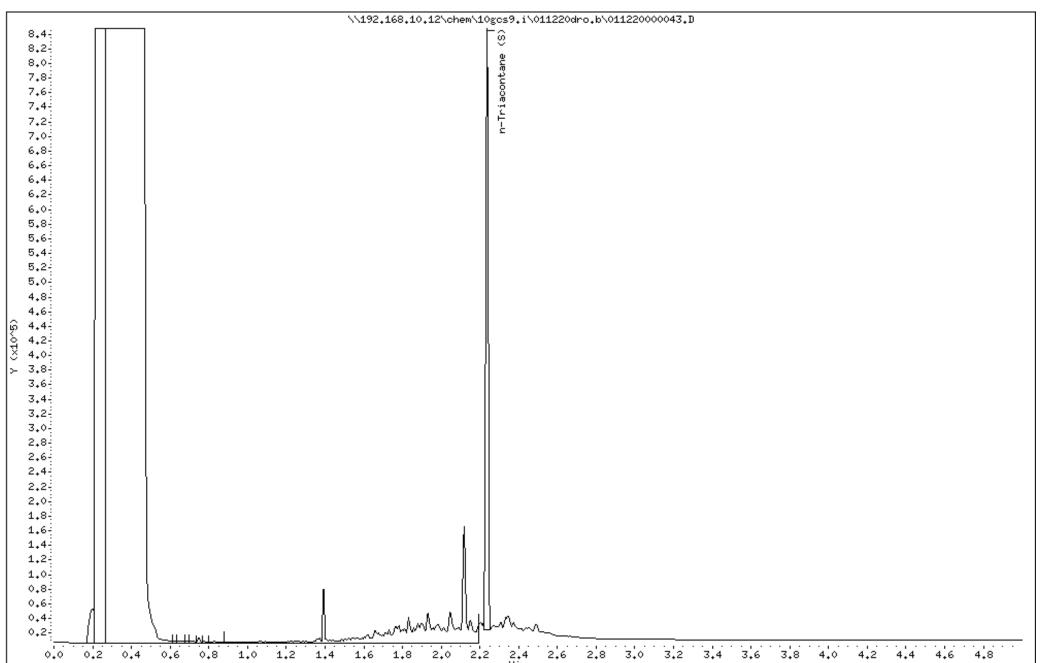
Sample Info: 10504984001

Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 16:54

Client ID: SB-15_6-8

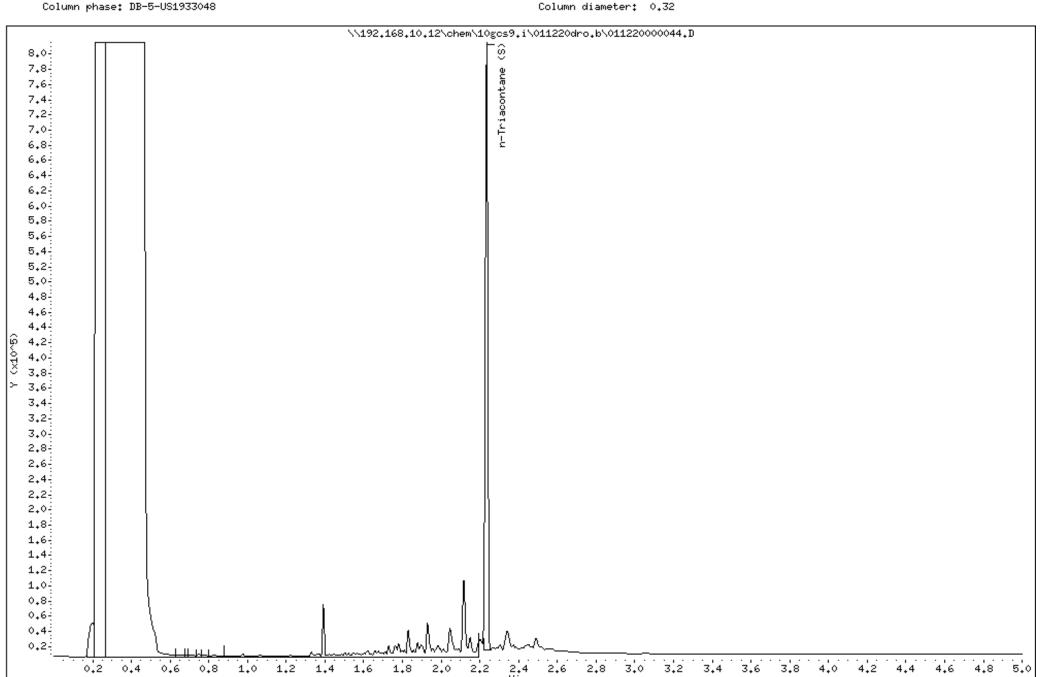
Sample Info: 10504984002

Volume Injected (uL): 1.0

Operator: JVM

Column diameter: 0.32

Instrument: 10gcs9.i



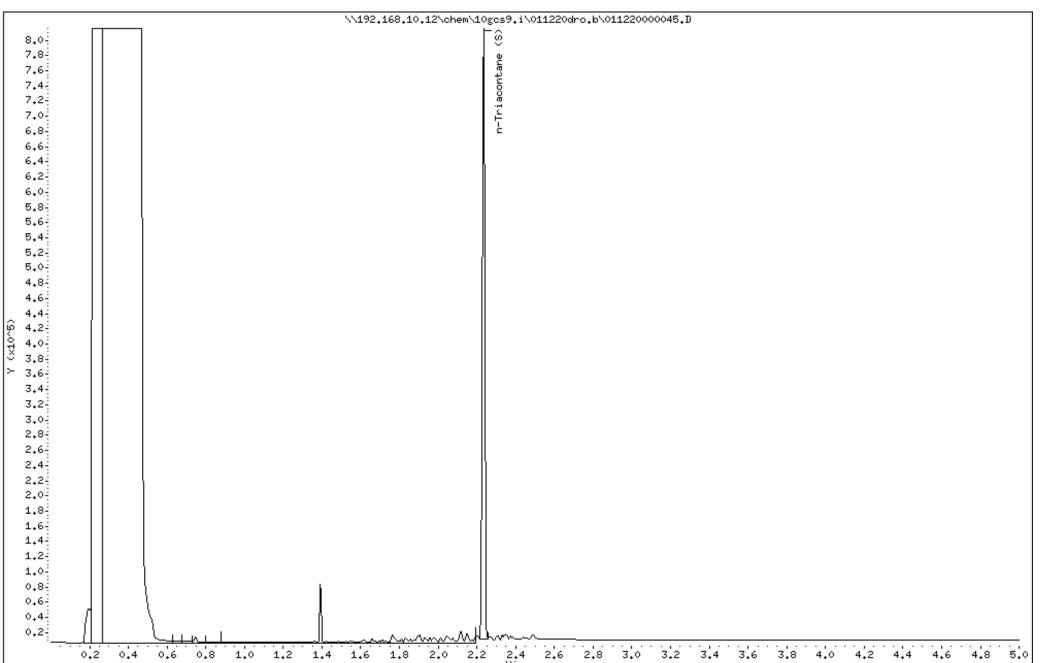
Date : 12-JAN-2020 17:01

Client ID: SB-13_6-8

Sample Info: 10504984003

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Instrument: 10gcs9.i

Operator: JVM



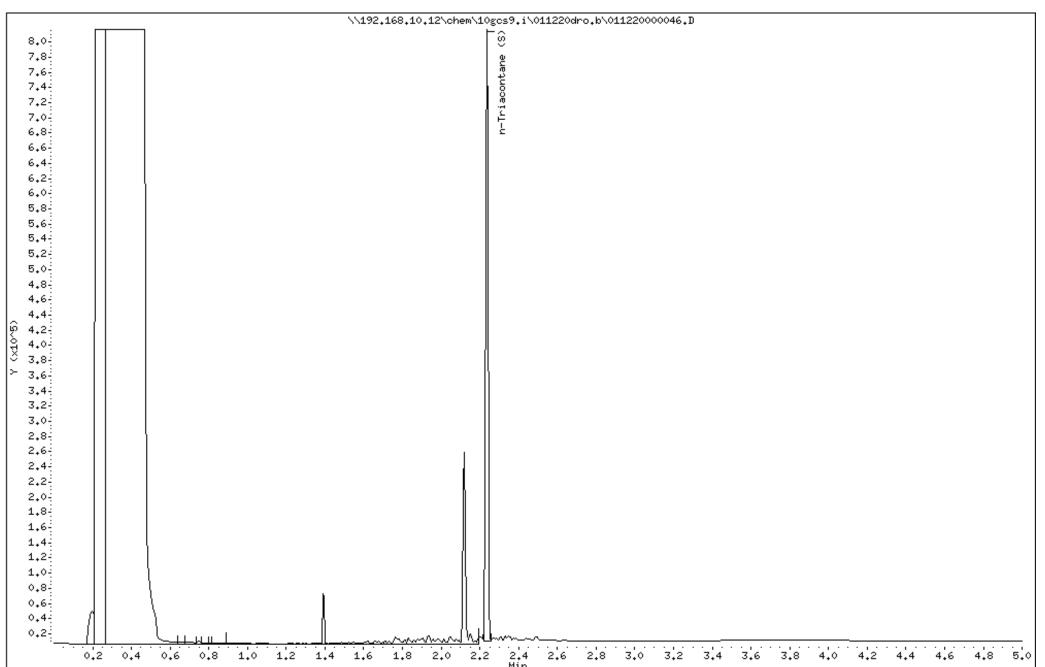
Date : 12-JAN-2020 17:08

Client ID: SB-12_6-8

Sample Info: 10504984004

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Instrument: 10gcs9.i

Operator: JVM



Page 72 of 103

Date : 12-JAN-2020 16:33

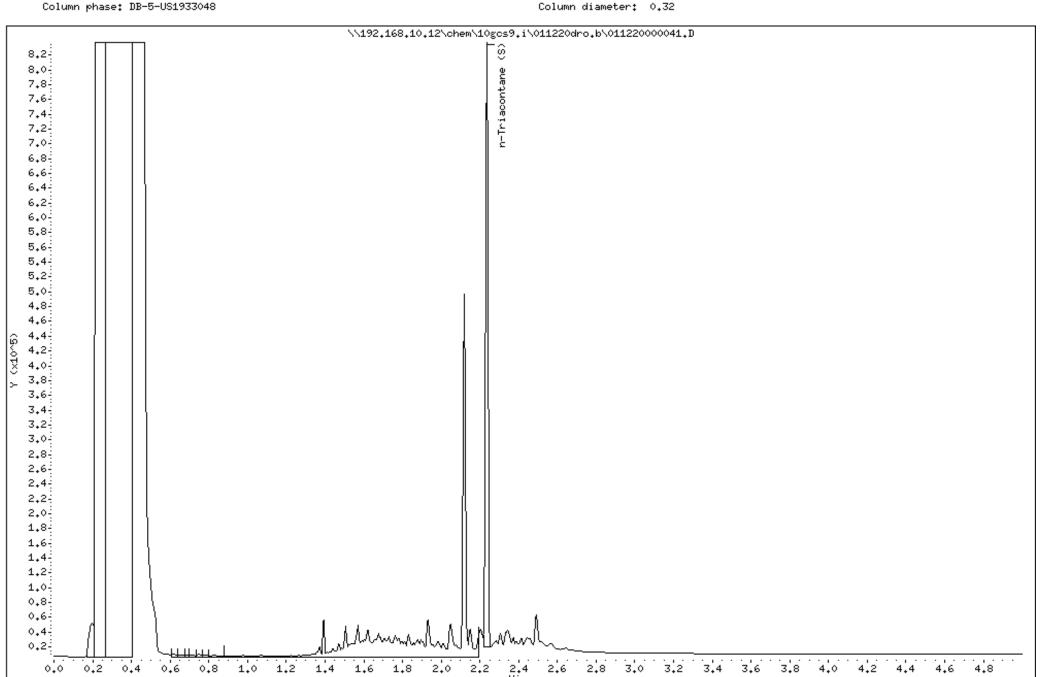
Client ID: SB-8_2-4

Sample Info: 10504984005

Volume Injected (uL): 1.0

Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 17:15

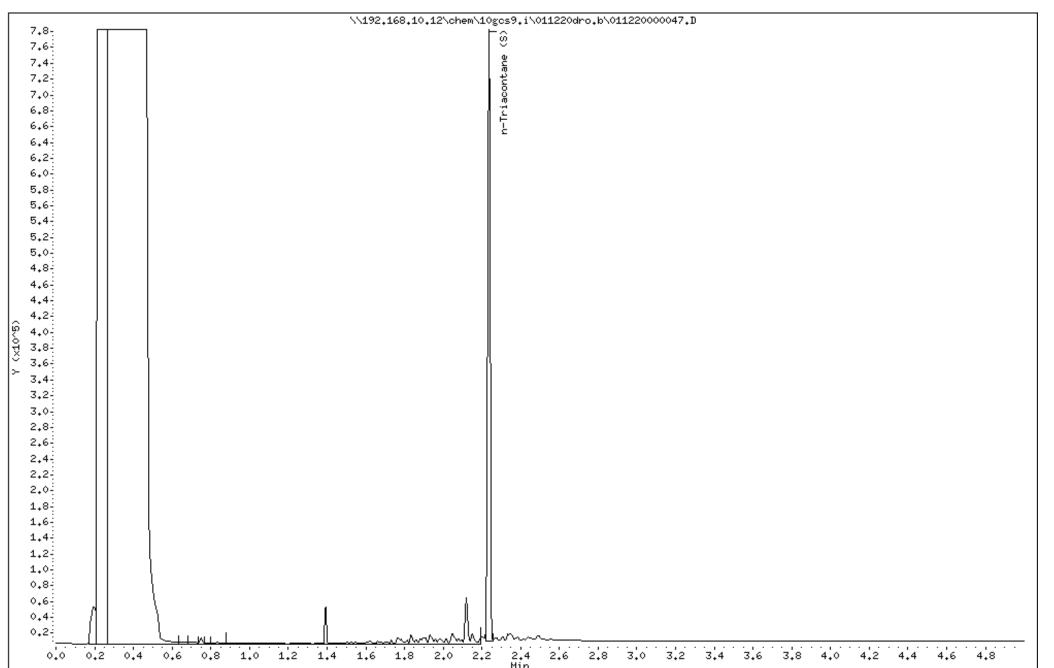
Client ID: SB-8_6-8

Sample Info: 10504984006

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Operator: JVM

Column diameter: 0.32

Instrument: 10gcs9.i



Date : 12-JAN-2020 16:40

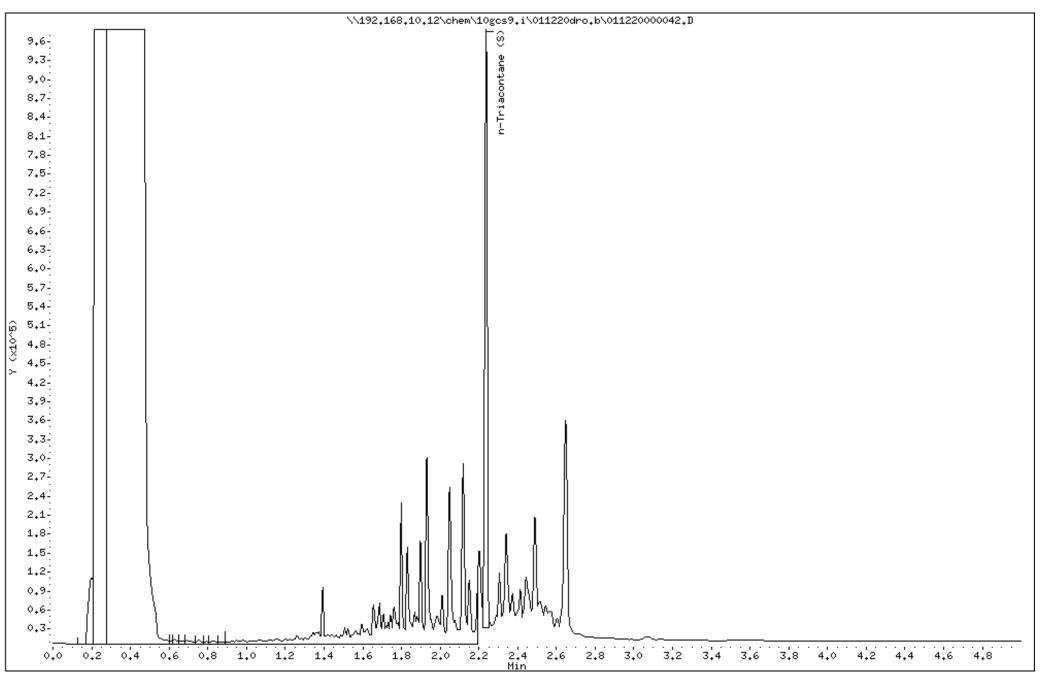
Client ID: SB-11_2-4

Sample Info: 10504984007 Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 17:22

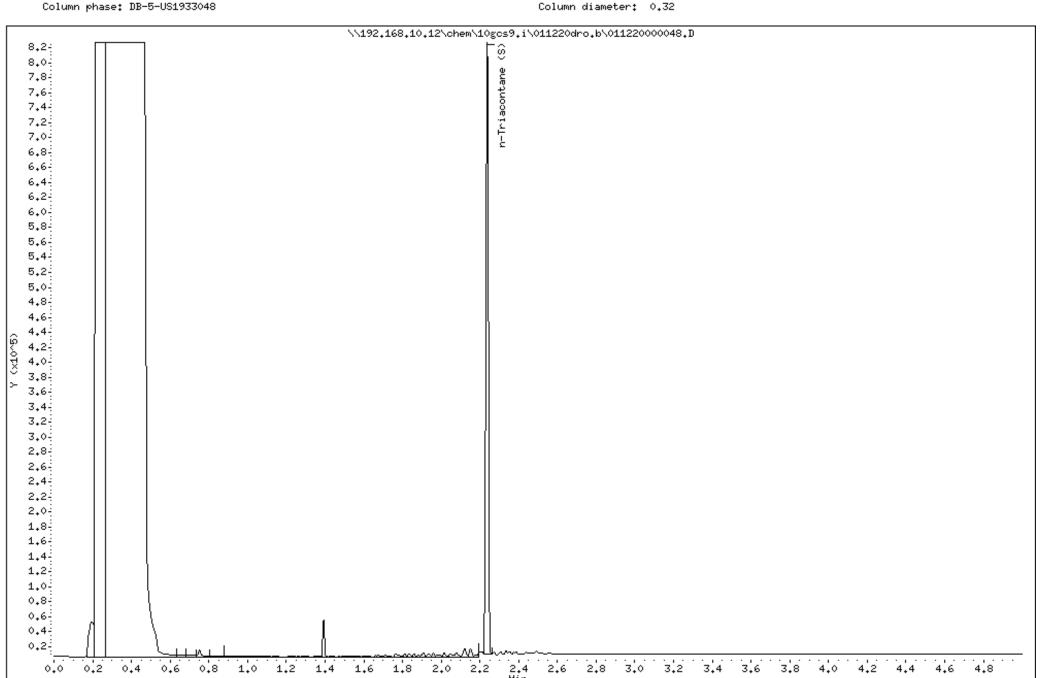
Client ID: SB-11_6-8

Sample Info: 10504984008

Volume Injected (uL): 1.0

Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 17:29

Client ID: SB-10_6-8

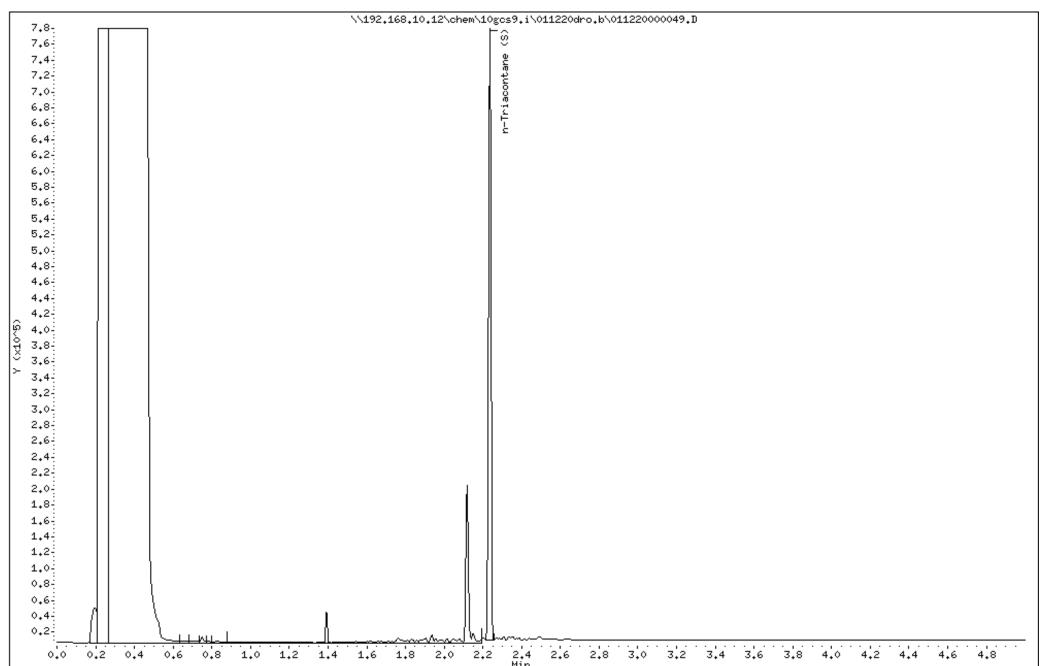
Sample Info: 10504984009

Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



Page 77 of 103

Date : 12-JAN-2020 17:36

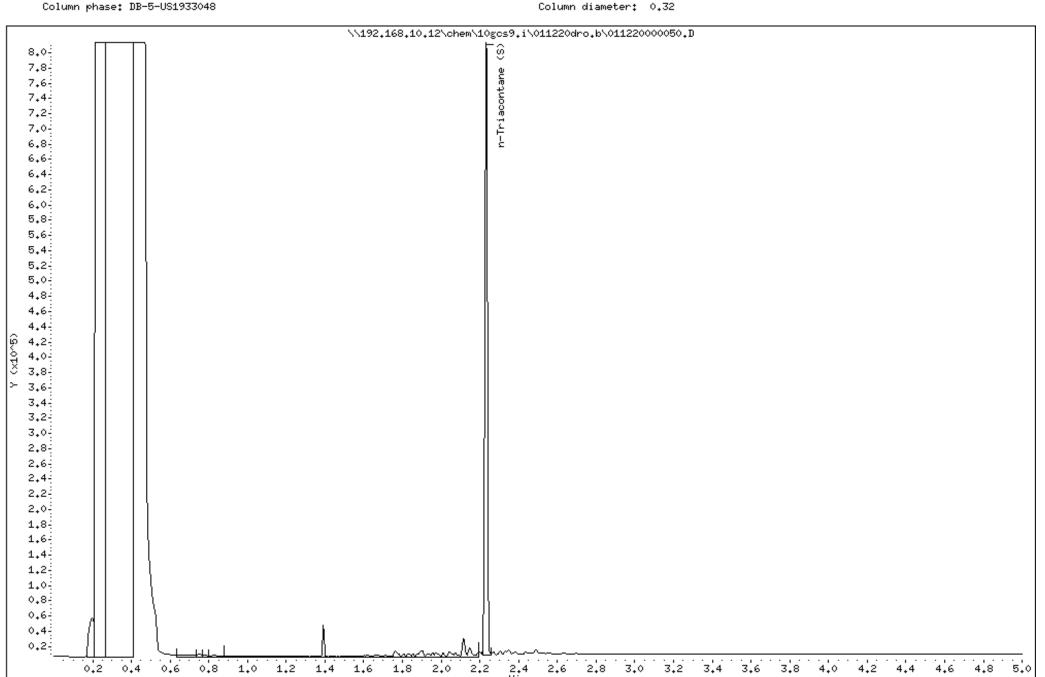
Client ID: SB-10_5-6

Sample Info: 10504984010

Volume Injected (uL): 1.0

Instrument: 10gcs9.i

Operator: JVM



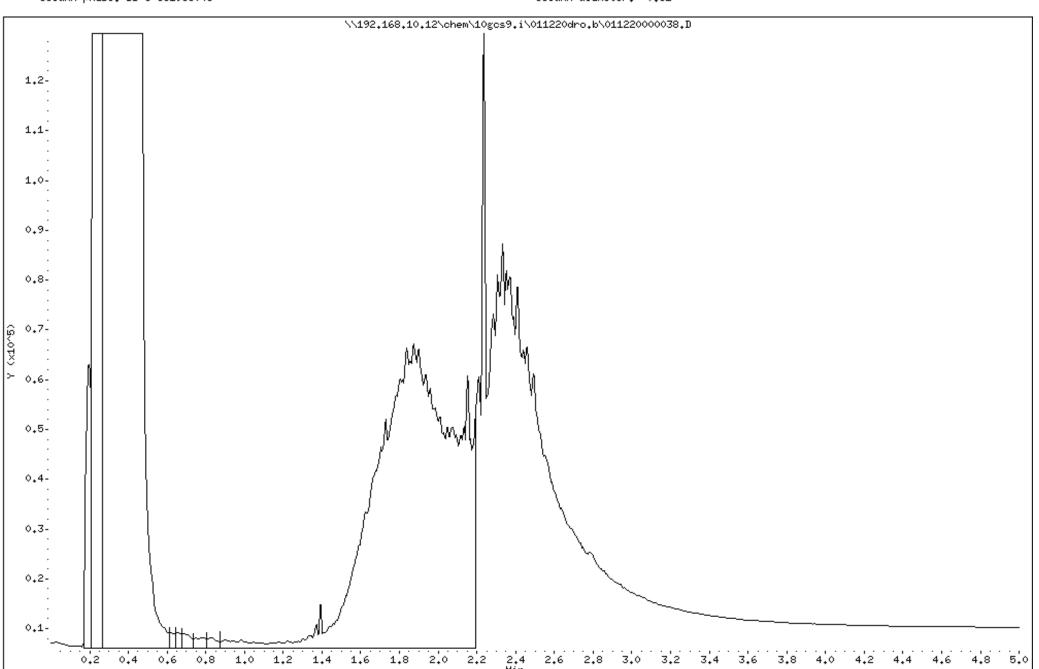
Date : 12-JAN-2020 16:12

Client ID: SB-10_1-2

Sample Info: 10504984011X10

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 17:43

Client ID: SB-9_6-8

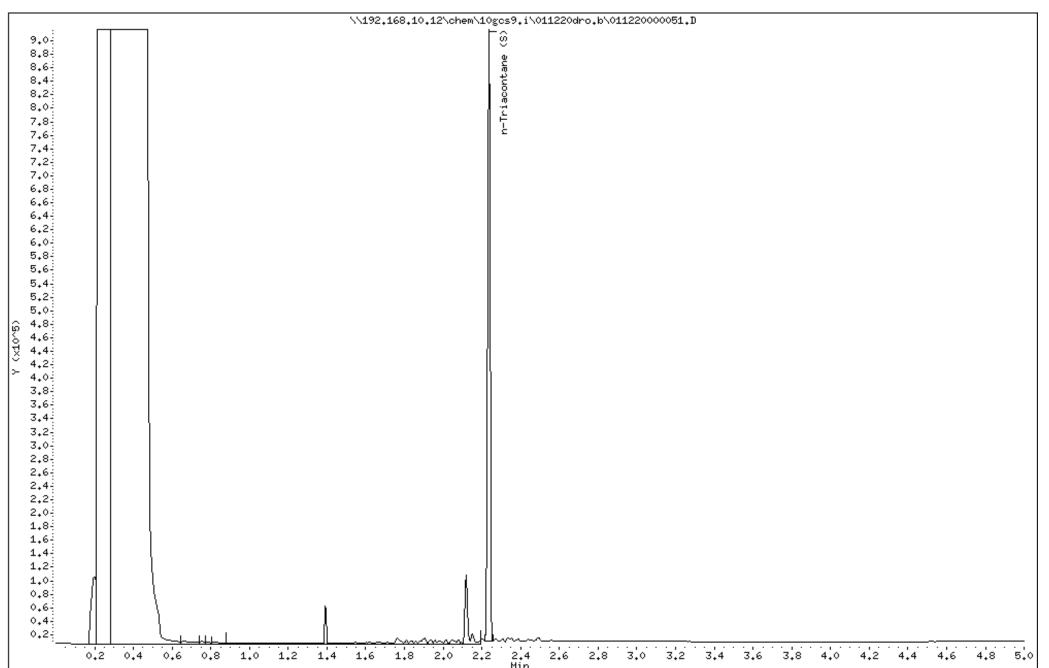
Sample Info: 10504984012

Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



Page 80 of 103

Date : 12-JAN-2020 17:50

Client ID: SB-7_2-4

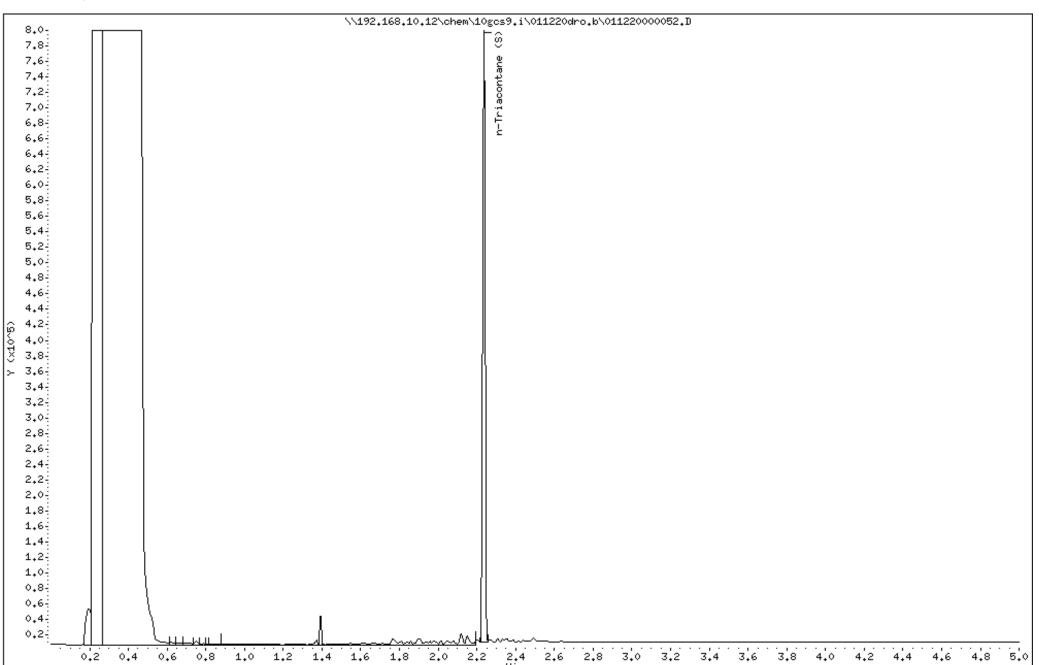
Sample Info: 10504984013

Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



Page 81 of 103

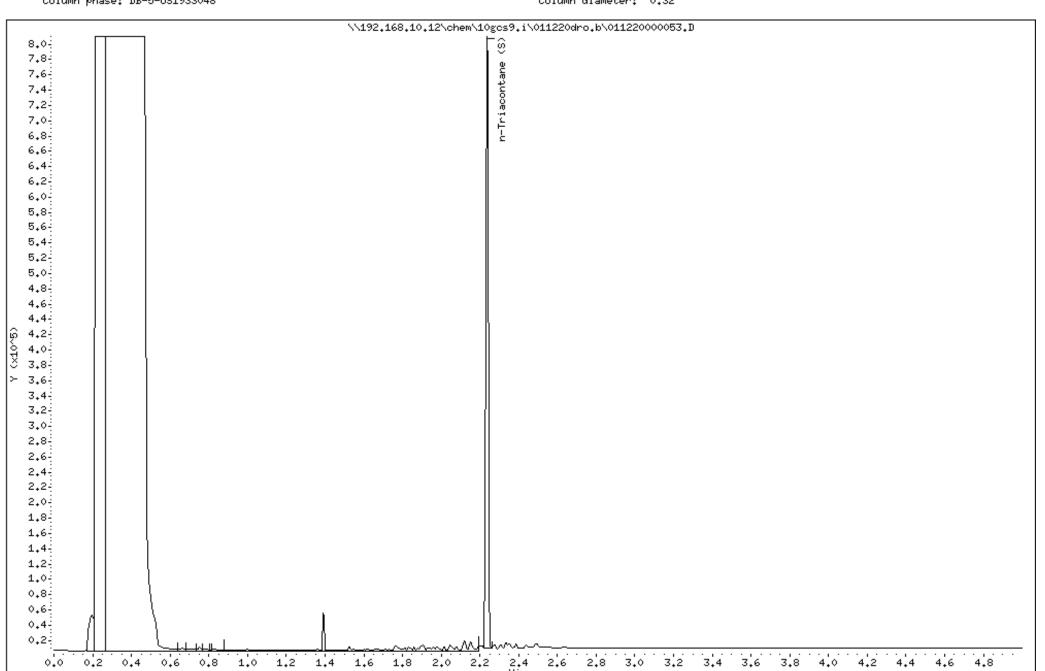
Date : 12-JAN-2020 17:57

Client ID: SB-7_6-8

Sample Info: 10504984014

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 16:26

Client ID: SB-16_6-8

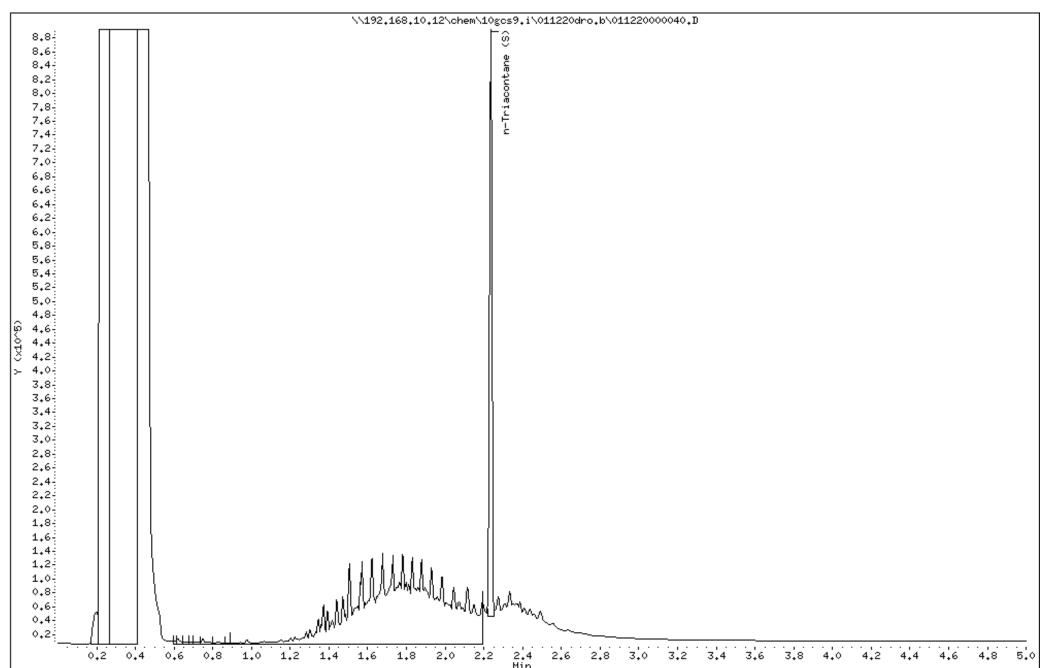
Sample Info: 10504984015

Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



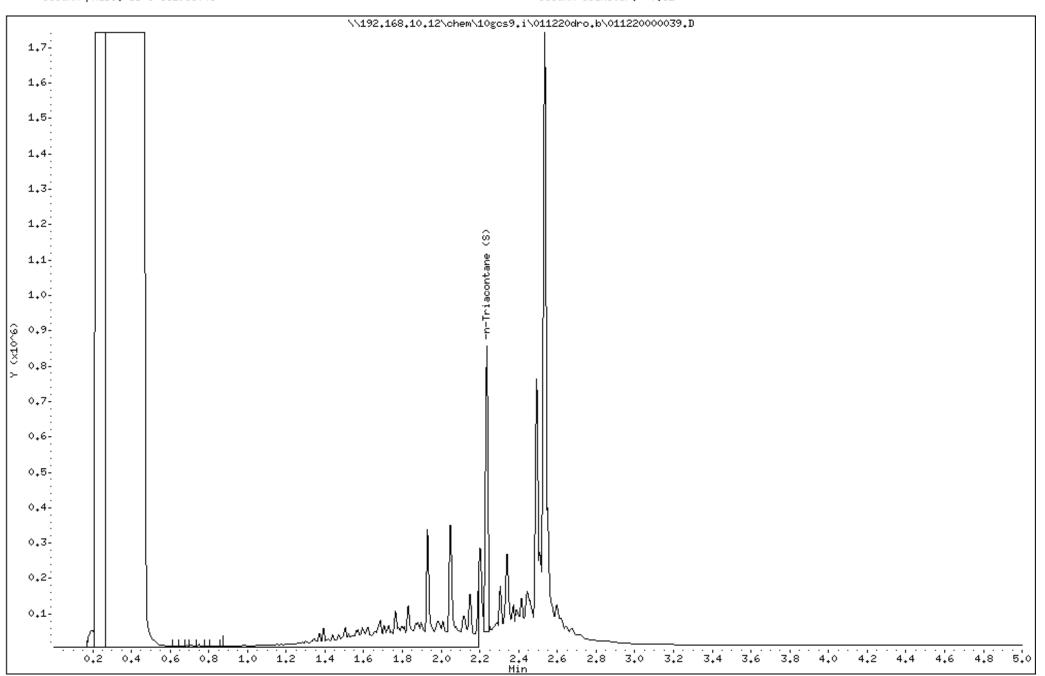
Date : 12-JAN-2020 16:19

Client ID: SB-6_1.5-2

Sample Info: 10504984016

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Instrument: 10gcs9.i

Operator: JVM



Page 84 of 103

Instrument: 10gcs9.i

Operator: JVM

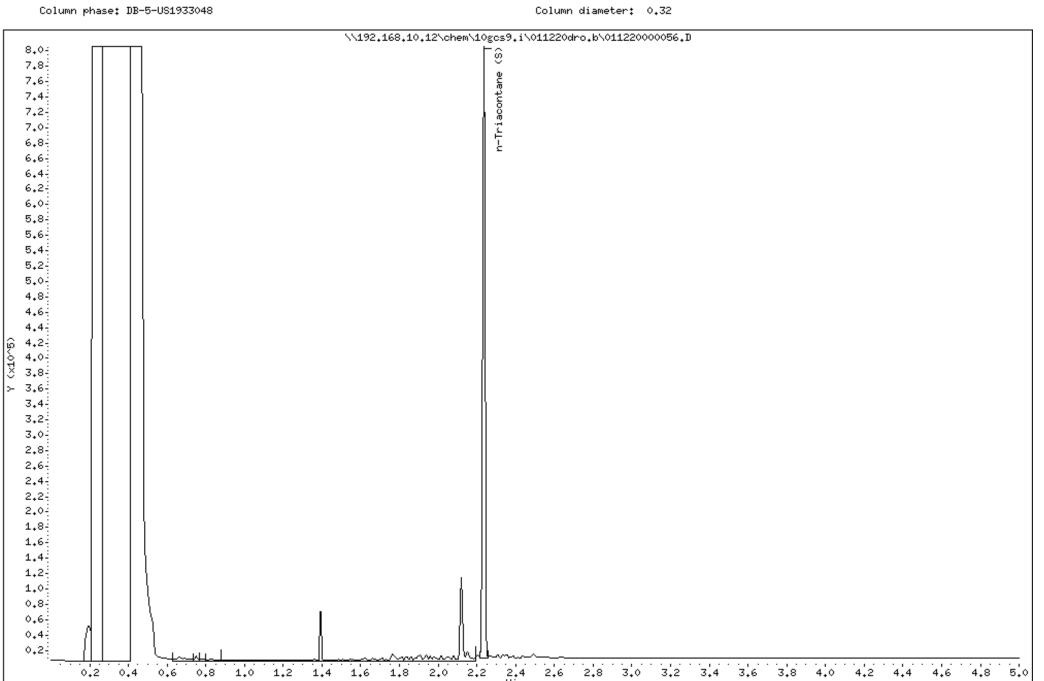
Date : 12-JAN-2020 18:19

Client ID: SB-6_5-6

Sample Info: 10504984017

Volume Injected (uL): 1.0

jected (uL): 1.0



Page 85 of 103

Date : 12-JAN-2020 18:05

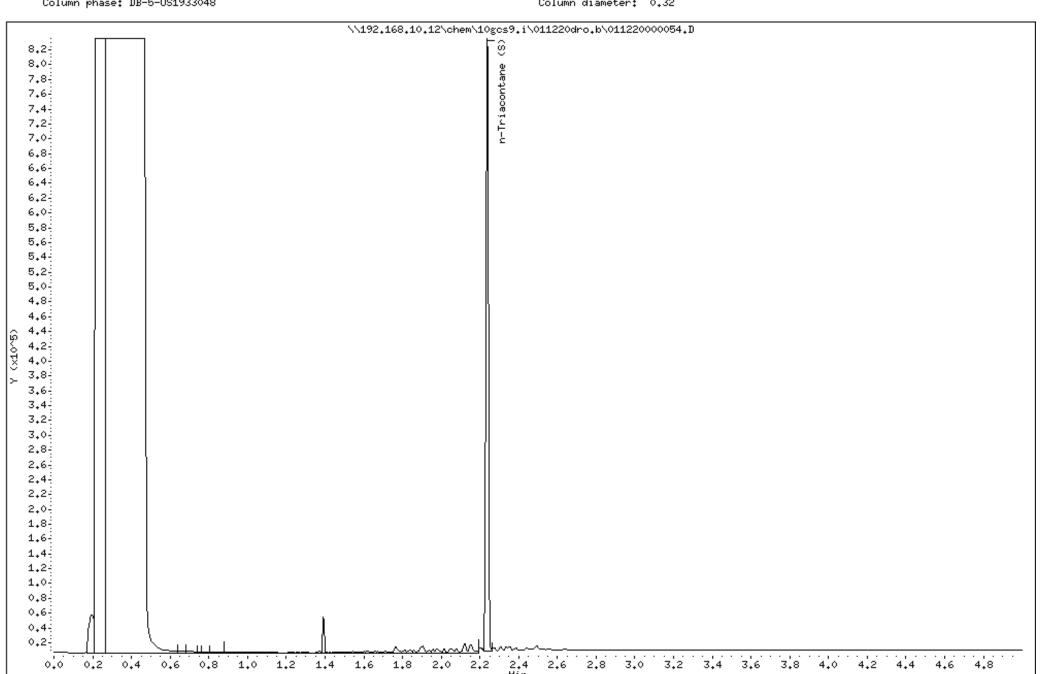
Client ID: SB-21_2-4

Sample Info: 10504984018 Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



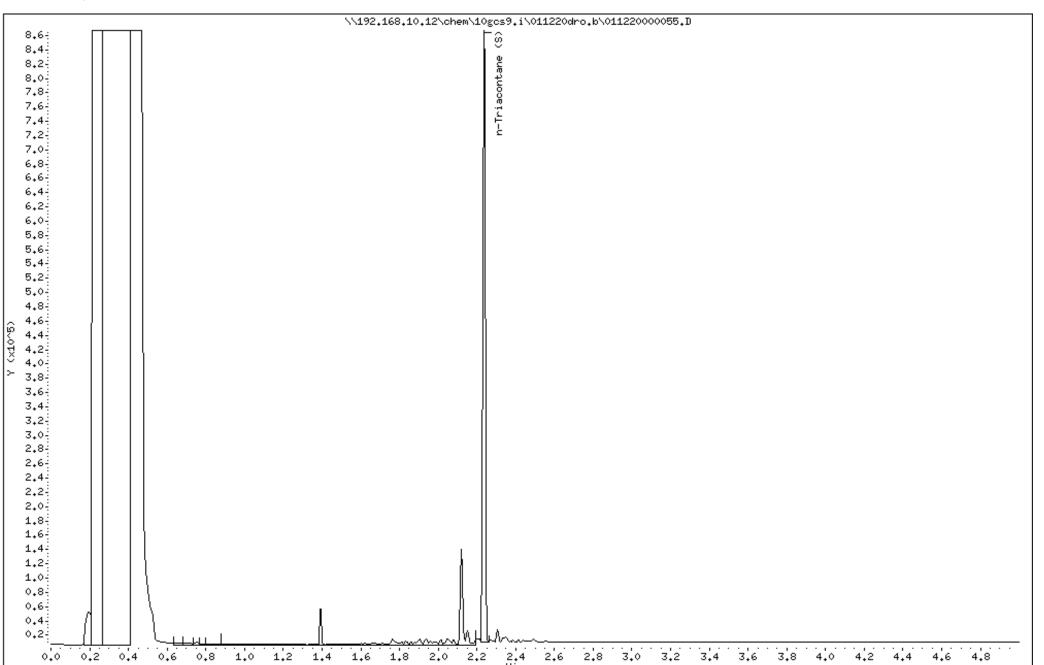
Date : 12-JAN-2020 18:12

Client ID: SB-21_6-8

Sample Info: 10504984019

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 18:26

Clicat ID: CD 20 0 4

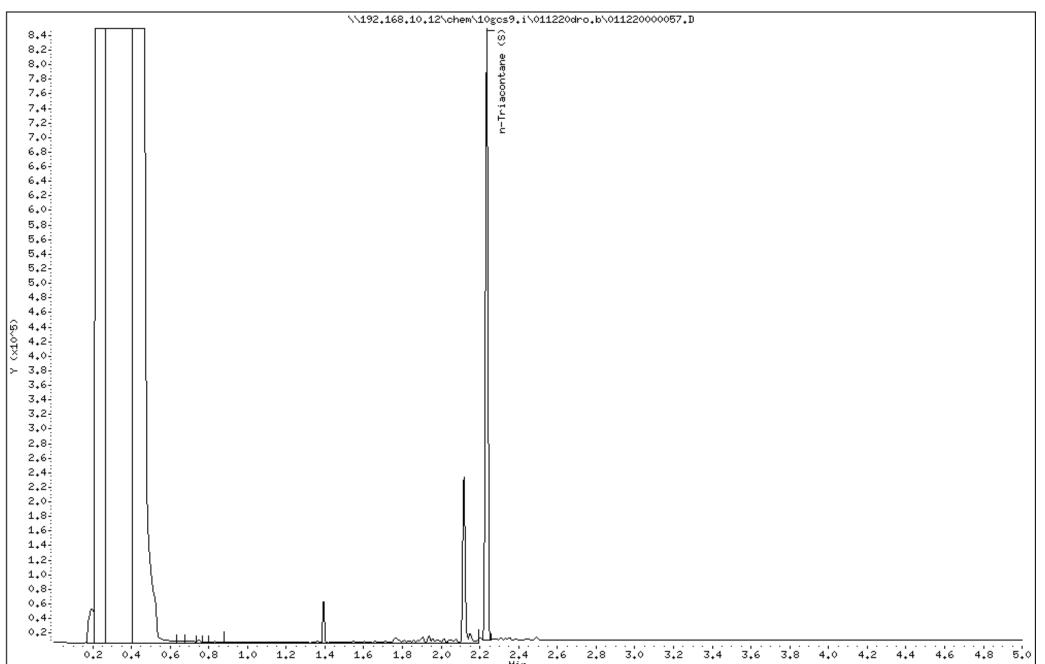
Client ID: SB-22_2-4

Sample Info: 10504984021 Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 13:53

Client ID: SB-22_6-8

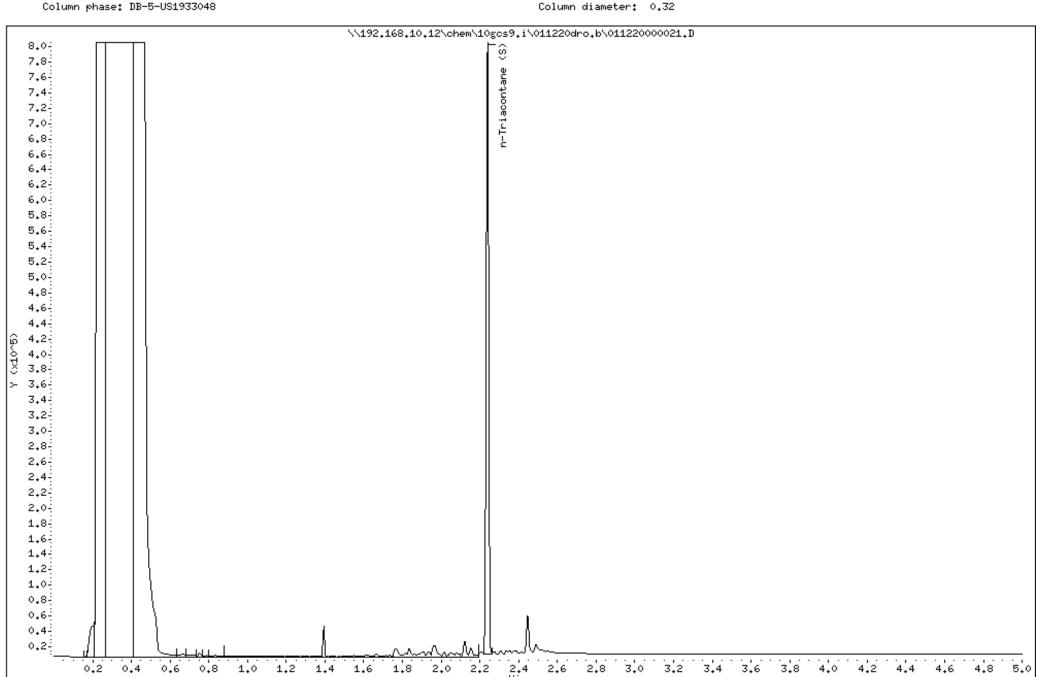
Sample Info: 10504984022

Volume Injected (uL): 1.0

Operator: JVM

Column diameter: 0.32

Instrument: 10gcs9.i



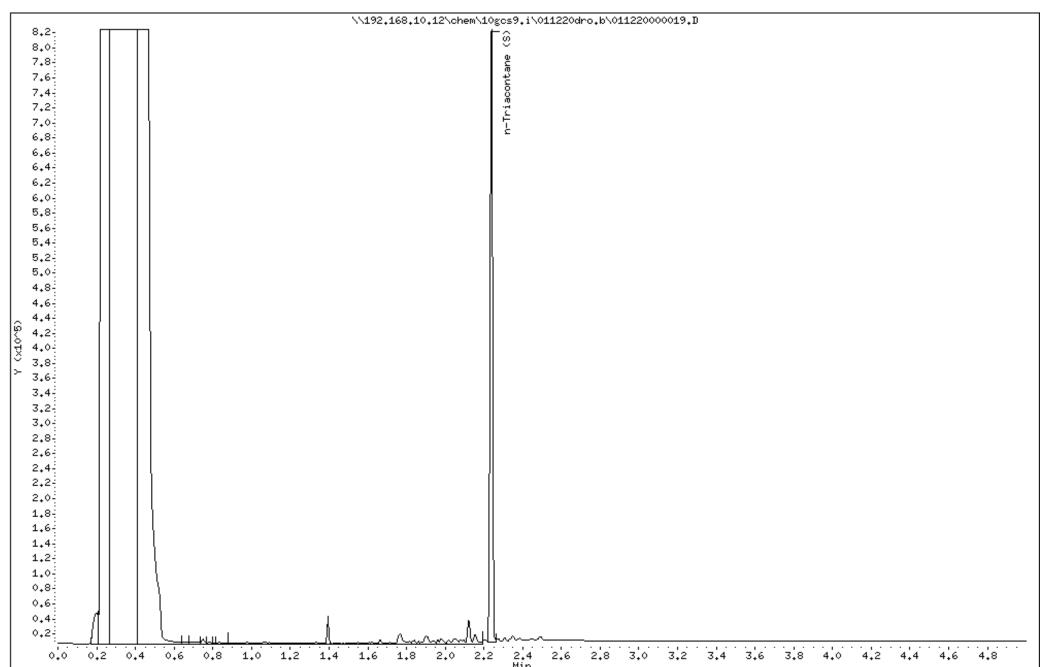
Date : 12-JAN-2020 13:39

Client ID: SB-23_6-8

Sample Info: 10504984023

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Instrument: 10gcs9.i

Operator: JVM



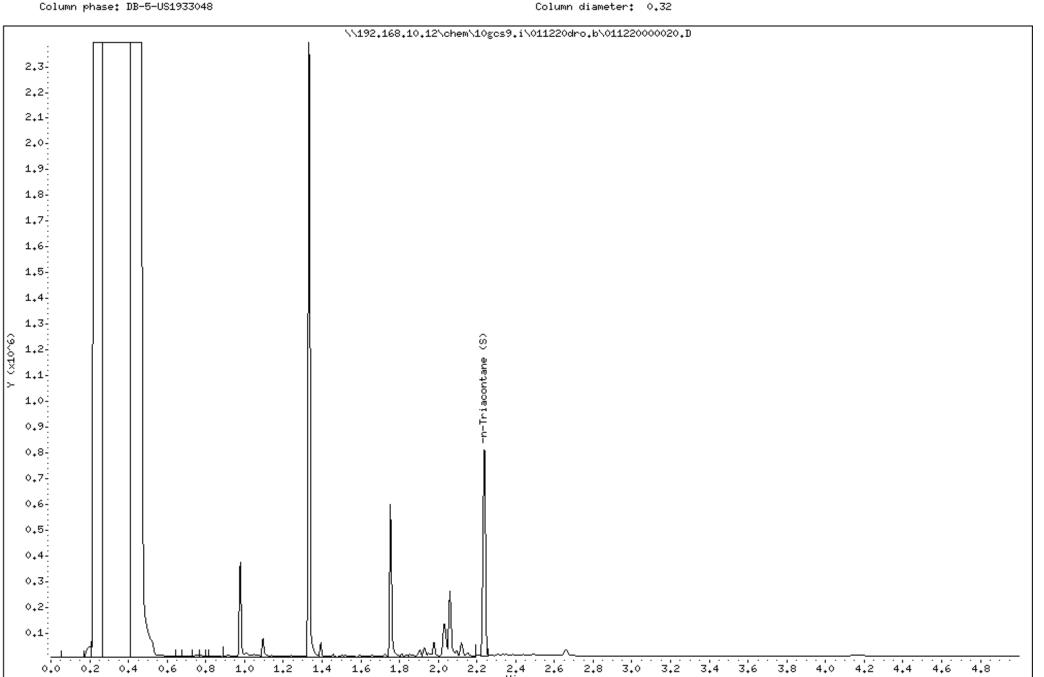
Client ID: SB-29_2-4

Sample Info: 10504984024

Volume Injected (uL): 1.0

Instrument: 10gcs9.i

Operator: JVM



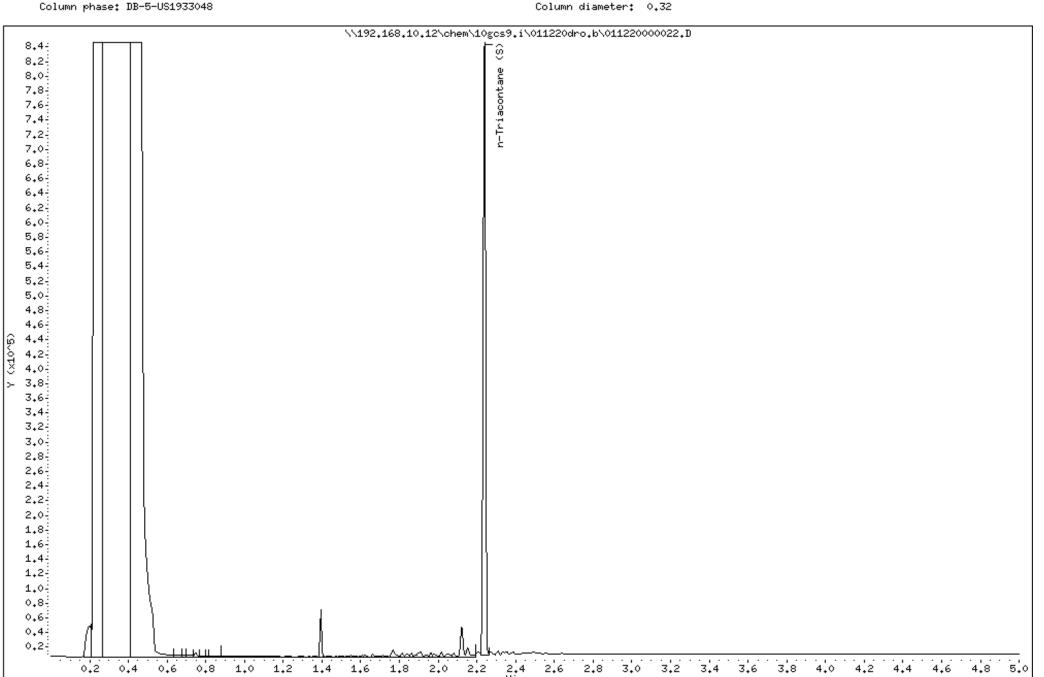
Client ID: SB-29_6-8

Sample Info: 10504984025

Volume Injected (uL): 1.0

Instrument: 10gcs9.i

Operator: JVM

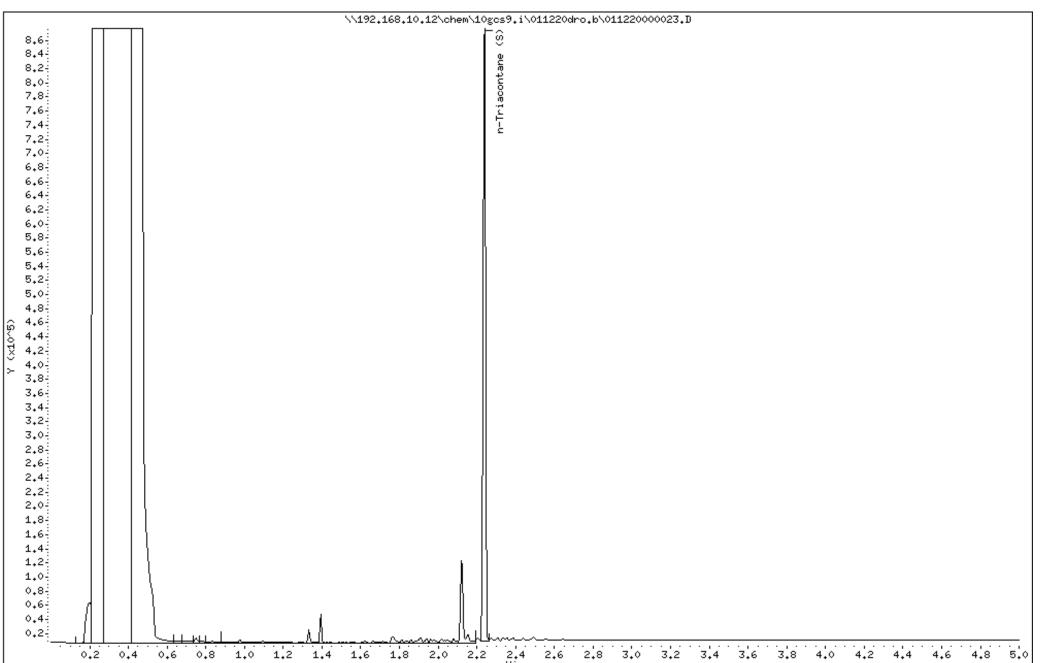


Client ID: SB-27_2-4

Sample Info: 10504984026

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Instrument: 10gcs9.i

Operator: JVM



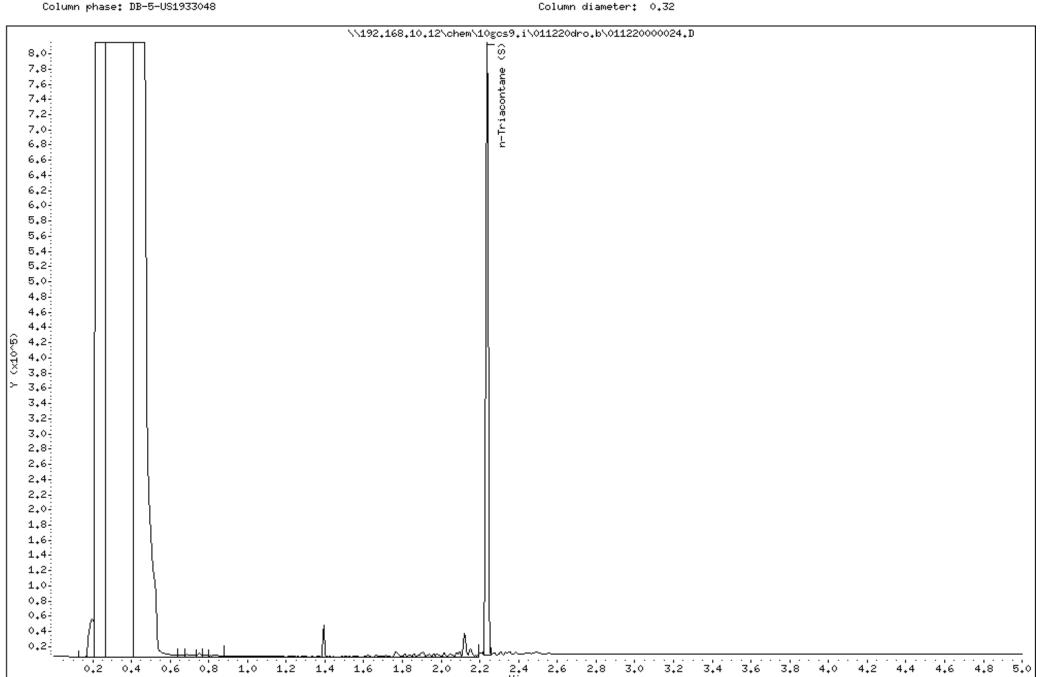
Client ID: SB-27_6-8

Sample Info: 10504984027

Volume Injected (uL): 1.0

Instrument: 10gcs9.i

Operator: JVM

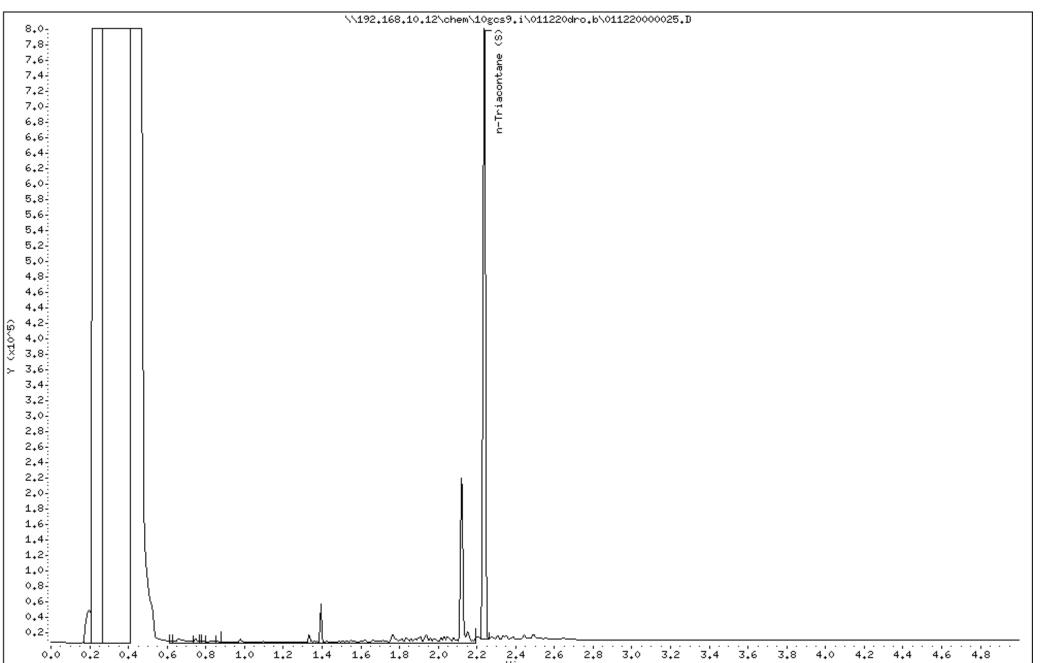


Client ID: SB-28_6-8

Sample Info: 10504984028

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Instrument: 10gcs9.i

Operator: JVM



Client ID: SB-24_6-8

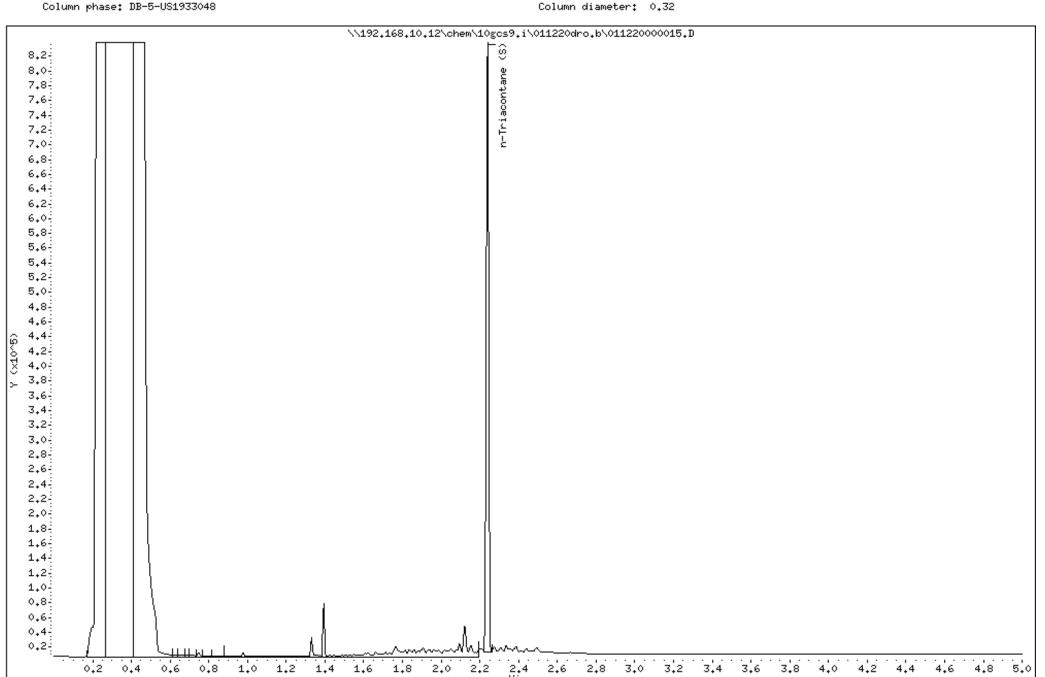
Sample Info: 10504984029

Volume Injected (uL): 1.0

Operator: JVM

Column diameter: 0.32

Instrument: 10gcs9.i



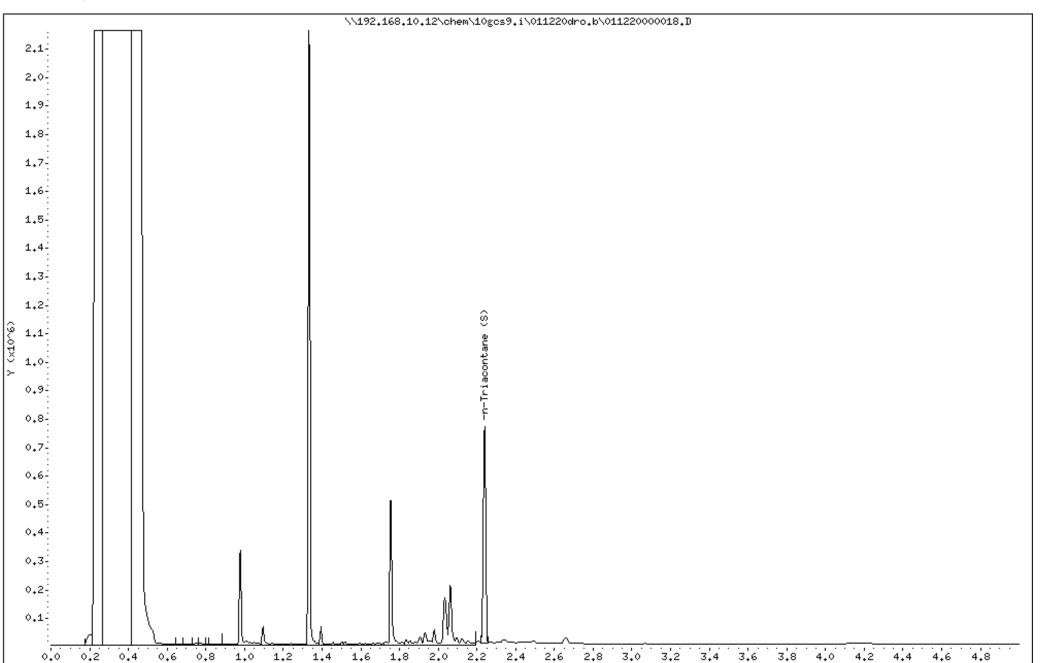
Client ID: SB-25_6-8

Sample Info: 10504984030 Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



Client ID: SB-26_2-4

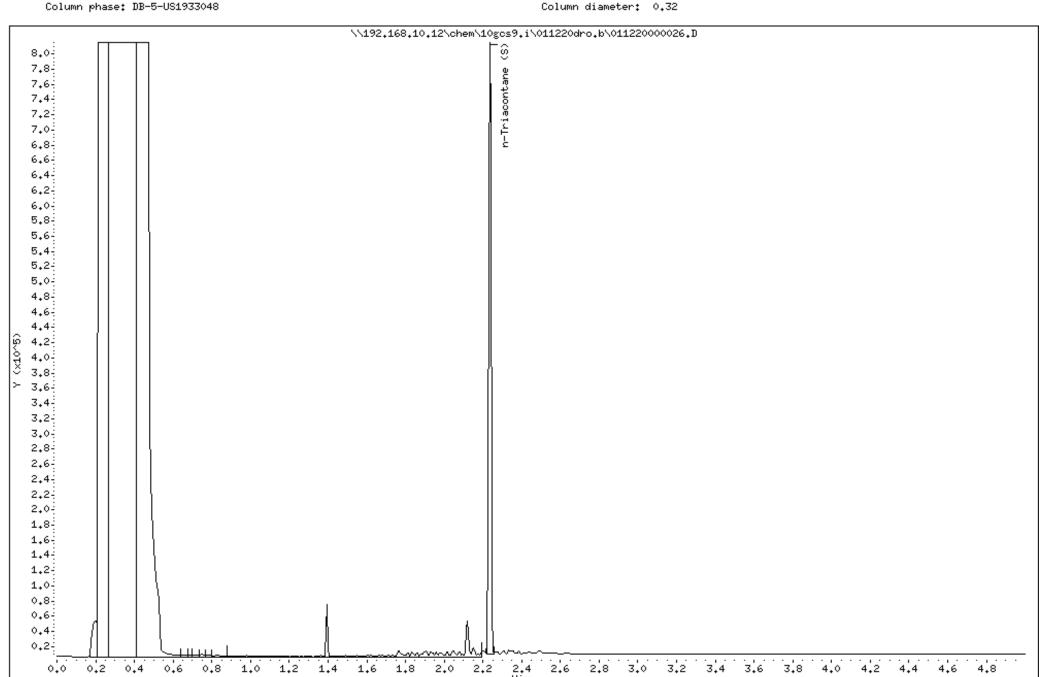
Sample Info: 10504984031

Volume Injected (uL): 1.0

Operator: JVM

Column diameter: 0.32

Instrument: 10gcs9.i



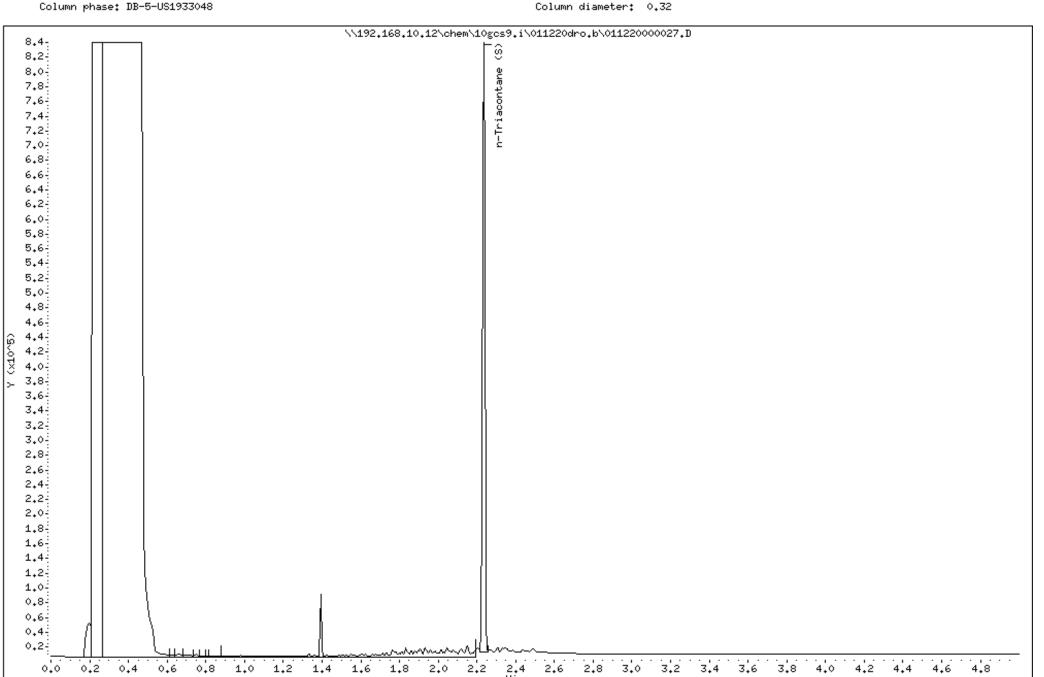
Client ID: SB-26_6-8

Sample Info: 10504984032

Volume Injected (uL): 1.0

Instrument: 10gcs9.i

Operator: JVM



Page 99 of 103

Date : 12-JAN-2020 14:56

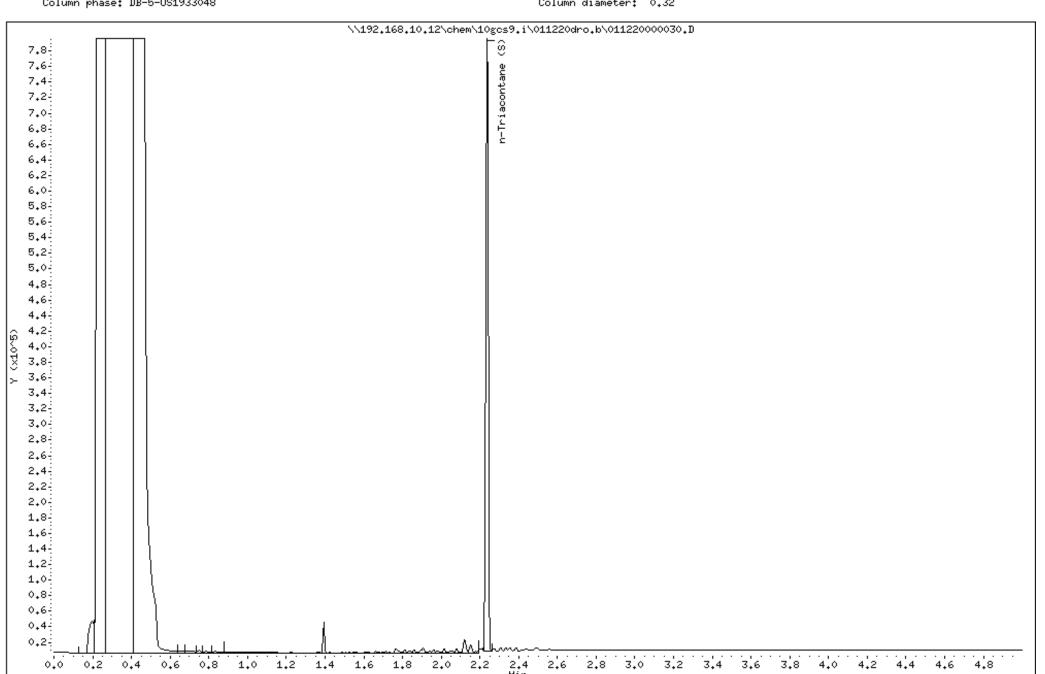
Client ID: SB-19_6-8

Sample Info: 10504984033 Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



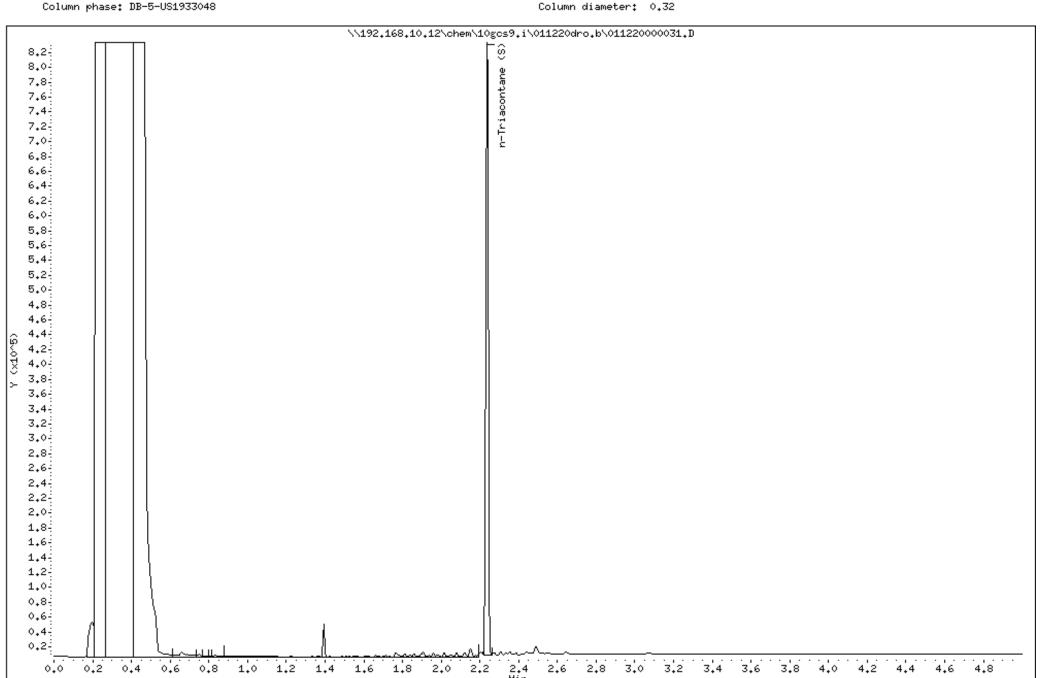
Client ID: SB-18_2-4

Sample Info: 10504984034

Volume Injected (uL): 1.0

Instrument: 10gcs9.i

Operator: JVM



Client ID: SB-18_6-8

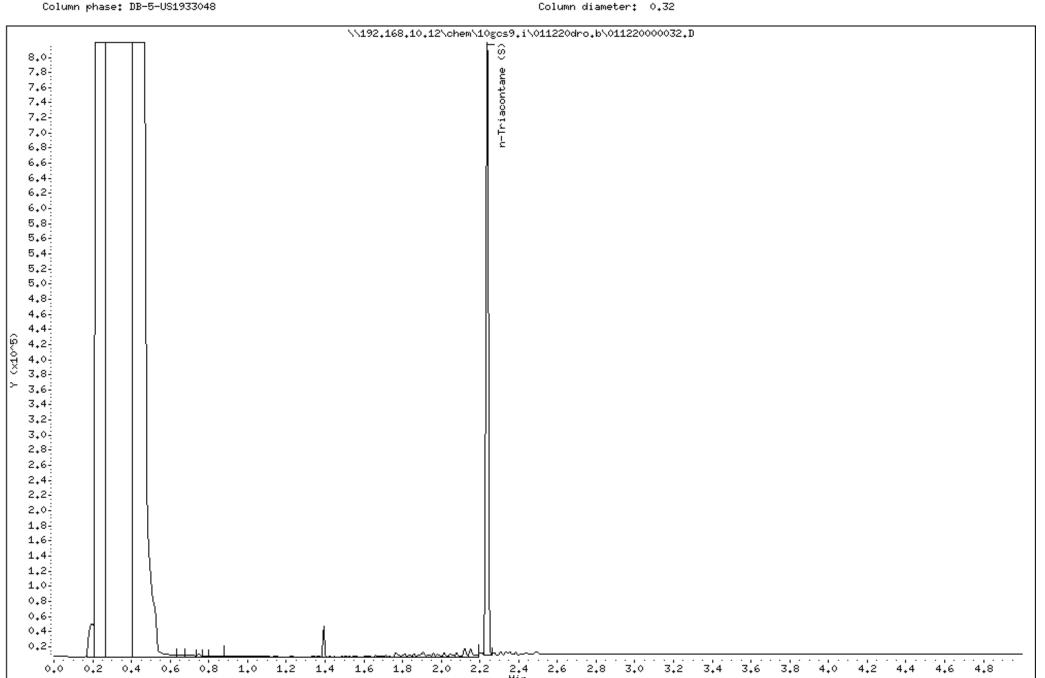
Sample Info: 10504984035

Volume Injected (uL): 1.0

Operator: JVM

Column diameter: 0.32

Instrument: 10gcs9.i



Client ID: SB-17_6-8

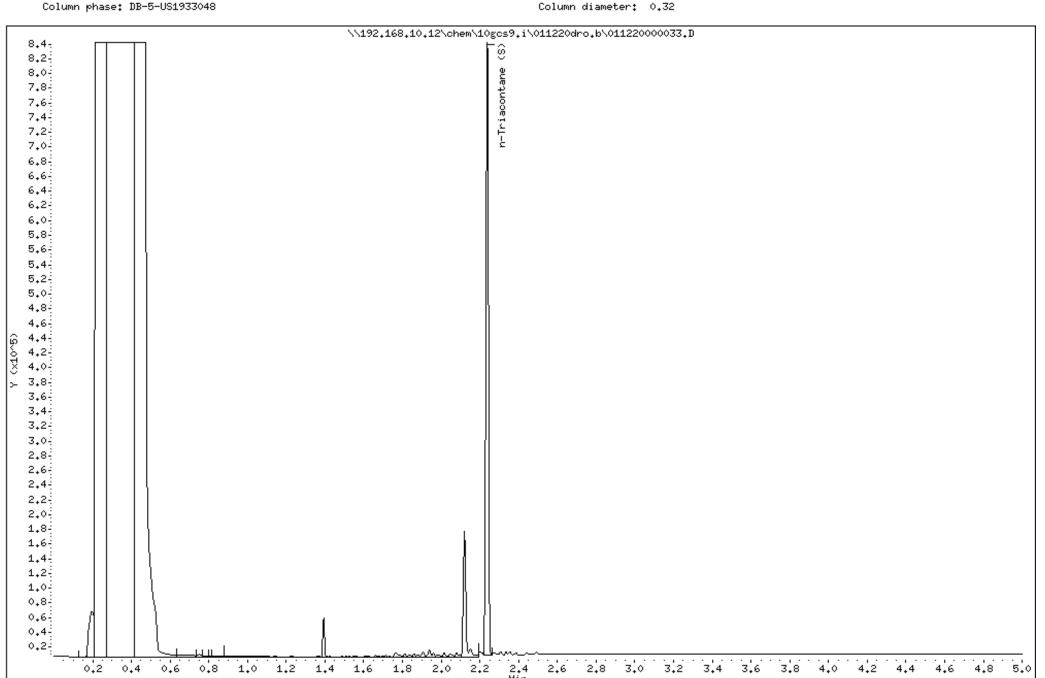
Sample Info: 10504984036

Volume Injected (uL): 1.0

Operator: JVM

Column diameter: 0.32

Instrument: 10gcs9.i



Client ID: SB-20_6-8

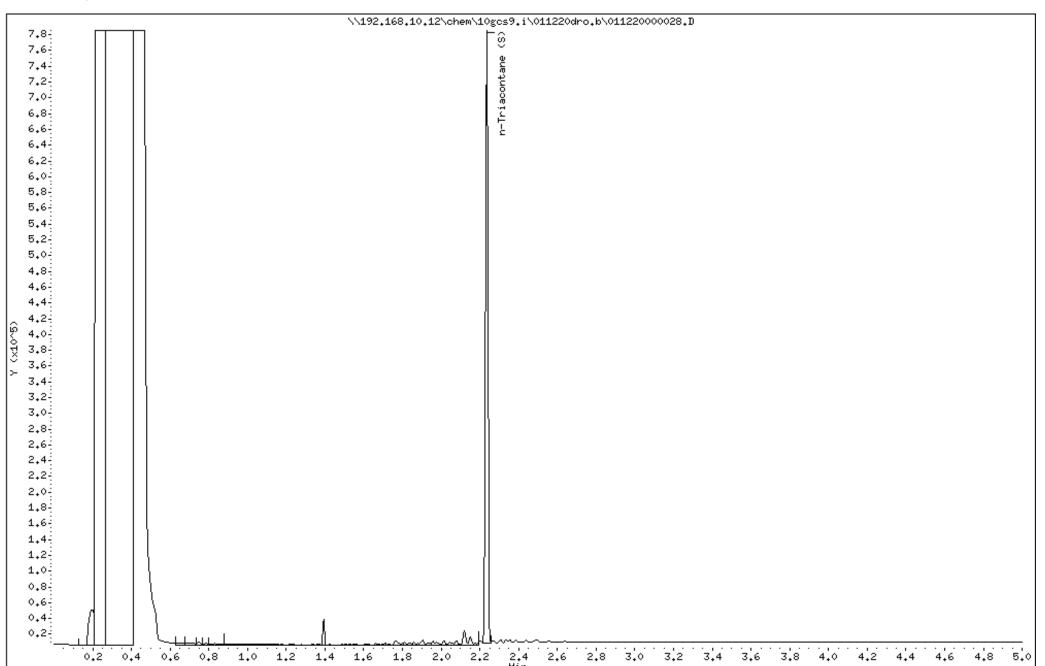
Sample Info: 10504984037

Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



C.2 – Investigation Waste Disposal Documentation



Waste Profile Sheet



P.O. Number	Customer Code		SKB Represe	ntative Kyle Back	strom CL		
I. Generator Information	n						
Generator Name: Superior Wate		Generato	EPA ID Num	ber WIR 000 1	50 185	SIC Code	
Generator Location: Nemadji Substation, Hill Avenue and	County: Douglas	Generato	Contact: Gr	eg Prom or Zach	Golkowski		
Stinson Avenue Superior WI, 54880	J	Phone: 218-355-3191 Fax:					
Generator Mailing Address (if differen 2915 Hill Avenue Superior, WI 54880	t: SWLP	Generato zgolkow	r Email Addres rski@mnpor	ss: gprom@mnpd wer.com	ower.com or		
Bill To Name & Address: SWLP Bill To #: Billing Contact: Accounts Payable 2915 Hill Avenue							
Superior, WI 54880		Phone: 2	218-355-31	91	Fax:		
Invoice Contact: Zach Golkowsk	i	Billing Em	ail Address:	accountspayable	@allete.com		
II. Waste Generation In							<u> </u>
Waste Name: Oil Impacted Soi	I/Debris			ed rate of waste general sections.		⊠ one □ yea	time rly
Generator Facility Operations and/or	Site History: Buried debris	mixed wi	th bituminou	S.			-
Describe the generating process or s	ource of contaminated soil/de	ebris and/o	waste: His	toric dumping of oil	y tarry bituminous.		
III. Waste Composition	and Constituents (list all kr	own)				Actual Rang	ppm
Oil Contaimainted Soil/Debris	(e.g. class 5, grave, sa	nd clay, t	opsoil, crus	hed rock, metal d	ebris)	100	<50 (PCB)
IV. Waste Properties Physical state: Figure 1. The properties of	ree Liquids: pH R	ongo:	Flash	noint:	Color:	Odor (des	oribo):
Solid Liquid Sludge Gas] Yes ⊠ No □ < ⊠ 5	ange: 2	-4 -12.4	140°F 140°F to < 200°F 200°F	Brown	Slight petroleu	•
V. Waste Classification			<u> </u>		•	•	<u>'</u>
Waste stream properties (answer				Does this waste o	ontain absorbents?	☐ Yes	⊠ No
Does this waste stream contain a	ny D, F, K, U or P listed a	s		Is this waste letha	ıl (by Minn. Rules		
hazardous waste, either in pure for treatment residue?	orm, as a mixture, or	☐ Y	es 🛚 No	7045.0131 Subp.	6)?	☐ Yes	⊠ No
Does this waste stream contain F		☐ Y	es 🛛 No	Is this waste recy		Yes	⊠ No
If yes, concentration:	ppm		N N	Is this waste explo		∐ Yes	⊠ No
Does this waste stream contain for Does this waste contain asbestos	•	HY	=	Is this waste infec		∐ Yes	⊠ No ⊠ No
Does this waste contain aspestos Does this waste contain oxidizers		∐ Y	_	Is this putrescible Is this waste dem		∐ Yes □ Yes	⊠ No ⊠ No
Does this waste contain oxidizers						Yes	⊠ No
Please attach any available info							
	ations. Include MSDS's an	d any info	rmation from	other agencies (i.e.,	MPCA, USEPA)		
VI. Shipping Information							
Proper DOT Shipping Name (per CFF	R 172.101) where applicable						
Reportable Quantity	DOT Hazard Class	UN/NA	Number		Packing Group		
Method of packaging: drums (siz	•	Method Ro	of shipment	nd dump 🔲 Rail	Other (Specify)		
Bulk Solids boxes (siz	e)			· —	, , , _		

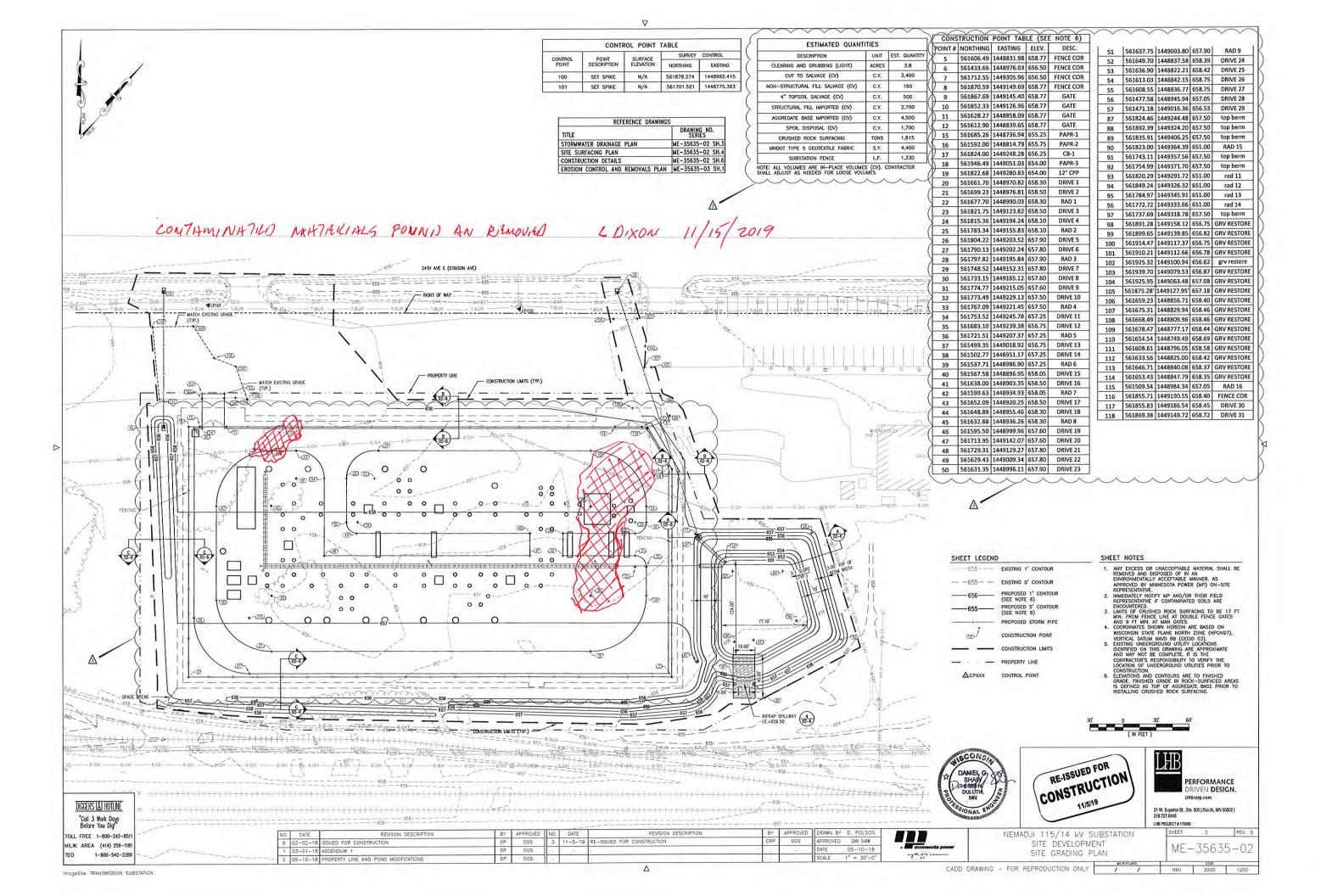
VII. Certification of Non Hazardous Waste & Approval Conditions

I hereby certify and warrant, on behalf of the generator and myself that, to the best of my knowledge and belief, the information contained herein is accurate, and true and that the waste is nonhazardous as defined in Title 42, Unites States Code Section 6903, Minnesota Statute Section 116.06, Subdivision 13, and/or any rules adopted by the Minnesota Pollution Control Agency under Minnesota Statute Section 116.07.

I understand that any approval is no longer valid if there are any changes in the process generating the waste or there have been changes in the composition of the waste. Therefore, if the composition of the waste stream changes or potentially changes, I or someone representing the generator, will immediately notify SKB Environmental. I, on behalf of the generator, hereby agree to fully indemnify SKB Environmental for any damages and/or costs incurred as a result of this certification being inaccurate or untrue.

	Greg Prom	Env. Complinace Spec	11/18/2019
Signature	Printed Name	Title	Date

Version 2012







November 15, 2019

Zach Golkowski MN Power 30 W. Superior St. Duluth, MN 55802

RE: Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Dear Zach Golkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on November 08, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ryan Thibault ryan.thibault@pacelabs.com (612)607-1700

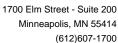
Project Manager

13-16

Enclosures

cc: Ross Dudzik, Minnesota Power Drew Janke, Minnesota Power







CERTIFICATIONS

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Pace Analytical Services Minneapolis

A2LA Certification #: 2926.01 Alabama Certification #: 40770

Alaska Contaminated Sites Certification #: 17-009

Alaska DW Certification #: MN00064 Arizona Certification #: AZ0014 Arkansas DW Certification #: MN00064 Arkansas WW Certification #: 88-0680 California Certification #: 2929 CNMI Saipan Certification #: MP0003

Colorado Certification #: MN00064 Connecticut Certification #: PH-0256

EPA Region 8+Wyoming DW Certification #: via MN 027-

053-137

Florida Certification #: E87605 Georgia Certification #: 959 Guam EPA Certification #: MN00064 Hawaii Certification #: MN00064 Idaho Certification #: MN00064

Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064

Maine Certification #: MN00064 Maryland Certification #: 322

Massachusetts Certification #: M-MN064

Massachusetts DWP Certification #: via MN 027-053-137

Michigan Certification #: 9909

Minnesota Certification #: 027-053-137

Minnesota Dept of Ag Certifcation #: via MN 027-053-137

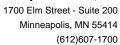
Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647

North Carolina DW Certification #: 27700 North Carolina WW Certification #: 530 North Dakota Certification #: R-036 Ohio DW Certification #: 41244 Ohio VAP Certification #: CL101 Oklahoma Certification #: 9507

Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #: 74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Vermont Certification #: VT-027053137
Virginia Certification #: 460163
Washington Certification #: C486

West Virginia DEP Certification #: C486
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C
Wisconsin Certification #: 999407970

Wyoming UST Certification #: via A2LA 2926.01





SAMPLE SUMMARY

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10498837001	Nemadji Sub	Solid	11/08/19 02:07	11/08/19 14:00





SAMPLE ANALYTE COUNT

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory	
10498837001	Nemadji Sub	EPA 8082A	JVM	12	PASI-M	
		WI MOD DRO	EC2	2	PASI-M	
		EPA 6010D	BD1	7	PASI-M	
		EPA 7470A	LMW	1	PASI-M	
		ASTM D2974	JDL	1	PASI-M	
		EPA 8270D	STB	18	PASI-M	
		EPA 8260B	AEZ	14	PASI-M	



ANALYTICAL RESULTS

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Date: 11/15/2019 05:18 PM

Sample: Nemadji Sub	Lab ID: 1049	98837001	Collected: 11/08/1	9 02:07	Received: 11	/08/19 14:00 N	/latrix: Solid	
Results reported on a "dry weight" l	basis and are adj	usted for p	ercent moisture, sa	mple s	ize and any dilut	ions.		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
8082A GCS PCB	Analytical Meth	nod: EPA 80	082A Preparation Me	thod: E	PA 3550			
PCB-1016 (Aroclor 1016)	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	11096-82-5	
PCB-1262 (Aroclor 1262)	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	37324-23-5	
PCB-1268 (Aroclor 1268)	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	11100-14-4	
PCB, Total	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	1336-36-3	
Surrogates	54	0/	E7.40E		44/44/40 47.47	44/44/40 00:00	077 00 0	C 0
Tetrachloro-m-xylene (S)	54	%.	57-125	1		11/14/19 20:23		S0
Decachlorobiphenyl (S)	49	%.	49-125	1	11/11/19 17:17	11/14/19 20:23	2051-24-3	
WIDRO GCS	Analytical Meth	nod: WI MO	D DRO Preparation	Method	I: WI MOD DRO			
NDRO C10-C28 Surrogates	9220	mg/kg	2530	50	11/11/19 13:02	11/12/19 17:20		
a-Triacontane (S)	0	%.	50-150	50	11/11/19 13:02	11/12/19 17:20	638-68-6	P3,S4
010D MET ICP, TCLP			010D Preparation Me PA 1311; 11/12/19 14			I nH: 1 87		
			•		•	•		
Arsenic	ND	mg/L	0.50	1		11/14/19 15:32		
Barium S	1.2	mg/L	1.0	1		11/14/19 15:32		
Cadmium	ND	mg/L	0.050	1		11/14/19 15:32		
Chromium	ND	mg/L	0.50	1		11/14/19 15:32		
Lead	ND	mg/L	0.50	1		11/14/19 15:32		
Selenium	ND	mg/L	0.10	1		11/14/19 15:32		
Silver	ND	mg/L	0.10	1	11/14/19 05:33	11/14/19 15:32	7440-22-4	
7470A Mercury, TCLP			70A Preparation Me					
	Leachate Meth	od/Date: El	PA 1311; 11/12/19 14	:20 Init	ial pH: 8.98; Final	l pH: 1.87		
Mercury	ND	ug/L	0.60	1	11/14/19 09:28	11/15/19 11:04	7439-97-6	
Ory Weight / %M by ASTM D2974	Analytical Meth	nod: ASTM	D2974					
Percent Moisture	29.6	%	0.10	1		11/14/19 13:40		N2
3270D MSSV TCLP	Analytical Meth	nod: EPA 82	270D Preparation Me	thod: E	PA 3510			
			PA 1311; 11/12/19 14			l pH: 1.87		
,4-Dichlorobenzene	ND	ug/L	100	1	11/13/19 13:28	11/13/19 23:32	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	100	1		11/13/19 23:32		
Hexachloro-1,3-butadiene	ND	ug/L	100	1		11/13/19 23:32		
Hexachlorobenzene	ND	ug/L	100	1		11/13/19 23:32		
Hexachloroethane	ND	ug/L	100	1		11/13/19 23:32		
2-Methylphenol(o-Cresol)	ND	ug/L	100	1		11/13/19 23:32		
3&4-Methylphenol(m&p Cresol)	ND	ug/L	100	1		11/13/19 23:32		



ANALYTICAL RESULTS

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Date: 11/15/2019 05:18 PM

Lab ID: 10498837001 Sample: Nemadji Sub Collected: 11/08/19 02:07 Received: 11/08/19 14:00 Matrix: Solid Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions. **Parameters** Results Units Report Limit DF Prepared Analyzed CAS No. Qual 8270D MSSV TCLP Analytical Method: EPA 8270D Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 11/12/19 14:20 Initial pH: 8.98; Final pH: 1.87 ND 100 Nitrobenzene ug/L 1 11/13/19 13:28 11/13/19 23:32 98-95-3 Pentachlorophenol ND ug/L 200 11/13/19 13:28 11/13/19 23:32 87-86-5 Pyridine ND ug/L 100 11/13/19 13:28 11/13/19 23:32 110-86-1 2,4,5-Trichlorophenol ND 100 11/13/19 13:28 11/13/19 23:32 95-95-4 ug/L 1 2,4,6-Trichlorophenol ND 100 11/13/19 13:28 11/13/19 23:32 88-06-2 ug/L Surrogates Nitrobenzene-d5 (S) 78 % 57-125 1 11/13/19 13:28 11/13/19 23:32 4165-60-0 2-Fluorobiphenyl (S) 71 %. 48-125 11/13/19 13:28 11/13/19 23:32 321-60-8 p-Terphenyl-d14 (S) 102 %. 53-125 11/13/19 13:28 11/13/19 23:32 1718-51-0 Phenol-d6 (S) 34 %. 10-128 11/13/19 13:28 11/13/19 23:32 13127-88-3 1 54 30-125 11/13/19 13:28 11/13/19 23:32 367-12-4 2-Fluorophenol (S) %. 1 2,4,6-Tribromophenol (S) 80 %. 45-125 11/13/19 13:28 11/13/19 23:32 118-79-6 8260B MSV TCLP Analytical Method: EPA 8260B Leachate Method/Date: EPA 1311; 11/11/19 16:14 Benzene ND ug/L 25.0 1 11/14/19 06:11 71-43-2 2-Butanone (MEK) ND ug/L 125 1 11/14/19 06:11 78-93-3 11/14/19 06:11 56-23-5 Carbon tetrachloride ND ug/L 25.0 1 Chlorobenzene ND 25.0 ug/L 1 11/14/19 06:11 108-90-7 Chloroform ND ug/L 25.0 11/14/19 06:11 67-66-3 1 1,4-Dichlorobenzene ND ug/L 25.0 1 11/14/19 06:11 106-46-7 1,2-Dichloroethane ND ug/L 25.0 1 11/14/19 06:11 107-06-2 1,1-Dichloroethene ND ug/L 25.0 1 11/14/19 06:11 75-35-4 Tetrachloroethene ND ug/L 25.0 1 11/14/19 06:11 127-18-4 Trichloroethene ND ug/L 10.0 1 11/14/19 06:11 79-01-6 Vinyl chloride ND 11/14/19 06:11 75-01-4 ug/L 5.0 1 Surrogates 102 1,2-Dichloroethane-d4 (S) %. 75-125 11/14/19 06:11 17060-07-0 1 Toluene-d8 (S) 75-125 11/14/19 06:11 2037-26-5 81 %. 1 4-Bromofluorobenzene (S) 98 %. 75-125 1 11/14/19 06:11 460-00-4

(612)607-1700



QUALITY CONTROL DATA

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

QC Batch: 644684 Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A Analysis Description: 7470A Mercury TCLP

Associated Lab Samples: 10498837001

METHOD BLANK: 3470775 Matrix: Water

Associated Lab Samples: 10498837001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Mercury ug/L ND 0.60 11/15/19 10:52

METHOD BLANK: 3468794 Matrix: Water

Associated Lab Samples: 10498837001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Mercury ug/L ND 0.60 11/15/19 11:35

LABORATORY CONTROL SAMPLE: 3470776

Date: 11/15/2019 05:18 PM

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Mercury ug/L 15 15.5 103 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3470777 3470778

MSD MS 10498724001 MSD MS MSD Spike Spike MS % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Mercury ND 103 80-120 20 ug/L 15 15 15.5 15.4 103

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

(612)607-1700



QUALITY CONTROL DATA

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

QC Batch: 644686 Analysis Method: EPA 6010D

QC Batch Method: EPA 3010 Analysis Description: 6010D TCLP

Associated Lab Samples: 10498837001

METHOD BLANK: 3470783 Matrix: Water

Associated Lab Samples: 10498837001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.50	11/14/19 15:12	
Barium	mg/L	ND	1.0	11/14/19 15:12	
Cadmium	mg/L	ND	0.050	11/14/19 15:12	
Chromium	mg/L	ND	0.50	11/14/19 15:12	
Lead	mg/L	ND	0.50	11/14/19 15:12	
Selenium	mg/L	ND	0.10	11/14/19 15:12	
Silver	mg/L	ND	0.10	11/14/19 15:12	

METHOD BLANK: 3468794 Matrix: Water

Associated Lab Samples: 10498837001

Date: 11/15/2019 05:18 PM

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.50	11/14/19 15:14	
Barium	mg/L	ND	1.0	11/14/19 15:14	
Cadmium	mg/L	ND	0.050	11/14/19 15:14	
Chromium	mg/L	ND	0.50	11/14/19 15:14	
Lead	mg/L	ND	0.50	11/14/19 15:14	
Selenium	mg/L	ND	0.10	11/14/19 15:14	
Silver	mg/L	ND	0.10	11/14/19 15:14	

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Arsenic	mg/L		5.3	106	80-120	
Barium	mg/L	5	5.2	104	80-120	
Cadmium	mg/L	5	5.3	105	80-120	
Chromium	mg/L	5	5.2	104	80-120	
Lead	mg/L	5	5.2	104	80-120	
Selenium	mg/L	5	5.5	109	80-120	
Silver	mg/L	2.5	2.6	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3470785						;						
			MS	MSD								
		10498724001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Arsenic	mg/L	ND	5	5	5.3	5.4	106	108	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

QUALITY CONTROL DATA

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Date: 11/15/2019 05:18 PM

MATRIX SPIKE & MATRIX S	SPIKE DUPLIC	CATE: 3470	785 MS	MSD	3470786							
	1	0498724001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Barium	mg/L	ND	5	5	5.3	5.4	100	103	75-125	3	20	
Cadmium	mg/L	ND	5	5	5.1	5.2	101	104	75-125	3	20	
Chromium	mg/L	ND	5	5	5.1	5.2	101	104	75-125	3	20	
Lead	mg/L	ND	5	5	5.0	5.1	100	102	75-125	2	20	
Selenium	mg/L	ND	5	5	5.5	5.6	109	112	75-125	2	20	
Silver	mg/L	ND	2.5	2.5	2.6	2.7	104	107	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

Minneapolis, MN 55414 (612)607-1700



QUALITY CONTROL DATA

Project:

Nemadji Substation Soil Sampli

Pace Project No.:

10498837

QC Batch:

644825

QC Batch Method:

ASTM D2974

Analysis Method:

ASTM D2974

Analysis Description:

Dry Weight / %M by ASTM D2974

Associated Lab Samples:

10498837001

SAMPLE DUPLICATE: 3471559

Parameter

10498814003 Result

Result

Dup Result

Max **RPD**

RPD

Qualifiers

Percent Moisture

Percent Moisture

Units %

5.6

5.9

6

30 N2

SAMPLE DUPLICATE: 3471560

Date: 11/15/2019 05:18 PM

10497839003

Dup Result

RPD

Max RPD

Qualifiers

Parameter

%

Units

18.3

19.4

6

30 N2

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

QC Batch: 644619 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV TCLP

Associated Lab Samples: 10498837001

METHOD BLANK: 3470492 Matrix: Water

Associated Lab Samples: 10498837001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1 diameter				Analyzed	Qualificis
,1-Dichloroethene	ug/L	ND	25.0	11/13/19 11:11	
,2-Dichloroethane	ug/L	ND	25.0	11/13/19 11:11	
,4-Dichlorobenzene	ug/L	ND	25.0	11/13/19 11:11	
P-Butanone (MEK)	ug/L	ND	125	11/13/19 11:11	
enzene	ug/L	ND	25.0	11/13/19 11:11	
arbon tetrachloride	ug/L	ND	25.0	11/13/19 11:11	
Chlorobenzene	ug/L	ND	25.0	11/13/19 11:11	
hloroform	ug/L	ND	25.0	11/13/19 11:11	
trachloroethene	ug/L	ND	25.0	11/13/19 11:11	
chloroethene	ug/L	ND	10.0	11/13/19 11:11	
nyl chloride	ug/L	ND	5.0	11/13/19 11:11	
2-Dichloroethane-d4 (S)	%.	101	75-125	11/13/19 11:11	
Bromofluorobenzene (S)	%.	101	75-125	11/13/19 11:11	
oluene-d8 (S)	%.	97	75-125	11/13/19 11:11	

METHOD BLANK: 3468472 Matrix: Solid

Associated Lab Samples: 10498837001

Date: 11/15/2019 05:18 PM

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	25.0	11/13/19 11:11	
1,2-Dichloroethane	ug/L	ND	25.0	11/13/19 11:11	
1,4-Dichlorobenzene	ug/L	ND	25.0	11/13/19 11:11	
2-Butanone (MEK)	ug/L	ND	125	11/13/19 11:11	
Benzene	ug/L	ND	25.0	11/13/19 11:11	
Carbon tetrachloride	ug/L	ND	25.0	11/13/19 11:11	
Chlorobenzene	ug/L	ND	25.0	11/13/19 11:11	
Chloroform	ug/L	ND	25.0	11/13/19 11:11	
Tetrachloroethene	ug/L	ND	25.0	11/13/19 11:11	
Trichloroethene	ug/L	ND	10.0	11/13/19 11:11	
Vinyl chloride	ug/L	ND	5.0	11/13/19 11:11	
1,2-Dichloroethane-d4 (S)	%.	101	75-125	11/13/19 11:11	
4-Bromofluorobenzene (S)	%.	101	75-125	11/13/19 11:11	
Toluene-d8 (S)	%.	97	75-125	11/13/19 11:11	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Date: 11/15/2019 05:18 PM

METHOD BLANK: 3469532 Matrix: Solid

Associated Lab Samples: 10498837001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	25.0	11/13/19 11:28	
1,2-Dichloroethane	ug/L	ND	25.0	11/13/19 11:28	
1,4-Dichlorobenzene	ug/L	ND	25.0	11/13/19 11:28	
2-Butanone (MEK)	ug/L	ND	125	11/13/19 11:28	
Benzene	ug/L	ND	25.0	11/13/19 11:28	
Carbon tetrachloride	ug/L	ND	25.0	11/13/19 11:28	
Chlorobenzene	ug/L	ND	25.0	11/13/19 11:28	
Chloroform	ug/L	ND	25.0	11/13/19 11:28	
Tetrachloroethene	ug/L	ND	25.0	11/13/19 11:28	
Trichloroethene	ug/L	ND	10.0	11/13/19 11:28	
Vinyl chloride	ug/L	ND	5.0	11/13/19 11:28	
1,2-Dichloroethane-d4 (S)	%.	102	75-125	11/13/19 11:28	
4-Bromofluorobenzene (S)	%.	100	75-125	11/13/19 11:28	
Toluene-d8 (S)	%.	95	75-125	11/13/19 11:28	

LABORATORY CONTROL SAMPLE:	3470493					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1-Dichloroethene	ug/L	500	423	85	73-125	
1,2-Dichloroethane	ug/L	500	444	89	75-125	
1,4-Dichlorobenzene	ug/L	500	470	94	75-125	
-Butanone (MEK)	ug/L	2500	2090	84	67-127	
Senzene	ug/L	500	469	94	75-125	
arbon tetrachloride	ug/L	500	513	103	73-125	
hlorobenzene	ug/L	500	517	103	75-125	
nloroform	ug/L	500	477	95	75-125	
trachloroethene	ug/L	500	559	112	75-125	
chloroethene	ug/L	500	504	101	75-125	
nyl chloride	ug/L	500	409	82	68-127	
2-Dichloroethane-d4 (S)	%.			95	75-125	
Bromofluorobenzene (S)	%.			106	75-125	
oluene-d8 (S)	%.			103	75-125	

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 3470	823		3470824							
Parameter	Units	10499029001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	500	500	626	561	125	112	60-137	11	30	
1,2-Dichloroethane	ug/L	ND	500	500	529	492	106	98	69-125	7	30	
1,4-Dichlorobenzene	ug/L	ND	500	500	537	501	107	100	75-125	7	30	
2-Butanone (MEK)	ug/L	ND	2500	2500	2270	3000	91	120	59-133	28	30	
Benzene	ug/L	2610	500	500	3240	4060	126	290	70-125	23	30	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Date: 11/15/2019 05:18 PM

			MS	MSD								
		10499029001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qua
Carbon tetrachloride	ug/L	ND	500	500	625	685	125	137	67-130	9	30	M1
Chlorobenzene	ug/L	ND	500	500	559	527	112	105	75-125	6	30	
Chloroform	ug/L	ND	500	500	552	626	110	125	71-125	13	30	
Tetrachloroethene	ug/L	ND	500	500	590	563	118	113	73-126	5	30	
Trichloroethene	ug/L	ND	500	500	555	515	111	103	72-133	8	30	
Vinyl chloride	ug/L	ND	500	500	576	533	115	107	70-134	8	30	
1,2-Dichloroethane-d4 (S)	%.						104	103	75-125			
1-Bromofluorobenzene (S)	%.						96	103	75-125			
Toluene-d8 (S)	%.						97	101	75-125			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

(612)607-1700



QUALITY CONTROL DATA

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Date: 11/15/2019 05:18 PM

QC Batch: 644184 Analysis Method: EPA 8082A
QC Batch Method: EPA 3550 Analysis Description: 8082A GCS PCB

Associated Lab Samples: 10498837001

METHOD BLANK: 3468508 Matrix: Solid

Associated Lab Samples: 10498837001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	ND	33.0	11/14/19 19:35	
PCB-1221 (Aroclor 1221)	ug/kg	ND	33.0	11/14/19 19:35	
PCB-1232 (Aroclor 1232)	ug/kg	ND	33.0	11/14/19 19:35	
PCB-1242 (Aroclor 1242)	ug/kg	ND	33.0	11/14/19 19:35	
PCB-1248 (Aroclor 1248)	ug/kg	ND	33.0	11/14/19 19:35	
PCB-1254 (Aroclor 1254)	ug/kg	ND	33.0	11/14/19 19:35	
PCB-1260 (Aroclor 1260)	ug/kg	ND	33.0	11/14/19 19:35	
PCB-1262 (Aroclor 1262)	ug/kg	ND	33.0	11/14/19 19:35	
PCB-1268 (Aroclor 1268)	ug/kg	ND	33.0	11/14/19 19:35	
Decachlorobiphenyl (S)	%.	82	49-125	11/14/19 19:35	
Tetrachloro-m-xylene (S)	%.	87	57-125	11/14/19 19:35	

LABORATORY CONTROL SAMPLE:	3468509					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	667	582	87	69-125	
PCB-1260 (Aroclor 1260)	ug/kg	667	559	84	63-125	
Decachlorobiphenyl (S)	%.			85	49-125	
Tetrachloro-m-xylene (S)	%.			91	57-125	

MATRIX SPIKE & MATRIX SI	PIKE DUPL	ICATE: 3468	544		3468545							
		4040007004	MS	MSD		1400		1405	0/ 5			
		10498837001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	ND	944	946	654	640	69	68	56-125	2	30	
PCB-1260 (Aroclor 1260)	ug/kg	ND	944	946	568	571	60	60	45-125	0	30	
Decachlorobiphenyl (S)	%.						60	62	49-125			
Tetrachloro-m-xylene (S)	%.						68	68	57-125			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Date: 11/15/2019 05:18 PM

QC Batch: 644645 Analysis Method: EPA 8270D

QC Batch Method: EPA 3510 Analysis Description: 8270D TCLP MSSV

Associated Lab Samples: 10498837001

METHOD BLANK: 3470595 Matrix: Water

Associated Lab Samples: 10498837001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L		100	11/13/19 19:06	
2,4,5-Trichlorophenol	ug/L	ND ND	100	11/13/19 19:06	
2,4,6-Trichlorophenol	ug/L	ND	100	11/13/19 19:06	
2,4-Dinitrotoluene	ug/L	ND	100	11/13/19 19:06	
2-Methylphenol(o-Cresol)	ug/L	ND	100	11/13/19 19:06	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	100	11/13/19 19:06	
Hexachloro-1,3-butadiene	ug/L	ND	100	11/13/19 19:06	
Hexachlorobenzene	ug/L	ND	100	11/13/19 19:06	
Hexachloroethane	ug/L	ND	100	11/13/19 19:06	
Nitrobenzene	ug/L	ND	100	11/13/19 19:06	
Pentachlorophenol	ug/L	ND	200	11/13/19 19:06	
Pyridine .	ug/L	ND	100	11/13/19 19:06	
2,4,6-Tribromophenol (S)	%.	82	45-125	11/13/19 19:06	
2-Fluorobiphenyl (S)	%.	72	48-125	11/13/19 19:06	
2-Fluorophenol (S)	%.	54	30-125	11/13/19 19:06	
Nitrobenzene-d5 (S)	%.	77	57-125	11/13/19 19:06	
p-Terphenyl-d14 (S)	%.	108	53-125	11/13/19 19:06	
Phenol-d6 (S)	%.	33	10-128	11/13/19 19:06	

LABORATORY CONTROL SAMPLE:	3470596					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	500	272	54	34-125	
2,4,5-Trichlorophenol	ug/L	500	420	84	70-125	
2,4,6-Trichlorophenol	ug/L	500	408	82	70-125	
2,4-Dinitrotoluene	ug/L	500	435	87	55-125	
2-Methylphenol(o-Cresol)	ug/L	500	365	73	43-125	
3&4-Methylphenol(m&p Cresol)	ug/L	500	335	67	41-125	
Hexachloro-1,3-butadiene	ug/L	500	206	41	40-125	
Hexachlorobenzene	ug/L	500	399	80	72-125	
Hexachloroethane	ug/L	500	251	50	30-125	
Nitrobenzene	ug/L	500	370	74	62-125	
Pentachlorophenol	ug/L	500	322	64	36-125	
Pyridine	ug/L	500	183	37	30-125	
2,4,6-Tribromophenol (S)	%.			78	45-125	
2-Fluorobiphenyl (S)	%.			77	48-125	
2-Fluorophenol (S)	%.			53	30-125	
Nitrobenzene-d5 (S)	%.			77	57-125	
p-Terphenyl-d14 (S)	%.			92	53-125	
Phenol-d6 (S)	%.			33	10-128	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



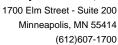
Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Date: 11/15/2019 05:18 PM

MATRIX SPIKE & MATRIX SI	PIKE DUPLIC	CATE: 3470	597 MS	MSD	3470598							
	1	0499029001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
1,4-Dichlorobenzene	ug/L	ND	500	500	287	236	57	47	70-130	20	30	M1
2,4,5-Trichlorophenol	ug/L	ND	500	500	390	370	78	74	70-130	5	30	
2,4,6-Trichlorophenol	ug/L	ND	500	500	397	351	79	70	70-130	12	30	
2,4-Dinitrotoluene	ug/L	ND	500	500	415	372	83	74	70-130	11	30	
2-Methylphenol(o-Cresol)	ug/L	ND	500	500	369	331	70	62	70-130	11	30	M1
3&4-Methylphenol(m&p Cresol)	ug/L	ND	500	500	360	319	67	59	70-130	12	30	M1
Hexachloro-1,3-butadiene	ug/L	ND	500	500	243	212	49	42	70-130	13	30	M1
Hexachlorobenzene	ug/L	ND	500	500	378	334	76	67	70-130	12	30	M1
Hexachloroethane	ug/L	ND	500	500	278	242	56	48	70-130	14	30	M1
Nitrobenzene	ug/L	ND	500	500	386	329	77	66	70-130	16	30	M1
Pentachlorophenol	ug/L	ND	500	500	309	279	62	56	70-130	10	30	M1
Pyridine	ug/L	ND	500	500	156	134	31	27	70-130	15	30	M1
2,4,6-Tribromophenol (S)	%.						73	69	45-125			
2-Fluorobiphenyl (S)	%.						77	71	48-125			
2-Fluorophenol (S)	%.						54	48	30-125			
Nitrobenzene-d5 (S)	%.						80	68	57-125			
p-Terphenyl-d14 (S)	%.						93	84	53-125			
Phenol-d6 (S)	%.						34	30	10-128			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





Project:

Nemadji Substation Soil Sampli

Pace Project No.:

10498837

QC Batch: QC Batch Method: 644171

WI MOD DRO

Analysis Method: Analysis Description: WI MOD DRO WIDRO GCS

Associated Lab Samples:

10498837001

METHOD BLANK: 3468463

Parameter

Matrix: Solid

Associated Lab Samples:

Date: 11/15/2019 05:18 PM

10498837001

Blank Result

Reporting

Limit

Analyzed

Qualifiers

WDRO C10-C28 n-Triacontane (S)

Units mg/kg %.

ND 89

10.0 50-150

11/12/19 17:07 11/12/19 17:07

LABORATORY CONTROL SAMPLE & LCSD: 3468464 3468465 Spike LCS **LCSD** LCS LCSD % Rec Max Parameter Units Conc. Result Result % Rec % Rec Limits **RPD RPD** Qualifiers **WDRO C10-C28** mg/kg 80 61.7 60.7 77 76 70-120 2 20 n-Triacontane (S) %. 90 88 50-150

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALIFIERS

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

Date: 11/15/2019 05:18 PM

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
P3	Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.
S0	Surrogate recovery outside laboratory control limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Date: 11/15/2019 05:18 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
10498837001	Nemadji Sub	EPA 3550	644184	EPA 8082A	645040
10498837001	Nemadji Sub	WI MOD DRO	644171	WI MOD DRO	644499
10498837001	Nemadji Sub	EPA 3010	644686	EPA 6010D	644988
10498837001	Nemadji Sub	EPA 7470A	644684	EPA 7470A	645053
10498837001	Nemadji Sub	ASTM D2974	644825		
10498837001	Nemadji Sub	EPA 3510	644645	EPA 8270D	644783
10498837001	Nemadji Sub	EPA 8260B	644619		



CHAIN-OF-CUSTODY / /

The Chain-of-Custody is a LEGAL DC

WO#: 10498837

10498837

Section A Section B Section C Required Client Information: Required Project Information: Invoice Information: Of Company: Attention: Minnesota Power Report To: Zach Golkowski Address: Copy To: Company Name: 30 W. Superior St. Duluth, MN 55802 Address: Regulatory Agency Email: zgolkowski@mnpower.com Purchase Order #: Pace Quote: (218)428-5582 Project Name: Nemadji Substation Soil Sampling Pace Project Manager: State / Location ryan.thibault@pacelabs.com, Requested Due Date: Project #: Pace Profile #: 36155 WE WISCONS IN Requested Analysis Filtered (Y/N) (see valid codes to left) C=COMP) COLLECTED Preservatives MATRIX CODE SAMPLE TEMP AT COLLECTION DW WT Drinking Water (G=GRAB ww Waste Water Residual Chlorine (Y/N) Product TCLP 8 RCRA Metals SL OL WP SAMPLE ID Soil/Solid START END. TCLP VOCs 8260 TCLP SVOC/8270 # OF CONTAINERS Oil DRO by WIDRO One Character per box. Wipe MATRIX CODE SAMPLE TYPE AR OT (A-Z, 0-9 / , -) Other Na2S203 Sample lds must be unique ITEM H2S04 HNO3 DATE TIME DATE TIME Nemad 2:07 11/8 li 1(3. 11/8 Ħ l1 2:05 OUN 11/8 1(5 11/8 2105 11 (6 16 11/8 Į1 2105 7 11 11/8 h 8 11/8 2:07 11 1(9 12 DATE SAMPLE CONDITIONS ADDITIONAL COMMENTS RELINQUISHED BY / AFFILIATION 1118 2:30 14:30 155 Piease pack TCLP VOC jar full. 1900 3,5 11/8/19 SAMPLER NAME AND SIGNATURE TEMP in C Zach Golkowski PRINT Name of SAMPLER: SIGNATURE of SAMPLER: DATE Signed:



Document Name: Sample Condition Upon Receipt Form

Document No.: F-MN-L-213-rev.29 Document Revised: 23Aug2019

Page 1 of 1

Issuing Authority: Pace Minnesota Quality Office

Sample Condition Clien Upon Receipt	nt Name:			Pro	oject #:	WO	#:1	049	9883	7
орон кесеірі	Minnesota Power					PM: I				11/15/19
	ed Ex UPS	Us		— □Cli			NT: MN P		se bate.	11/15/19
∑Pa Tracking Number:	ace SpeeDee	∐Co	mmerci	al See Exc	eptions					j
	ox Present? Yes	 ปีNo	Sea	is Intact	 P □Yes		o Biolo	zical Tis	sue Frozen?	Yes No No
	ibble Wrap 🔀 Bubble Ba]None	Oth		٠٠٠	5.0.0		emp Blank?	. *
,	461) T2(1336) T3(0459)		_	_ .	_				inp blank:	Zies □ivo
Thermometer: T4(0) Note: Each West Virginia Sa	254) 🔀 T5(0489)		Type of I	,		⊒Blue حار	□None	□Dŋ	/ Melted	d
Temp should be above freezing to					10 4	- 3 2	°C	Avora	ge Corrected	Tomp
1			-		1	<u> </u>				nly): See Exception
Correction Factor:O./	Cooler Temp Correcte	d w/tem							oc	
USDA Regulated Soil: (🔲 N							Person Exan			MRZ 11-8
Did samples originate in a qua ID, LA. MS, NC, NM, NY, OK, C				CA, FL, GA			ginate from a erto Rico)?		ource (internat Yes ⊠Nc	tionally, including
	either question, fill out a F						,		_	
								сомм	ENTS:	
Chain of Custody Present and	Filled Out?	∑¥Yes	□No		1.					
Chain of Custody Relinquished	13	∑Yes	□No		2.					
Sampler Name and/or Signatu		Yes	□No	□N/A	3.					
Samples Arrived within Hold T	ime?	Yes	No		4.					
Short Hold Time Analysis (<72	! hr)?	Yes	₩						orm/E coli 🔲 BC thophos 🔲 Othe	DD/cBOD Hex Chrome er
Rush Turn Around Time Requ	ested?	Yes	≫No		6.	·				<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>
Sufficient Volume?	·	≯ZYes	□No		7.					
Correct Containers Used?		Yes	□No		8.					
-Pace Containers Used?		Yes	□No							
Containers Intact?		Yes	□No		9.					
Field Filtered Volume Received	for Dissolved Tests?	☐Yes	□No	√Z/N/A	—					YesNo
Is sufficient information availated to the COC?	ble to reconcile the samples	¥Z¥Yes	□No		11. If no,	write ID/	Date/Time on	Containe	er Below:	See Exceptio
Matrix: □Water ☑ Soil □Oil	□Other	—								
All containers needing acid/ba checked?		Yes	□No	∑ Z N/A	12. Samp	ole#				
cneckedr										
All containers needing preserv		□Yes	□No	√ZÍN/A	([NaOH	☐ HN	O ₃	∐H₂SO₄	Zinc Acetate
compliance with EPA recomme (HNO ₃ , H ₂ SO ₄ , <2pH, NaOH >9										
(HNO ₃ , H ₂ 5O ₄ , <2pH, NaOH >9	Sumde, NaOH>12 Cyanide)				Positive 1	for Res. [່ ໆYes			See Exception
Exceptions: VOA, Coliform, TO	C/DOC Oil and Grease,	☐Yes	□No	√ 2Ń/A	Chlorine	=	=	рН Раре	er Lot#	, \square
DRO/8015 (water) and Dioxin/	PFAS				Res. Chlo	rine	0-6 Roll		0-6 Strip	0-14 Strip
					13.	<u> </u>				See Exception
Headspace in VOA Vials (greate	er than 6mm)?	□Yes	□No	> Z N/A						
Trip Blank Present?		Yes	□No	√Z]N/A	14.					
Trip Blank Custody Seals Prese	nt?	Yes	□No `	₩/A	Pac	e Trip Bla	ank Lot # (if p	urchase	d):	
CLIENT NOTIFICAT	ION/RESOLUTION						Field	d Data F	Required?	_Yes □No
Person Contacted:					Date/T	ime:		,		
Comments/Resolution:										
Dualant Bannana D	aulaus Anna	10.11	711			Dete		44/44	/40	
Project Manager R Note: Whenever there is a discre		complian	e sample	es, a conv	of this form	Date: will be se		11/11 h Carolir		fication Office (i.e. out
hold, incorrect preservative, out of				., = ==P1						2





Notification of Waste Acceptance

11/18/2019

CUSTOMER INFORMATION

Superior Water, Light & Power Co Nemadji Substation Hill Ave & Stinson Ave Superior, WI 54880 Contact: Greg Prom Phone: (218) 355-3191 INVOICE INFORMATION

Bill #: 2636 Superior Water, Light & Power Co 2915 Hill Ave Superior, WI 54880 Contact: Accounts Payable Phone: (218) 355-3191

Waste Stream #: CL19-0049

Waste Name: Oil Impacted Soil/Debris

Thank you for selecting SHAMROCK LANDFILL for your waste management requirements. Your waste stream has been reviewed and is acceptable for management at our facility based on the information provided in the profile sheet number listed above and conditions below. Our facility has the necessary permits to allow the storage, treatment, or disposal of this waste. The above referenced acceptance number should be listed on all shipping documents and correspondence. Please retain these documents for your records and future reference.

To schedule a shipment, or should you have any questions, please contact the facility at (218) 878-0112.

ACCEPTANCE INFORMATION

The waste stream identified by the reference above is acceptable for disposal.

This waste is acceptable for delivery beginning on 11/18/2019 thru 11/8/2021 at which time the material will need to be reanalyzed and recertified.

Spill Reporting Reminder: MPCA spill reporting procedures must be followed.

Free Liquid Statement: Free liquids will not be placed in cells at Shamrock Landfill. Free liquids must be solidified either prior to shipment to Shamrock Landfill or at Shamrock Landfill.

Shipping Requirements A NON-HAZARDOUS certificate is required to be on file, certifying the waste is non-hazardous as specified per 40 CFR 261.4. The shipment may be accompanied with an Shamrock Landfill manifest.

AUTHORIZATION					
Approval:	Heath	Genty	Date:	((-18-19	

We want to assist you with the proper completion of the Shipping Manifest for this waste stream. Based on our analytical data from WS # CL19-0049, we suggest your waste stream should be shipped using the following information...

Non Hazardous Industrial Waste

Shamrock	
Landfill	

	Ch. L	1. Generator's US EPA ID N	o. <i>(if</i>	any,)	_	2	. Page 1	of		page	(s)
П	Shipping Manifest		1	1	ı		1 .					
	Generator's Name and Facility Address Superior Water, Light & Power Co Hill Ave & Stinson Ave Superior, WI 54880	 	-1.	-1	Mailing	2915 Hi	r Water, II Ave Ir, WI 54		Power 0	;o	Nemad	ji Substat
Ш	4. Generator's Phone (218) 355-3191				Fax	- Cupeno						
П	5. Transporter 1 Company Name											
	:				Phone:							
II	6. Transporter 2 Company Name											
					Phone:				_			
П	7. Designated Facility Name and Site Address	Shamrock Environn		al,	LLC							
		761 MN Highway 4				_	_					
П		Cloquet, MN 5572							8-0112	<u> </u>		
H	8. U.S. DOT Description (including Proper Shipping	(Name)	9.	Co	ntainer	5	10. Total	١,	11. Unit	М	12. aste Pi	ofile
			_ N	lo.	Туре		Quantity		it/Voi		Sheet	#
Ġ	a, Non Hazardous Industrial Waste (Oil Impa	acted Soil/Debris)						. \				
E	ч -						1 1					
E	b.		╫			 	<u> </u>					
A			١,	ı	l i	1 .) [,				
A T O R			11				1		ĺ			
	C.		+		1							
lt		r	<i>^</i>	1	' I.	ી !		. Î				
			\vdash	_=		₁	. —	<u>i</u>		- \	-	
		* P	14	ı	1 I		1 1		ı İ			
	13. Additional Descriptions for Materials Listed Above (Indiana, CL CL19-0049 Oil Impacted Soil/D	icale waste stream Approval # balowj	14). S	pecial Ha	endling Proc	cedures f	or Waste	s Listed A	bave	1	
	b. CL	ĖNI 19										
	c. CL											
	d. CL											
$\ $	15. Special Handling Instructions and Additional Info								Use Only	/ :		
	g Enerators Müs t supply emerg	ENCY CONTACT NUMB	ER!	!				Load:	·			
ŀ								<u> </u>				
	16. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packet	clare that the contents of this	isnoo ni eu	gnn sila	eva iner etneme	fully and in proper	accurati conditio	ely desc on for th	inbed ab ansport b	ove: y hi:	oy qhway	
	according to applicable international and nation	ai government regulatiоля.		 , 1		ш. р. оро.				•		
	Printed/Typed Name	Signature			· · · · · · · ·		·		Mont	'n	Day	Year
Î	PLEASE BE SURE GENERATOR HAS SIG	ENED AND DATED IN TH	HS S	EC	T10N	OF THE	MANI	EEST!!	<u> </u>	_1_		1
Ţ	17. Transporter 1 Acknowledged of Receipt of Mate	rials										
TRANSP	Printed/Typed Name	Signature						1	Mont	h	Day	Year
P	18. Transported 2 Acknowledgement of Receipt of N	deterials			<u> </u>				ــــــــــــــــــــــــــــــــــــــ			 ,
ORTER	Printed/Typed Name	Signature							Mont	n -	Day	Year
E	rancuriyou namo	Siftigrois							1		<u> </u>	<u>_ll</u>
-	19. Discrepancy Indication Space											
F												
ĉ												
ACILI												
			·····	··			(11 la 10 a			
Y	20. Facility Owner or Operator: Certification of rece	lipt of non-hazardous material	is cov	rer o	o by this	Manifest	except	as note			<u>.</u>	
1	Printed/Typed Name	Signature							Mont	h i	Day	Year
l	, 1	1								L_		





November 18, 2019

Accounts Payable Superior Water, Light & Power Co 2915 Hill Ave Superior, WI 54880

RE: CL19-0049 Oil Impacted Soil/Debris

Dear Sir/Madam:

This agreement will confirm the price and length of service for disposal and /or transportation of your non-hazardous industrial material at our facility. This agreement is for the term of the Waste Approval granted by Shamrock Landfill and is for all services ordered and performance initiated within such period and does include the disposal surcharge fees which you are obligated to pay as of the date of this agreement. Shamrock Landfill may incur additional costs including but not limited to increases in state and local taxes. Shamrock Landfill may pass these costs on to the customer only after notification to the Customer. This agreement grants Shamrock Landfill the exclusive right to dispose of the referenced waste for the term of this agreement. This agreement shall automatically renew thereafter for an additional term of 24 months "Renewal Term" unless either party gives the other party written notification of termination at least 90 days prior to the termination of the then-existing term. Shamrock Landfill will notify the customer prior to the expiration of the agreement of any rate changes prior to the start of the Renewal Term.

Payment and terms are net thirty (30) days. Interest will be charged at a rate of 11/2% per month (18% annually) on any unpaid balance 30 days after the date of the invoice. In the event Customer terminates this Agreement prior to its expiration other than as a result of a breach by Shamrock Landfill or Shamrock Landfill terminates this agreement for Customer's breach (including nonpayment) Customer agrees to pay to Shamrock Landfill as liquidated damages a sum calculated as follows: (1) if the remaining term under this agreement is six or more months Customer shall pay its average monthly charges multiplied by six: or (2) if the remaining term under this agreement is less than six months Customer shall pay its average monthly charge multiplied by the number of months remaining in the term. Customer expressly acknowledges that in the event of an unauthorized termination of this agreement the anticipated loss to Shamrock Landfill in such event is estimated to be the amount set forth in the foregoing liquidated damages provision and such estimated value is reasonable and is not imposed as a penalty.

These prices are based on an approved waste stream composition. In the event that a non-conforming waste is received, you will be notified of additional charges, when applicable.

To accept this agreement, please sign one copy and return it to Shamrock Landfill, PO Box 2232, Cloquet, MN 55720 or email to janetb@wasteconnections.com.

For	all Terms ad Conditions pl	Shamrock Landfill Nearl refer to Contract Puncha	ر اکر
Agree	Customer ACCEPTED BY: (name, position) DATE: 1//8/2019	ENV. Specialist	
	WASTE APPROVAL Period: 11/18/2019 to 11/8/2021	_	

Start Date: 11/1/2019 Stop Date: 11/30/2019

BILL TO ACCOUNT

2636 Superior Water Light & Power C

SUPS8

Superior Water - Nemadji Subst

Hill Ave & Stinson Ave

Superior WI 54880

Superior. WI						
48693	Manifest 65386			Waste Name	12.82	
48694	65385		9 19-0049	Oil Impacted Soil/Debris	12.74	
48697	65387		9 19-0049	Oil Impacted Soil/Debris	17.27	
48698	65388		9 19-0049	Oil Impacted Soil/Debris	17.38	
2000	7		9 19-0049	Oil Impacted Soil/Debris	33777	
48700	65389		19-0049	Oil Impacted Soil/Debris	20.18	
48705	69648		9 19-0049	Oil Impacted Soil/Debris	20.15	
48706	69649		19-0049	Oil Impacted Soil/Debris	18.25	
48707	65390		19-0049	Oil Impacted Soil/Debris	10.45	
48710	69650		19-0049	Oil Impacted Soil/Debris	16.35	
48711	69651		9 19-0049	Oil Impacted Soil/Debris	18.10	
48712	69652	11/19/19	19-0049	Oil Impacted Soil/Debris	14.82	
48714	69653	11/19/19	19-0049	Oil Impacted Soil/Debris	14.74	
48716	69655	11/19/19	19-0049	Oil Impacted Soil/Debris	15.59	
48718	69656	11/19/19	9 19-0049	Oil Impacted Soil/Debris	16.91	
48719	69654	11/19/19	9 19-0049	Oil Impacted Soil/Debris	17.57	
48720	69657	11/19/19	9 19-0049	Oil Impacted Soil/Debris	18.67	
48722	69658	11/19/19	9 19-0049	Oil Impacted Soil/Debris	17.27	
48724	69659	11/19/19	9 19-0049	Oil Impacted Soil/Debris	16.60	
48726	69660	11/19/19	9 19-0049	Oil Impacted Soil/Debris	11.16	
48728	69662	11/19/19	19-0049	Oil Impacted Soil/Debris	19.63	
48729	69663	11/19/19	9 19-0049	Oil Impacted Soil/Debris	16.32	
48730	69664	11/19/19	19-0049	Oil Impacted Soil/Debris	16.53	
48731	69661	11/19/19	9 19-0049	Oil Impacted Soil/Debris	8.40	
48732	69665	11/19/19	19-0049	Oil Impacted Soil/Debris	15.38	
48733	69666	11/19/19	19-0049	Oil Impacted Soil/Debris	19.24	
48735	69667	11/19/19	19-0049	Oil Impacted Soil/Debris	18.55	
48736	69668	11/19/19	19-0049	Oil Impacted Soil/Debris	18.75	
48738	69669	11/19/19	19-0049	Oil Impacted Soil/Debris	18.22	
48739	69670		9 19-0049	Oil Impacted Soil/Debris	17.04	
48740	69671	11/19/19	9 19-0049	Oil Impacted Soil/Debris	20.12	
48743	69672	11/19/19	9 19-0049	Oil Impacted Soil/Debris	19.54	
			200	The Parity and Street, Name of		

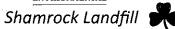
Print Date: 3/26/2020

Start Date: 11/1/2019 Stop Date: 11/30/2019

BILL TO A	ACCOUNT 69673	11/19/19 19-0049	001	16.38
48745	69674	11/19/19 19-0049	Oil Impacted Soil/Debris	13.17
48747	69675		Oil Impacted Soil/Debris	19.48
27.2	69676	11/19/19 19-0049	Oil Impacted Soil/Debris	
48748 48750		11/19/19 19-0049	Oil Impacted Soil/Debris	15.75
35305	69678	11/19/19 19-0049	Oil Impacted Soil/Debris	16.40
48753	69677	11/19/19 19-0049	Oil Impacted Soil/Debris	16.75
48754	69680	11/19/19 19-0049	Oil Impacted Soil/Debris	17.84
48755	69681	11/19/19 19-0049	Oil Impacted Soil/Debris	14.86
48756	69679	11/19/19 19-0049	Oil Impacted Soil/Debris	13.79
48757	69682	11/19/19 19-0049	Oil Impacted Soil Debris	18.46
48761	69683	11/19/19 19-0049	Oil Impacted Soil/Debris	20.03
48762	69684	11/19/19 19-0049	Oil Impacted Soil/Debris	16.52
48763	69685	11/19/19 19-0049	Oil Impacted Soil/Debris	18.38
48764	69686	11/19/19 19-0049	Oil Impacted Soil/Debris	10.50
48765	69687	11/19/19 19-0049	Oil Impacted Soil/Debris	17.66
48767	69688	11/19/19 19-0049	Oil Impacted Soil/Debris	24.48
48768	69689	11/19/19 19-0049	Oil Impacted Soil/Debris	19.68
48770	69690	11/19/19 19-0049	Oil Impacted Soil/Debris	18.63
48774	69691	11/19/19 19-0049	Oil Impacted Soil/Debris	11.13
48780	69693	11/20/19 19-0049	Oil Impacted Soil/Debris	9.79
48781	69692	11/20/19 19-0049	Oil Impacted Soil/Debris	8.82
48789	69694	11/20/19 19-0049	Oil Impacted Soil/Debris	12.46
48792	69695	11/20/19 19-0049	Oil Impacted Soil/Debris	12.99
48798	69696	11/20/19 19-0049	Oil Impacted Soil/Debris	8.93
48807	69697	11/20/19 19-0049	Oil Impacted Soil/Debris	11.36
48816	69698	11/20/19 19-0049	Oil Impacted Soil/Debris	13.07
48817	69699	11/20/19 19-0049	Oil Impacted Soil/Debris	13.06
48821	66951	11/21/19 19-0049	Oil Impacted Soil/Debris	9.06
48823	66950	11/21/19 19-0049	Oil Impacted Soil/Debris	12.81
48833	66952	11/21/19 19-0049	Oil Impacted Soil/Debris	12.57
48846	66953	11/21/19 19-0049	Oil Impacted Soil/Debris	14.11
48858	66954	11/21/19 19-0049	Oil Impacted Soil/Debris	14.16
	# of Lo		TOTAL FOR Waste Stream	987.82
		GRAND TOTALS		987.82
		ACTION AND THE PROPERTY OF THE		

Shipping Manifest	1. Generato	or's US EPA ID No.	. (if any	1)				I. Pag	e 1 of		page	(s)
3. Generator's Name and Facility Address	50/2/h 1			M	 Mailing Ai		alderst, man som a press, a	TI TI WARE PROPERTY SECOND STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET	(Alexa) Maragental may alexa menga apa sa casa 14.	MANAGEMENT OF THE PARTY.		
16 U 4 	erus in la la serie. Para in la la serie	10 71 210 TO TO 311 TO				CIST IN A			R Janat	133 N	an a	1811 C
L Generator's Phone:	1			F	ax:		us programa	die sitz	e de la companya de la companya de la companya de la companya de la companya de la companya de la companya de La companya de la co		بوقامه إيكامه والمطوف	44.49
5. Transporter 1 Company Name												
SHAMROCK TRUCKING			-	F	hone:	218-8	38.0 1	12				
6. Transporter 2 Company Name						10 3 11,5 1.7	2 722 5. 5	h g.r				
				P	hone:							
Designated Facility Name and Site Address	SKB/S1	hamrock Envi	ronn	nei	ntal, L	LC						
	761 M	N Highway 45	;									
	Cloque	t, MN 55720				Pho	ne: 2	218-8	378-011	2		
3. U.S. DOT Description (including Proper Sh	nipping name)	74.0	9. C	on	tainers		10.		11.		12.	
			No.		Type		Total Jantity		Unit Wt/Vol		iste Pr Sheet	
l. Non Hazanicus Industriai Waste	a a				7,							
(OIL CONTAMINATED DEFE												
,												
).												
		•					ı	1				
		-										
					'	,	,	•				
									•			
0. A 10: 10				\Box								
Additional Descriptions for Materials Listed About CL		am Approval # oelow)	14.	Spe	eciai Hand	iling Proc	eaures	tor wa	stes Listed	Above		
P. CL GLISSON OIL CONFAMINA	ted debres -											
DETERCT OF									•			
i. OL 5. Special Handling Instructions and Additio	nal Information							SKI	3 Use Onl	v.		
Emergency Contact:								Loa		y		
								Loa	·			
								1				
GENERATOR'S CERTIFICATION: I here proper shipping name and are classified,	packed, marked, a	nd labeled, and ar										
according to applicable international and	national governme	nt regulations.							•		•	
Printed/Typed Name		Signature			1	/			Mont	h ,[Dąyy	χ
LINGS STON		and the same	·		مكتون الكر		garathing	· 1779	1' 1'		17	
7. Transporter 1 Acknowledged of Receipt of	f Materials	<u>/}_</u>	<u></u> ·	, aq	1							
Printed/Typed Name		Signature	and the same	7	Land	1			Mont	h [Day.	Y
18. Transporter 2 Acknowledgement of Recei	pt of Materials	At Gard to the se	(James Comment			and the same					.1	
Printed/Typed Name	1	Signature		_		•			h A	h ^r)av	1/
		2.5				4.			Mont	.ı L	Day 	- Ye
9. Discrepancy Indication Space											1	
	•											
			_									
0. Facility Owner or Operator: Certification	of receipt of non-ha	azardous materials	cove	red	by this	Manifest	excep	t as n	oted in ite	m 19.		
Printed/Typed Name		Signature							Mont	h ſ	Эау	Y
3 L										·· •		ι ΄





Generator's Name and Facility Address Generator's Phone: Transporter 1 Company Name SHAMBOCK TRUCKING Transporter 2 Company Name Designated Facility Name and Site Address U.S. DOT Description (including Proper Shipping response in the Address) John Hazardous Industrial Waste (OTL CONTAMINATED DEBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CL CONTAMINATED DEBRUS) CL CONTAMINATED DESCRIPTIONS CL CONTAMINATED DESCRIPTIONS Special Handling Instructions and Additional Informations and Additional Informations and Contact:	SKB/Sh 761 MN Cloquet, name)	amrock Env Highway 4 , MN 55720	9. (No	Pmen	ax: Phone:	LC	(MU) (PE) -57:14	218	L Defermens	0112	12. Waste Pr Sheet	ofile
Transporter 1 Company Name SHAMBOCK TRUCKING: Transporter 2 Company Name Designated Facility Name and Site Address U.S. DOT Description (including Proper Shipping research House Industrial Wards (OTL CONTAMINATED DEBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CONTAMINATED DESTRICT OPS CL CONTAMINATED DESTRICT OPS CL 5. Special Handling Instructions and Additional Informations	SKB/Sh 761 MN Cloquet, name)	amrock Env Highway 4 , MN 55720	9. (No	Pmen	Phone: ntal, L	LC	hone:	218	3-878-	0112	12. Waste Pr Sheet	ofile
Transporter 1 Company Name SHAMBOCK TRUCKING: Transporter 2 Company Name Designated Facility Name and Site Address U.S. DOT Description (including Proper Shipping research House Industrial Wards (OTL CONTAMINATED DEBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CONTAMINATED DESTRICT OPS CL CONTAMINATED DESTRICT OPS CL 5. Special Handling Instructions and Additional Informations	SKB/Sh 761 MN Cloquet, name)	amrock Env Highway 4 , MN 55720	9. (No	Pener	Phone: Phone: ntal, L	LC	hone:	0112 : 218	3-878-	0112	12. Waste Pr Sheet	ofile
Transporter 1 Company Name SHAMBOCK TRUCKING: Transporter 2 Company Name Designated Facility Name and Site Address U.S. DOT Description (including Proper Shipping research House Industrial Wards (OTL CONTAMINATED DEBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CONTAMINATED DESTRICT OPS CL CONTAMINATED DESTRICT OPS CL 5. Special Handling Instructions and Additional Informations	SKB/Sh 761 MN Cloquet, name)	amrock Env Highway 4 , MN 55720	9. (No	Pener	ental, L	318 LC	hone:	: 218	3-878-	0112	12. Waste Pr Sheet	ofile
Transporter 1 Company Name SHAMBOCK TRUCKING: Transporter 2 Company Name Designated Facility Name and Site Address U.S. DOT Description (including Proper Shipping research House Industrial Wards (OTL CONTAMINATED DEBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CONTAMINATED DESTRICT OPS CL CONTAMINATED DESTRICT OPS CL 5. Special Handling Instructions and Additional Informations	SKB/Sh 761 MN Cloquet, name)	amrock Env Highway 4 , MN 55720	9. (No	Pener	Phone: ntal, L	LC	hone:	: 218	11. Unit	:	12. Waste Pr Sheet	
Transporter 2 Company Name Designated Facility Name and Site Address U.S. DOT Description (including Proper Shipping religions) Hon Hazardous Industrial Waste (OTL CONTAMINATED DEBRIS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CONTAMINATED DEBRIS) CL DISTRICT OPS 5. Special Handling Instructions and Additional Informations	761 MN Cloquet, name)	Highway 4, MN 55720	9. (No	Con	Phone: ntal, L	LC	hone:	: 218	11. Unit	:	12. Waste Pr Sheet	
Designated Facility Name and Site Address U.S. DOT Description (including Proper Shipping reliable Hexardous Industrial Wards (OTL CONTAMINATED DEBRIS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CONTAMINATED DESTRICT OFS CL DISTRICT OFS CL 5. Special Handling Instructions and Additional Informations	761 MN Cloquet, name)	Highway 4, MN 55720	9. (No	Con	Phone: ntal, L	LC	hone:	: 218	11. Unit	:	12. Waste Pr Sheet	
Designated Facility Name and Site Address U.S. DOT Description (including Proper Shipping relations Including Instructions and Additional Informations and Additional Informations and Additional Informations and Additional Informations Information	761 MN Cloquet, name)	Highway 4, MN 55720	9. (No	Con	ntal, L	LC	hone:	: 218	11. Unit	:	12. Waste Pr Sheet	
JOH Description (including Proper Shipping report Hazardous Industrial Waste (OTL CONTAMINATED DEBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL CULTS (1999) OR CONTAMINATED DESTRICT OF SECULO	761 MN Cloquet, name)	Highway 4, MN 55720	9. (No	Con	ntal, L		10. Tota	ıl .	11. Unit	:	12. Waste Pr Sheet	
JOH Description (including Proper Shipping report Hazardous Industrial Waste (OTL CONTAMINATED DEBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL CULTS (1999) OR CONTAMINATED DESTRICT OF SECULO	761 MN Cloquet, name)	Highway 4, MN 55720	9. (No	Con	tainers		10. Tota	ıl .	11. Unit	:	12. Waste Pr Sheet	
Hon Hazardous Industrial Waste (OH. CONTAMINATED DEBRIS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CL DISTRICT OFS 5. Special Handling Instructions and Additional Informations	Cloquet, name)	, MN 55720	9. (PI	10. Tota	ıl .	11. Unit	:	12. Waste Pr Sheet	
Hon Hazardous Industrial Waste (OH. CONTAMINATED DEBRIS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CL DISTRICT OFS 5. Special Handling Instructions and Additional Informations	name)		9. (PI	10. Tota	ıl .	11. Unit	:	12. Waste Pr Sheet	
Hon Hazardous Industrial Waste (OH. CONTAMINATED DEBRIS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CL DISTRICT OFS 5. Special Handling Instructions and Additional Informations	name)		9. (10. Tota	ıl .	11. Unit	:	12. Waste Pr Sheet	
Hon Hazardous Industrial Waste (OH. CONTAMINATED DEBRIS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CL DISTRICT OFS 5. Special Handling Instructions and Additional Informations	cate waste stream	n Approval # below)	No				Tota	ı.	Unit	:	Waste Pr Sheet	
(OTL CONTAMINATED DRBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL) CL CL DISTRICT OPS CL 5. Special Handling Instructions and Additional Informations		n Approval # below)			Type						Sheet	
(OTL CONTAMINATED DRBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL) CL CL DISTRICT OPS CL 5. Special Handling Instructions and Additional Informations		n Approval # below)	14.								100	***
(OTL CONTAMINATED DRBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL) CL CL DISTRICT OPS CL 5. Special Handling Instructions and Additional Informations		n Approval # below)	14.									***:
3. Additional Descriptions for Materials Listed Above (indical CL CONTAMBJATED D. CL CONTAMBJATED D. DISTRICT OPS CL DISTRICT OPS 5. Special Handling Instructions and Additional Info		n Approval # below)	14.									
3. Additional Descriptions for Materials Listed Above (indical CL CL CL CL DISTRICT OPS CL CL S. Special Handling Instructions and Additional Informations		n Approval # below)	14.									
3. Additional Descriptions for Materials Listed Above (indical CL CL CL CL DISTRICT OPS CL CL S. Special Handling Instructions and Additional Informations		n Approval # below)	14.									
3. Additional Descriptions for Materials Listed Above (indiced Listed Above) (indiced Liste		n Approval # below)	14.									
3. Additional Descriptions for Materials Listed Above (indiced Listed Above) (indiced Liste		n Approval # below)	14.									
3. Additional Descriptions for Materials Listed Above (indiced CL CL CL CL DISTRICT OVS CL 5. Special Handling Instructions and Additional Information		n Approval # below)	14.								·	
3. Additional Descriptions for Materials Listed Above (indiced CL CL CL CL DISTRICT OVS CL 5. Special Handling Instructions and Additional Information		n Approval # below)	14.	Cad							i	
3. Additional Descriptions for Materials Listed Above (indiced CL CL CL CL DISTRICT OVS CL 5. Special Handling Instructions and Additional Information		n Approval # below)	14.	Car				<u> </u>			i	
3. Additional Descriptions for Materials Listed Above (indiced CL) CL CL CL DISTRICT OPS CL 5. Special Handling Instructions and Additional Informations		n Approval # below)	14.	2							i	
3. Additional Descriptions for Materials Listed Above (indiced CL CC) 15-00150 CIL CONTAMBJATED DESTRICT OFS CL 5. Special Handling Instructions and Additional Info		n Approval # below)	14.					1 1	E .		·	
CL CL CL CL DESTRICT OPS CL Special Handling Instructions and Additional Information		n Approval # below)	14.					1			i	
CL CL CL CL DISTRICT OPS CL Special Handling Instructions and Additional Information		n Approval # below)	14.	C=							i	
CL CL CL CL DISTRICT OPS CL Special Handling Instructions and Additional Information		n Approval # below)	14.					1 1		l l		
CL CL CL DESTRECT OPS CL Special Handling Instructions and Additional Information		II Apploval # Delowy	'		ecial Hand	Hina Pr	rocedur	es for	Wastes Li	sted Ah	IOVA	
CL DESTRICT OPS CL 5. Special Handling Instructions and Additional Information	HEBRIS -			Opt	colai i lanc	, in ig	oocaai	00 101	TTESTES E	0100710	,010	
CL DESTRICT OPS CL 5. Special Handling Instructions and Additional Information	AREMOND -											
. CL 5. Special Handling Instructions and Additional Infor			ľ									
5. Special Handling Instructions and Additional Info												
•	ormation							1.	WD 11	O-1		
Emergency Comact.	Jimadon							*	KB Use	Only		
3 , · · · · · · · · · · · · · · · · · ·								L	oad#			
		/										
6. GENERATOR'S CERTIFICATION: I hereby decis												
proper shipping name and are classified, packed,			ire in a	ll re	spects ir	n prop	er con	dition	for trans	sport b	y highway	
according to applicable international and national	ai governmen	nt regulations.	1									
Printed/Typed Name		Signature /	3,				. **			.donth:	,Day	Y
Printed/Typed Name		Signature	11	مية سر								$_{\perp}$ $/$
7. Transporter 1 Acknowledged of Receipt of Materi	rials		C _M								<u> </u>	ــــــــــــــــــــــــــــــــــــــ
Tanaporter Acknowledged of necespt of Mater	i idio	,			- 4	.6*						
Printed/Typed Name		Signature	1		A CONTRACT	Land the second	meric.		V	/lonth	Day	ŢΥ
CMF15 / CLUMON		hans of	Carl Carlon Car		1 2					4 /	<u> 1444</u>	
B. Transporter 2 Acknowledgement of Receipt of Ma	laterials											
Printed/Typed Name		Signature							, and the same of	/onth	Day	Y
· ··· · · · · · · · · · · · · · · · ·		2.5								1	l l	
9. Discrepancy Indication Space		· · · · · · · · · · · · · · · · · · ·									1	Ь
A Disorepancy indication opace												
			>									
D. Facility Owner or Operator: Certification of receip	ipt of non-ha						ant ave		s noted i	n item	19.	
	.,	zardous materia	ls cove	ered	by this	Manife	estexc	жин				
Printed/Typed Name		zardous materia	ls cove	ered	by this	Manife	esi exc	ері а				



Γ.		1. Generat	or's H	S EDA I	D No	(if an	24		_			4 D.			-
1	Shipping Manifest	. General	.01 3 00	1	D 140.	(11 411)	ΥŲ	\. .11	Ĭ.				ige 1 of	page(s)
Į I	3. Generator's Name and Facility Address	. 10			1 1		N	lailing	Addr	ess_	accompany of the	Carlotte material	-	_ :	
	Hill Alle a Stiffen	My an	-;											表表示: 120 mile 4: 1 Establish Sea (1) (1) (1)	
	4. Generator's Phone:	97000 N	, 5				F	ax:	HAT.	2001 	ERI	OR G	E, EHLA	UH, MH 158 YZZ	lé
	5. Transporter 1 Company Name	<i>;</i> ;		_		_			remolest F	£ 1,200	(/ 		* flat	
	SHAMROCK TRUCKING						Ρ	hone:	2	1508	(18a)	1112			
	6. Transporter 2 Company Name		_	*							<u> </u>	1111		-	
	7. Designated Facility Name and Site Address							hone:					· :		
	1. Designated Facility Name and Site Address	SKB/S				onn	1e1	ntal, l	LL(3					
		761 MI	-		•										
	8. U.S. DOT Description (including Proper Shipping	Cloque	t, Mi	N 557						Pho		218-	-878-01	12	
	5. 5.5. bot bescription (including Proper Shipping	g name)					1	tainers			10. Total		11. Unit	12. Waste Profi	ile
¥ G	a. 57 77 5 7 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		<u>_</u>			No.	-	Туре	+	Q	uantit	y	Wt/Vol	Sheet#	
Ε	a. Hon Hozanious Industrial Waste (OIL CONTAMINATED DEBRIS)					1 1		1		ı	1 1	1			
N E		, <u></u> ,													
R A	b.														
Ţ					!										
O Ŗ	C.	_				Ш.	+		-	١		_			_
*															
	d.	<u>-</u> .			-		4		-					<u>.</u>	
						1 1		ı		1 1	l f			2 - Q	
	13. Additional Descriptions for Materials Listed Above (ind a. CL	icate waste strea	am Appro	val # belo	ow)	14. 8	Spe	cial Han	dling	Proc	edures	s for W	astes Listed	Above	***
	b. CL ASLASSOBBO OIL CONTAMINATED I	DEMRIS -													
-	B. CL 49LAS-0030 OIL CONTAMINATED I c. CL DISTRICT OPS d. CL														
	15. Special Handling Instructions and Additional Info	ormation						.	_			SK	B Use Onl		
,	Emergency Contact:												ad #		
	16. GENERATOR'S CERTIFICATION: I hereby dec	lare that the	conter	nts of th	his cor	sign	me	nt are f	ully a	and a	ccura	ately d	escribed a	bove by	
	proper shipping name and are classified, packer according to applicable international and nation	d. marked. ai	nd labe	eled, ar	าศ are	in all	res	pects i	n pro	per	condi	ition fo	r transport	t by highway	
	Printed/Typed Name		Sian	ature,-	p	, por			7		_		Mont	h Davi	
<u>¥</u>	17. Transporter 1 Acknowledged of Receipt of Mate	 			A.			1.	/ 	· · · · · · · · · · · · · · · · · · ·			1/1/	h Day 	Year G
R A	Printed/Typed, Name	rials —-	. Olem	.1					es Carlo	-					
TRANSPORTER	A1-EX12753		Sign	ature	and the same	31	į	10	7				Monti	h Day /	Year
O R	18. Transporter 2 Acknowledgement of Receipt of N	1aterials	1		- , 21' - 2''	_,•								<u> </u>	<u> </u>
T E	Printed/Typed Name		Sign	ature									Monti	h Day	Year
<u>م</u>	19. Discrepancy Indication Space									_				<u> </u>	L
F	-														
A C															
j L															
1	90 Equilibra Oruman - O O O		,			2					_				
T Y	20. Facility Owner or Operator: Certification of recei	ipt of non-ha 			erials c	overe	d b	y this	Man	fest	excep	ot as n	oted in iter	m 19.	
	Printed/Typed Name		Signa	ature									Month	n Day	Year
															1



A	Chinning Monifest	1. Gener	rator's U	S EPA II	D No.	(if aı	(ער					1. Pa	ge 1 of		page	(s)
	Shipping Manifest		1 1	1	I		ı	1 1	1		i		•		15-	(-)
	3. Generator's Name and Facility Address 4. Generator's Phone:	A. P		I				Mailing A	Addre	955 	659 mp milydrill	Act William	Sec.	(1)	u, // A	yak Mit ca
	4. Generator's Phone: 5. Transporter 1 Company Name	3/3/1	, epipe ^d				_							irei.	MN 55	£16
	6. Transporter 2 Company Name		_				I	Phone:						 -	<u>.</u>	·
	7. Designated Facility Name and Site Address							Phone:			78.0	1112				
	The second of a country Wallie and One Address	761 N	Sham IN Hi iet, M	ghway	y 45	roni	me	ntal, I				210	070 0	110		
	8. U.S. DOT Description (including Proper Shipping	name)	ici, IVI	N 33/	20	9. (Cor	ntainers		Pnc	ne:	218-	878-0	112	12,	
	a.				_	No		Туре			Total uantit	у	Unit Wt/Vol		Vaste Pro	
3	Hou Ideardous industrial Waste															
1	b.		-				 	,			<u> </u>	7.	diss ^a		i V	-
1	С.	<u>.</u>		.			<u> </u>					<u> -</u> -				•
	d.				_								_	_		
	*							.							٠.	
-	13. Additional Descriptions for Materials Listed Above (India a. CL b. CL 77-0047	cate waste st	ream Appr	oval # belo	ow)	14.	Spe	ecial Hand	diing	Proce	edures	s for Wa	ustes Liste	ed Abov	e	
1	d. CL CI.13-0030 CIL. CONTAMINATED I.															
	15. Special Handling Instructions and Additional Info Emergency Contact:	rmation	•				_		_			SKI	B Use O	пју		
-	16. GENERATOR'S CERTIFICATION: I hereby decl proper shipping name and are classified, packed	are that th	e conte	nts of th	ils co	nsigr	nme	ent are fu	ılly a	nd a	ccura	ately de	escribed	above	by	
	according to applicable international and nationa	l governm	nent regu	ilations.	<u>Jeren</u> o			spects in	(") (")) Per (JOHUI	tion to	rtranspo	ort by n	igriway	
-	Printed/Typed Name // / // / 17. Transporter 1 Acknowledged of Receipt of Mater	ials	Sign	ature	July September	2 c	u'paper	· garden ca	<u>, </u>	And the second	Salt et al.	وحات ا	Mor	nth _	Day _y	Year,
	Printed/Typed Name hard to he	1	Sign	ature	Parket Stranger	er gelekeren er	1	A CONTRACTOR OF THE PARTY OF TH	## **********		elater :	_	Mor	yth j	Day	Year
<u> </u>	 Transporter 2 Acknowledgement of Receipt of Management of Receipt of Rece	aterials	T Cian	ature			_		_		_					
	19. Discrepancy Indication Space		Sign	ature ———		_		-			_		Mor	nth	Day	Year
									F							
	20. Facility Owner or Operator: Certification of receip	ot of non-h	nazardou	ıs mate	rials c	over	ed	by this M	1anif	est e	xcep	ot as no	oted in it	em 19.	-	
	Printed/Typed Name	-	Sign							_			Mor		Day	Year



^	Shipping Manifest	1. Generato		D No.						age 1 of	
	3. Generator's Name and Facility Address 4. Generator's Phone:	10 A	12			Mailing A	ddres	s J	That The state of the state of	0/1	15 M. H. A.
	4. Generator's Phone: 35.5 = 30 5. Transporter 1 Company Name	191		-	<u> </u>	See also	seator missing	Same and death	Albertain profes	farithicantes.	<u> </u>
	6. Transporter 2 Company Name					Phone:	TIE	l=878=	0112		
	7. Designated Facility Name and Site Address	761 MN	amrock I Highwa , MN 557	y 45	onme	ental, L		hone	218	-878-01	12
	8. U.S. DOT Description (including Proper Shipping				9. Co No.	ntainers Type		10. Tota Quant	 	11. Unit Wt/Vol	12. Waste Profile Sheet#
à l	a. 11on Hazardous Industrial Waske b. (CH. CONTANTISTATION OFFICES)			.					1		
	C.		•			F	1				
	d.		<u>.</u>								_
	13. Additional Descriptions for Materials Listed Above (Ind	dicate waste stream	Approval # bek	nuvì	14 So	ecial Hand	lling Pr	200dur	e for W	astes Listed	J Abour
	a. CL 2/9-3043 b. CL c. CL c. CL d. CL CL15-0(30-CM_CONTAMINATED)		· · · · · · · · · · · · · · · · · · ·	,	,		g:	0000.	55 IO. 7.	doleo Lidio.	TADOVE
	15. Special Handling Instructions and Additional Info Emergency Contact:									B Use On	ıly
	16. GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packed according to applicable international and nation.	d marked and	diaheled ar	nd aroi	signmen n all re	ent are fu spects in	lly and	d accur er conc	ately d	lescribed a	above by rt by highway
	Printed/Typed Name / / / / / / / / / / / / / / / / / / /	<u> </u>	Signature		or i=€usi	and the same of th	- marc			Mon	th Day Year
	Printed/Typed Name LUAYAE 3 C 18. Transporter 2 Acknowledgement of Receipt of N		Signature L	ngr-	- Day	130	tradical de	12		Mon / /	
	Printed/Typed Name 19. Discrepancy Indication Space		Signature							Mont	th Day Year
	290										
	20. Facility Owner or Operator: Certification of recei	ipt of non-haza	ardous mate	erials co	overed	by this M	1anife:	st exce	pt as n	oted in ite	em 19.
	Printed/Typed Name		Signature					-		Mont	th Day Year



Non Hazardous Industrial Waste

65390

		T-1 0. (-			-				
*	Shipping Manifest	1. Generat	1 1	:PA ID No I	. (If any	V) _		,	,	I. Pag	e 1 of	pag	je(s)
	3. Generator's Name, and Facility Address 5007	- /		<u> </u>	L	Ma	<u>i</u> iling Ad	ldress	St-10	P	J.77	5 11.11	AUG
	PARTING Conformation	e Complete State of the Complete State of the Complete State of the Complete State of the Complete State of the Co	<i>-1</i>									JOE My	WI 5%
	4. Generator's Phone:	1495	J			Fay						FFIL REST	· 医性复数
	5. Transporter 1 Company Name			7.			<u> </u>	re service	Jinganga ter	1.4 E. 2	<u>, 4,675</u> 73,675	the Best of BURSHAN A	<u> </u>
						Pho	one:						
	6. Transporter 2 Company Name	_						218-8	78-01	() ()			
	7 Decimend Facility Manager 100												
	7. Designated Facility Name and Site Address					nent	al, Ll	LC					
			_	•				ъ.	_		.=		
	8. U.S. DOT Description (including Proper Shippin	-	t, MN	55/20	• •			Pho		218-8			
	6. 0.3. DOT Description (including Proper Shippin	g name)				ı			Total		11. Unit		
¥	a.				No.		Туре	Q	uantity		Wt/Vol	Shee	et#
G E	Non Hazardous Industrial Wester						ı	ı	l I	1			
N E	WILLY ON THE AMERICAN THE THEORY	 .					1					_	
R A	b.	¥											
Т													
O R	C.												<u>-</u>
^ .		Mailing Address ALLIER FORM SOUTH Fax: 30 W SUPERIOR ST DEFLOTE MONS Phone: 18-878-0112 Phone: SKB/Shamrock Environmental, LLC 761 MN Highway 45 Cloquet, MN 55720 Phone: 218-878-0112 Per Shipping name) 9. Containers No. Type Quantity W/Vol W/Vol Shee Made Month Materials Manth Materials Manth Materials		·									
	d.												
	a. CL 21 19 - 0019 9		l Above										
	b. CL c. CL												
	d. CL CLAS-0030-QU, CONTACTION TED												
	15. Special Handling Instructions and Additional Inf												
	Emergency Contact:												
		<u>. </u>					=:						
	16. GENERATOR'S CERTIFICATION: I hereby deproper shipping name and are classified, packet	clare that the	contents	of this co	onsign e in all	ment	are ful	ly and a	condit	ely de	scribed a	above by	
	according to applicable international and nation	al governme	nt regula	tions.	المتسيعة والمارا	75°C	0010111	propor	oondie	011 101	папорог	r by mgmva	'
	Printed/Typed Name	***************************************	Signat	ure							— Mont	th /Days	Year,
T	17. Transporter 1 Acknowledged of Receipt of Mate	erials]	part Comment	- "			3:		المستشدة	' '	/	1'17
TRANSPORT	Printed/Typed Name		Signat	ure		e ·					Mont	th Day	Year
S			12757	<u> </u>	2	************	¥					f Day	
O R	18. Transporter 2 Acknowledgement of Receipt of N	/laterials	·										
É	Printed/Typed Name		Signati	ure							Mont	th Day	Year
	19. Discrepancy Indication Space		1								_		
F A													ļ
C													
L													
l T	20. Facility Owner or Operator: Certification of rece	eipt of non-ha	azardous	materials	cover	ed hv	this M	anifest	excen	as no	ated in ite	em 19	
Y	Printed/Typed Name		Signati			- ~ v				110	Mont		Year
			Jigrian		-							iii Day	rear

White - Return to Generator

Canary - Facility Copy



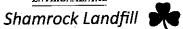
97.4	1. Generato	r's US EPA ID No	. (if any)			1. Pa	age 1 of	page(s)
Shipping Manifest		1 1 - 1		1	1 1			
3. Generator's Name and Facility Address			N	/lailing Ad	dress	1		
SUPERION WATER LITTE & POWER FRIL AVE A STEELOH AVE SUPERI 4. Generator's Phonebys (1882-1993)			F	(#(399) (8 H ax:	RIOR WA ULL AYR	THE.	LIGHT S ERIOR, 1	LANGER CO
5. Transporter 1 Company Name								
			F	Phone:				
6. Transporter 2 Company Name			F	Phone:				
7. Designated Facility Name and Site Address	SKB/Sh	amrock Env			LC			
		Highway 4:		,				
		, MN 55720			Phone:	218	-878-01	12
B. U.S. DOT Description (including Proper Shippin	ng name)	•	9. Con	tainers	_10.		11.	12.
	•		No.	Туре	Tota Quant		Unit Wt/Vol	Waste Profile Sheet#
a. Hen Hanndow Industrial Weste		· · · · · · · · · · · · · · · · · · ·						
(OIL IMPACTED SOIL/DESES)								
D.								
						<u>. </u>		
).			.			· · 1		
					·			
		4						
3. Additional Descriptions for Materials Listed Above (ndicata wasta etraer	n Annovel # helow	14 Sn	ecial Handi	ling Procedure	es for V	Vastes List <i>e</i>	d Above
a. CL b. CL ^C L 12-0049 OH, IMPACTED SCIL/I		ii , ipp, orai ii oolow,	III 5p	ooidi i laridi	mig i rooddan	50 101 1		4,154,0
b. CL	ANDER ENLINE							
d. CL								
15. Special Handling Instructions and Additional In	nformation					SI	KB Use Or	ıly
Emergency Contact:						Lo	oad #	
		4.5						
 GENERATOR'S CERTIFICATION: I hereby deproper shipping name and are classified, pack according to applicable international and national /li>	ed, marked, an	id labeled, and a						
Printed/Typed Name		Signature	1.00	ري. در المعمور	Je ^{gg}	j	⁾ Mor	4 6 W N S S
7. Transporter 1 Acknowledged of Receipt of Ma	terials	The state of the s	<u> </u>	30 May 19 19 19 19 19 19 19 19 19 19 19 19 19	The second the second	11-11-5		
Printed/Typed Name 1	,	Signature					Mor	nth Day 3
- Dake Englies		Constitution of the	A STATE OF THE STA					
8. Transporter 2 Acknowledgement of Receipt of	Materials							
Printed/Typed Name		Signature					Mor	nth Day Y
9. Discrepancy Indication Space	,							
		*		-				
20. Facility Owner or Operator: Certification of rec	ceipt of non-ha	zardous material	s covered	by this M	lanifest exc	ept as	noted in it	em 19.
Printed/Typed Name		Signature					Mor	nth Day Y



Non Hazardous Industrial Waste

Shinning Manifest	1. Generator's US EPA ID N	o. (if a	any)					1 . Pa	ige 1 o	f	page(s	3)
Shipping Manifest			1	1								
. Generator's Name and Facility Address	,		N	/lailing Ad								
STEERING WATER LIGHT & BYMAR I FILL AVE & STEERON AVE SUPERIO Generator's Phone: 23 248 448	IO HUMADA IORIT. N, WI MESO		F	90131 9 0131 ax:		Mari Lay	VAT EE.	TES. Stu	CANELL BARN	rapc rapc	NYER CC Satabo)
. Transporter 1 Company Name		•										
		•	F	Phone:								
Transporter 2 Company Name			i	Phone:								
. Designated Facility Name and Site Address	SKB/Shamrock Env	viro	nme	ntal, L	LC	i ,						
	761 MN Highway 4											
	Cloquet, MN 55720]	Pho	ne:	218	-878-	-0112		
. U.S. DOT Description (including Proper Shipping	<u> </u>		. Cor	ntainers	Γ		10.		11		12.	
			No.	Туре			otal antii	ty	Un Wt∧		Waste Pro Sheet#	
				1		-		***				
* Hen Hazardous Industrial Wests (CH. IMPACTED COIL/DEBREE)												
•												
		-			-							
•			1			1 1	1	[
. '							ĺ					
•			L' -				•					
•												
		١,	4 6.	ecial Han	dling	Proc	adure	e for l	Maetos	Listed Ab	inve	<u> </u>
Additional Descriptions for Materials Listed Above (Ind. CL	iicate waste stream Approval # below).	· '	4. O	Acriai maii	amig	1 100	saure	3 101	· · · · · · · · · · · · · · · · · · ·			
a. CL b. CL ^T L1240012 OIL IMPACTED SOILAD!	MED RAIST											
c. CL		ļ										
d. CL 15. Special Handling Instructions and Additional Inf	formation				_	·		S	KB Us	e Only		_
Emergency Contact:								L	oad#			
					11			rately				
	-1		-:	ant ara f					MARCH		we hv	
proper shipping name and are classified, packet	ed, marked, and labeled, and	con:	signm n all r	nent are f espects i	ully a n pr	and a oper	cond	dition	for tra	nsport b	ove by ly highway	
16. GENERATOR'S CERTIFICATION: I hereby de- proper shipping name and are classified, packe according to applicable international and nation	ed, marked, and labeled, and	are in	signm n all r	nent are f espects i	ully a	and a oper	cond	dition	for trai	nsport b	ove by y highway	
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	ed, marked, and labeled, and	are in	signm n all r	nent are f	n pr	and a oper	cond	dition	for trai	nsport b	y nigriway	
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	ed, marked, and labeled, and nal government regulations. Signature	are in	signm n all n	nent are f	n pr	and a	cond	dition	for trai	nsport b	Day	
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Materials (1988)	ed, marked, and labeled, and nal government regulations. Signature	are in	signm n all r	nent are f	n pr	and a	cond	dition	for trai	Month	Day	-, <u>/</u>
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name	ed, marked, and labeled, and nal government regulations. Signature	s cons	signm n all r	nent are f	n pr	and a	cond	dition	for trai	nsport b	y nigriway	-, <u>/</u>
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name	ed, marked, and labeled, and nal government regulations. Signature erials Signature	are in	signm n all r	nent are f	n pr	and a	cond	dition	for trai	Month	Day	- <u>/</u>
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of International I	ed, marked, and labeled, and nal government regulations. Signature erials Signature	are in	signm n all r	nent are f	n pr	and a	cond	dition	for trai	Month	Day	-\ <u>/</u> <u>/</u>
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of International Printed/Typed Name	ed, marked, and labeled, and nal government regulations. Signature erials Signature Materials	are in	signm n all r	nent are f	n pr	and a	cond	dition	for trail	Month ///	Day Day Day	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, and labeled, and nal government regulations. Signature erials Signature Materials	s cons	signm n all r	nent are f	n pr	and a	cond	dition	for trai	Month ///	Day Day Day	<u> </u>
according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of	ed, marked, and labeled, and nal government regulations. Signature erials Signature Materials	s cons	signm n all r	nent are f	n pr	and a oper	cond	dition	for train	Month ///	Day Day Day	<u> </u>
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, and labeled, and nal government regulations. Signature erials Signature Materials	s cons	n all r	nent are f	n pr	and a	Conc	dition	for train	Month ///	Day Day Day	<u> </u>
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of International Printed/Typed Name	ed, marked, and labeled, and nal government regulations. Signature erials Signature Materials	s cons	n all n	nent are f	n pri	and a oper	CONC	dition	for train	Month ///	Day Day Day	<u> </u>
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of International Printed/Typed Name 19. Discrepancy Indication Space	ed, marked, and labeled, and nal government regulations. Signature erials Signature Materials Signature	are ii	n all r	espects i	n pr	oper	cond	dition	l l	Month Month Month	Day Day Day	-\ <u>/</u> <u>/</u> _
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, and labeled, and nal government regulations. Signature erials Signature Materials Signature	are ii	n all r	espects i	n pr	oper	cond	dition	l l	Month Month Month	Day Day Day	<u> </u>





66952

Chinning Manifest	1. Generator	's US EPA ID No	. (if a	ny)				1.	Page	e 1 of		page(s	3)
Shipping Manifest													
. Generator's Name and Facility Address				٨	lailing Ad								
FUFFRICE WATER LIGHT & POWER LILL AVE. & STRISSH AVE. BUYER. Generator's Phone.	CO MENAL OR, WI MAR	VI. SUPST. O		F	\$1)PE 2215 F ax:	RIOI HLL	A.V.E	JE.	R LI LEGE	CATT S RIOT,), 290,14 VAI, 34	VER OF	į
Generator's Phone: Transporter 1 Company Name													
				F	Phone:		-		_				
. Transporter 2 Company Name													
	· .				Phone:				_				
. Designated Facility Name and Site Address		amrock Env		me	ntal, L	LC							
	** .	Highway 4:	5				_						
	Cloquet	, MN 55720				P)	hone	: 2	18-8	378-01	12		
. U.S. DOT Description (including Proper Shipping	ng name)		9.	Cor	ntainers		10 Tota	al		11. Unit	v	12. Vaste Pro	ofile
		·	N	o.	Туре		Quan			Wt/Vol		Sheet	
le ser region de la contrata de la STE-ser		-					,						
Hor Hozanious Industrial Waste (OIL IMPACTIO SOIL/DEBELS)													
The state of the s			+	<u> </u>					1				
•			1	ı			ı	ı	1				
											_		
			Γ.			Ī .					_		
h	·		╀┸	Щ.	 	+	!			-	<u> </u>		
• The second second second second second second second second second second second second second second second				I			l		ı				
		•											
3. Additional Descriptions for Materials Listed Above (i	ndicate waste strea	m Approval # below)	14	l. Sp	ecial Han	dling P	rocedu	ires f	or Wa	stes Liste	ed Abov	e	
i.CL 5.CLI 19-2049 — OH. BAPACTED SOILA	Meris				•								
5. CL													
i. CL			\perp		,								
5. Special Handling Instructions and Additional I	nformation	٠.								B Use C	inly		
Emergency Contact:	•				.:				LOS	ad#			
		· .							L			_	
6. GENERATOR'S CERTIFICATION: I hereby d	eclare that the	contents of this	cons	ignm	ent are f	ully ar	nd acc	urat	ely d	lescribed	d above	e by highway	
proper shipping name and are classified, pack according to applicable international and nation	kea, markea, a onal governme	nu labeled, and a nt regulations.	ue IN 7	ali (aopecis i	n brol	pei GO	rull	J11 10	, adiisp	J. C D y		
Printed/Typed Name		Signature			The same of the sa				-	Mo	onth	Day	•
- Lileas History		Salara Market Salara Communication of the Communica	<u> </u>	N. Seek Side	ger <u>gang</u> an	49	200					Zil	1
17. Transporter 1 Acknowledged of Receipt of Ma	aterials	a service of an in the									,		
Printed/Typed Name	<u> </u>	Signature		,n							onth	Day	I &
18. Transporter 2 Acknowledgement of Receipt o	f Materials	San San San San San San San San San San	The second second	ere ages	nest						1 1	žį" <u>} _</u>	į
	IVIALEITAIS	Signature				•••				NA.	onth	Day	
Printed/Typed Name		Signature				•						Lay	<u>L</u> _
19. Discrepancy Indication Space													
,													
		• .											
20. Facility Owner or Operator: Certification of re	eceipt of non-h	azardous materia	ils co	vere	d by this	Mani	fest e	ксер	t as	noted in	item 1	9.	
Printed/Typed Name		Signature									onth	Day	,
i initiar typod rianto									_				<u>L.</u>

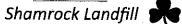
Pink - Transporter



Non Hazardous Industrial Waste

Shipping Manifest	1. Generator	r's US EPA ID No	. urany)	, ,		(4)	ge 1 of	7-	ge(s)
, · · · · · · · · · · · · · · · · · · ·	'			 Mailing Ad	dress				
Generator's Name and Facility Address	en seg in general en en en	to raine in month offerthe offertions		•		programa in	gengere ø.	alwiigtyenerie	/ Yen.
SUPERIOR WATER LIGHT & YOWER : FULL AVE. A STEEDER AVE. BUTEREY Generator's Phone: The WAY MADE	TO WELLE M. WESLE	uesusti. G	· ·		rior wat hit ay b				\$ 1 m
. Transporter 1 Company Name									
				Phone:					
. Transporter 2 Company Name									
				Phone:					
. Designated Facility Name and Site Address		amrock Env		ental, Ll	LC				
		I Highway 4		-			A=	-	•
•		, MN 55720			Phone:	218-	-878-011		
. U.S. DOT Description (including Proper Shipping	g name)		9. Co	ntainers	10. Total		11. Unit	1 Waste	2. Profile
en en en en en en en en en en en en en e	_		No.	Type	Quanti		Wt/Vol		eet#
TOTAL IMPACTION SOUTABERIS)									
Live boundaring and a service of the					1				
"			, ,			ı			
		•							•
					<u> </u>				
		•							
i.	•					1			
	•								
13. Additional Descriptions for Materials Listed Above (in	dicate waste strea	ım Approval # below)	14. S	pecial Hand	ling Procedure	es for V	/astes Listed	Above	
a. CL									
o. Click to the second of the	,				•				
d. CL									
15. Special Handling Instructions and Additional In	formation		_ `			SI	KB Use On	ly	
Emergency Contact:						Lo	oad#		
16. GENERATOR'S CERTIFICATION: I hereby de	eclare that the	contents of this	consignr	nent are fu	illy and accu	rately	described a	above by	
proper shipping name and are classified, pack according to applicable international and natio	ed, marked, a	nd labeled, and	are in all	respects ir	proper con	dition 1	for transpor	rt by highv	/ay
	governine	,	Late St. Bar.		7				
Printed/Typed Name		Signature		والمستحصرة	garage and a superior and the superior a		Mon	th Day	y , y
		<u> </u>	11000000	2, 12	- Law Superior			1 20	<u> </u>
17. Transporter 1 Acknowledged of Receipt of Mar	terials							4h D-1	/ / Y
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name	terials	Signature	a la Jac	f /	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			th Day	
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name		Signature	<u> </u>	f /	n in guide th		Mon	tn Day	100
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name		Signature Signature	And the second		A		Mon		
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name			Manager and	1 /	Service de la companya de la company				
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name					4. A.A.	<u> </u>			
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of			1.1.						
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name									
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name			and the second						
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name 19. Discrepancy Indication Space	Materials	Signature	***************************************				Mon	th Day	
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	Materials	Signature	***************************************		Manifest exc	ept as	Mon	th Day	/ Y



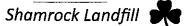


55954

Tarin bek zanajin 5	140	1 110 FD4 (D.)						1.4				<u> </u>	`
Shipping Manifest	1. Generato	or's US EPA ID I	NO. (IT	any)	1 1	1	ı	1.	Page	1 of		page(3)
3. Generator's Name and Facility Address					Mailing A	ddres	is						
SUFERIOR WATER LIGHT & POWE THIL AVE & STRESOM AVE SOVE 4. Generator's Phone	TR CO NEMA BOOK, WE SHE	OH 20 83 T. 20			SUP	EFIO	R W	KTR I SI	R LI	CHTE S JOK,	n POW. Vil san	MACT SO	À
5. Transporter 1 Company Name					Ψ	-						•	
<u> </u>					Phone:								
6. Transporter 2 Company Name					Phone:								
7. Designated Facility Name and Site Address	SKB/Sl	namrock En	vito			LC							
		l Highway											
		t, MN 5572				P	hone	e: 21	18-8	78-01	12		
8. U.S. DOT Description (including Proper Ship		,		. Co	ntainers	Ŧ	10			11.		12.	
				No.	Туре		Tot Quar		. 1	Unit Wt/Vol		ste Pro Sheet#	
a. 1850 Hazardone industrial Waste													
(OH, IMPACTED COLUMERIE)	No.												
b				L	, , , , , , , , , , , , , , , , , , ,			_ 1,	•				
C.				LL.	<u> </u>	<u> </u>							
			ľ										
d.							- 1	ı	'				
											-		
13. Additional Descriptions for Materials Listed Above	e (indicate waste strea	m Approval # below)	1	4. Sp	ecial Han	dling P	rocedu	ıres fo	r Was	tes Liste	d Above		
a. CL b. CEL-19-00AD OIL IMPACTION SOLL	AMERICA.		'										
c. CL					•								
d. CL 15. Special Handling Instructions and Additiona	Unformation	· .							OVD	llee O			
Emergency Contact:	· ·····Orritation								Load	Use O	niy	•	
									Loud				
16. GENERATOR'S CERTIFICATION: I hereby proper shipping name and are classified, pa according to applicable international and na	cked, marked, ar	nd labeled, and											
Printed/Typed Name		Signature		uy Astronomica	10	7				, Moi	nth [Day	Year
- 104113 13136	(<i>d</i>	The state of the s	1000 m	41.7°	SERVE PARTY AND AND AND AND AND AND AND AND AND AND	e godernoor d	ب _{در و} ه	e egiste g	est (m	$\perp f_{\perp}$	12		115
 Transporter 1 Acknowledged of Receipt of N Printed/Typed Name 	/laterials	Cionatura		*									
A CAPETA CAPETA	and the same	Signature	Ε.		4.		-			Moi	ntn L	Day	Year
18. Transporter 2 Acknowledgement of Receipt	of Materials			* .								. 	7
Printed/Typed Name		Signature								Moi	nth [Day	Year
19. Discrepancy Indication Space		<u>. </u>								1		1 !	
	·				-								
20. Facility Owner or Operator: Certification of	eceipt of non-ha	zardous materi	als co	verec	by this	Manif	est ex	cept	as no	ted in it	tem 19.		
Printed/Typed Name		Signature								Мог	nth C	Day	Year
										1 1			

Pink - Transporter





Shipping Manifest	1. Generate	or's US	EPA ID No	. (if any)	•		1. Pag	e 1 of	page	e(s)
3. Generator's Name and Facility Address					 Mailing Ad	dress				
				. '	_					
APPELIATE WATER LIGHT & POWER OF Generator's Phone! THISEN AVE. SUPERIOR	CHREA.	DH FL	BH.		aupm - Todas	PIUR WA	TER D	KALL &	POWERC	(
. Transporter 1 Company Name	Se Fall Delet	(C) (2			Fax: 1935	HALAVE.	3016	enin, s	71 3445U	يفياد منعنا الإح
,					Phone:					
. Transporter 2 Company Name		· · ·	 -		riionę.			:		
				ē	Phone:					
Designated Facility Name and Site Address	SKB/S	hamro	ck Env		ental, L	LC				
	761 M	N Hig	hway 4.	5	•			•		
	Cloque	t, MÑ	55720			Phone:	218-	878-011	12	
. U.S. DOT Description (including Proper Shipping	name)			9. Co	ntainers	_10.		11.	12.	
				No.	Туре	Total Quanti		Unit Wt/Vol	Waste Pi Sheet	
			•.						-	
Rechtscher industrial Weste (OIL Indipacted Soulaberris)					:					
]			
			1.0			1 1 1		į.		
Additional Descriptions for Materials Listed Above (indic	ate waste stre	am Approv	al # below)	14. Sp	ecial Handl	ing Procedure	s for Wa	stes Listed	Above	
CL: CLEAR P-008 P OIL IMPACTION SOIL JUST	minter .									
CL	Established Control of									
CL	:						 			
 Special Handling Instructions and Additional Info Emergency Contact; 	rmation							B Use Onl	У	
		i.	. 4			é	Loa	.d #		
			<u>:</u>						<u></u>	
6. GENERATOR'S CERTIFICATION: I hereby declar proper shipping name and are classified, packed										
according to applicable international and national						p p. 0		. папорог		
Printed/Typed Name		Signa	iture	/	1/7			Mont	h Day	Ye
Transporter 1 Acknowledged of Receipt of Materi	iala	- Carren	<u> </u>	<u>C. C.</u>	J. J	Ball to the state of		_1/_1/	191	1/
Printed/Typed Name	اهام	Signa	turo				.		L 5	
Timodriypod Hallie		Joigna	uule					Mont	h Day	- Y∈ -
Transporter 2 Acknowledgement of Receipt of Ma	aterials	_								1
Printed/Typed Name		Signa	ture					Mont	h Day	Ye
Discrepancy Indication Space		l	•							
					-					
Facility Owner or Operator: Certification of receip	ot of non-ha	azardou	s materials	covered	by this M	anifest exce	ept as n	oted in ite	m 19.	
Printed/Typed Name		Signa					<u> </u>	Mont		Ye
Transcertypod Haine		Jigilia	eul d					IVIOITE	Day	τ¢





3. Generator's Name and Facility Address SUPPLIED AND STORED AND SUPPLIED 4. Generator's Phone (1994) (1994) 5. Transporter 1 Company Name 6. Transporter 2 Company Name 7. Designated Facility Name and Site Address	SKB/S 761 M Cloque		ironme	Phone:	erde van Halave			CWE CO
SUPPRIOR WATER LIGHT A POWER OF THE LAVE SUPPRIOR AVE SUPPRIOR AVE SUPPRIOR AVE SUPPRIOR AND SUP	SKB/S 761 M Cloque	hamrock Env N Highway 4	ironme	STOPEN 29 (5 La Fax: Phone:	erde van Halave			
i. Generator's Phone Mark Mark Mark Mark Mark Mark Mark Mark	SKB/S 761 M Cloque	hamrock Env N Highway 4	ironme	ence:			OP, 748	9.8.980 <u> </u>
Transporter 1 Company Name Transporter 2 Company Name	761 M Cloque	N Highway 4	ironme	^o hone: ^o hone:				
Transporter 2 Company Name	761 M Cloque	N Highway 4	ironme	Phone:				
	761 M Cloque	N Highway 4	ironme	Phone:				
	761 M Cloque	N Highway 4	ironme					
Designated Facility Name and Site Address	761 M Cloque	N Highway 4	ironme					
Designated Facility Name and Site Address	761 M Cloque	N Highway 4		ntal. LI				
	Cloque		5		LC.			
	Cloque							
	_	•			Phone:	218-87	8-0112	1
. U.S. DOT Description (including Proper Shipping	•			tainers	10.		11.	12.
		-	No.	Time	Total	U	Init :/Vol	Waste Profile Sheet#
· Non Huzanicam buhashisi Waste	÷.;	····	NO.	Туре	Quantit	y VVI	/VOI	2LIGET#
· HOLEMPACTID SOLDENES					i + j			
and the second s								
	**	:		'				
			111					
		-			1			
			111					
			 					
			1					
	. •	*						
. Additional Descriptions for Materials Listed Above (Indi	cate waste stre	am Approval # below)	14. Sp	L ecial Handli	ing Procedure	l I s for Wastes	Listed At	
CULA 2-0047 OIL, INTERCTIED SCHLADI	BRIS		'		·			
CL CL								
CL		*						
5. Special Handling Instructions and Additional Info	ormation		l			SKB U	se Only	
Emergency Contact:						Load #	_	
					•			
CENERATORIS CERTIFICATION. I hombis des				الديك منية		-4-1	21	
 GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packet 								
according to applicable international and national	al governme	ent regulations.	منهو العو	r e	· · ·			
Printed/Typed Name		Signature	Career Co.	1	7		Month,	Day ,
LUKAS VIXUR		-	(all Carrier	A BOOK SAN	C		<u> 44</u>	1/1/1/
Transporter 1 Acknowledged of Receipt of Mate	rials							•
Printed/Typed Name		Signature	,	100 C 200 M			Month	Pay _{Cy}
Transporter 2 Acknowledgement of Receipt of M	lateriale	1 8/1/6.8/1	man () and ()	Land French	·	İ	/ /	
	iatoriais	Signatur-						
Printed/Typed Name		Signature				ı	Month	Day \
Discrepancy Indication Space							<u> </u>	1.
					d.			
D. Facility Owner or Operator: Certification of recei	int of non-h	azardous material	s covered	by this M	anifest even	nt as noto	d in item	19
	ipcornon-tr		COACIEC	∸ N H H P IVI	annest exce	hr as linte		
Printed/Typed Name		Signature				1	Month	Day



Non Hazardous Industrial Waste

Shipping Manifest	1. Generato	or's US EPA ID No	. (if any)		I F	1. Page 1	of	page(s)
3. Generator's Name and Facility Address SUPERIOR WATER LIGHT & FOWER		<u> </u>	<u> </u>	_ ∕Iailing Ad				
- SUPERIOR WATER LIGHT A POWER C - HILL AVE A STEERE AVE SUPERIOR	O HEIDE	DIE BUESTE.			PLOT WAS			
4. Generator's Phone 18-135-31-14	C. SALE TAPPER	in i			allenva	earapaereac	州, 京庆合臣	* ()
5. Transporter 1 Company Name			<u> </u>	ax:				
a number of a Company Name								
C TN			F	Phone:				
6. Transporter 2 Company Name								
7. Designated Facility Name and Site Address	QTTD (01	1 =		Phone:				
. Designated Facility Name and Site Address		namrock Envi		ntal, Ll	LC			
		N Highway 45	•					
		t, MN 55720			Phone:	218-878	3-0112	
8. U.S. DOT Description (including Proper Shipping	name)	:	9. Cor	ntainers	1 0. Total		1. nit Wa	12. aste Profile
			No.	Туре	Quantit		/Vol	Sheet#
L. Mon Hammlous industrial Waste								
(CIL IMPACTED SOIL/DEBRIE)		$(x_1, \dots, x_n) \in \mathcal{C}$						
		· ·						
).								
<u>.</u>		2.7						
					1			
l					1 1 1			
		1.20						
3. Additional Descriptions for Materials Listed Above (indic ১ টোলে মাজ সভাতে আলোন সময় সাম সাম্প্রাস্থ্য সংস্কৃতি সংক্রম	ate waste strea	m Approval # below)	14. Sp	ecial Handl	ling Procedures	s for Wastes	Listed Above	
a. CE J. 19-0149 OU. IMPACTED SOUADE b. CL	is BAB							
c. CL		•						
d. CL		E_{ij}^{-1}						
15. Special Handling Instructions and Additional Info	rmation					SKB Us	e Only	
Emergency Contact:						Load #		
								*
 GENERATOR'S CERTIFICATION: I hereby decl. proper shipping name and are classified, packed according to applicable international and nationa 	, marked, ar	nd labeled, and ar nt regulations.	onsignme e in all re	ent are ful spects in	ly and accura proper cond	ately descri ition for tra	ibed above t nsport by hi	ghway
Printed/Typed Name		Signature	marked and the second	A. Carrier	/		Month	Day Y
17. Transporter 1 Acknowledged of Receipt of Mater	ials	prom		d constitue	. Supplied thing	a solice.	17 1	1/ 1
Printed/Typed Name	7	Signature	147 i	/		· 1	Month	Day Y
18. Transporter 2 Acknowledgement of Receipt of Ma	aterials	1 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.	4.7				1/ 1	
Printed/Typed Name		Signature					Month	Day Y
· ····································						1		
9. Discrepancy Indication Space								
		· ·						
		e de la companya de l						
		•						
				-				
Facility Owner or Operator: Certification of receipt	pt of non-ha	zardous materials	covered	by this M	lanifest exce	pt as noted	in item 19.	
Printed/Typed Name		Signature		-	. '			Day Y
· mitem typed radine		Signature						Jay 1



Non Hazardous Industrial Waste

Shipping Manifest	1. Genera	tor's US EPA ID No	. (if i	any)		•		-	f, Pa	ge 1 of	page	e(s)
. Generator's Name and Facility Address			<u>L</u>		 /lailing A	ddro						
STEELAR VALER LIGHT & PO'N	er co nemi	ada subay.		IV.				AT.	GF. Í	a tedi.	FOWER C	O
HILLAVE A STRIBER AVE SUPE											VI 54.880	
Generator's Phone				F	ax:							
. Transporter 1 Company Name												
·				F	Phone:							
. Transporter 2 Company Name					•							
				F	hone:						<u> </u>	
. Designated Facility Name and Site Address	SKB/S	hamrock Envi	iroı	nme	ntal, L	LC						
		N Highway 45	5							•		
	Cloque	et, MN 55720				I	Phon	e: 2	218-	878-01	12	
. U.S. DOT Description (including Proper Ship	ping name)	-	9.	Cor	itainers	-		0.		11.	12.	
			, N	lo.	Туре	ļ		otal untity		Unit Wt/Vol	Waste P Shee	
· Mon Mazandous Industrial Wasto					.,,,,,	 				1		
(OIL IMPACTIO SOIL/DEERIS)				. [1			
			Ш			ļ						
		*,										
				1								
			1									
			,	ı	ı	.		1	1			
· · · · · · · · · · · · · · · · · · ·					- 1		<u> </u>					
				ļ				1	ı			
				٠.	-							
3. Additional Descriptions for Materials Listed Above		eam Approval # below)	14	4. Sp	ecial Hand	dling I	Proced	lures	for W	astes Listed	Above	
. CLOL 19-0049 OIL IMPACTED BOIL . CL	alaels 213											
. CL												
. CL												
Special Handling Instructions and Additiona Emergency Contact:	I Information								SK	B Use On	ly	
Emergency Contact.	*								Lo	ad#		
6. GENERATOR'S CERTIFICATION: I hereby	declare that the	e contents of this c	onsi	ignme	ent are fu	ılly a	nd ac	curat	tely d	lescribed a	bove by	
proper shipping name and are classified, pa according to applicable international and na	cked, marked, a	and labeled, and ar	e in	all re	spects ir	ı pro	per co	onditi	ion fo	or transpor	t by highway	1
	uonai governini		Sept har									
Printed/Typed Name		Signature		and the second		ζ				Mont	h Day	Ye
7. Transporter 1 Acknowledged of Receipt of N	/aterials	I proportion of the same		V _{oge} to	, e							1/
Printed/Typed Name		Signature	5 1	Alaka Salaha Salaha Salaha Salaha Salaha Salaha Salaha Salaha Salaha Salaha Salaha Salaha Salaha Salaha Salaha	And the second second		` <u>`</u>	a district	, , e.	Mont	h Day	V.
Landred toder out	•	Olgridation	A STANSON	alang da kanada kanada Marang da kanada ka	in may be a representative	one collection	مسرمسر الم	Charle		IVIONI }	th Day	
8. Transporter 2 Acknowledgement of Receipt	of Materials	1112		. 2944	,,,,,,							
Printed/Typed Name		Signature								Mont	h Day	Υe
		1			·							
9. Discrepancy Indication Space												
•												
		· .										
0. Facility Owner or Operator: Certification of a	receipt of non-h	nazardous materials	CO	vered	by this I	Mani	fest e	хсер	t as r	noted in ite	m 19.	
Printed/Typed Name		Signature								Mont	h Day	Ye
1 (1)										1 1	- i'	



Non Hazardous Industrial Waste

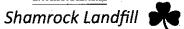
Shipping Manifest	1. Generator	's US EPA ID No.	(if any)			1.	Page 1	of	p	age(s)
		<u> </u>			-					
, Generator's Name and Facility Address	and any in the terms of the letter	THE PRINCIPLE STAIR	IV	lalling Ad פרדינייי	aress Swannikaa	: 1450 <u>51</u> 1	o Tans	T 3. 1	112 12. Waste Profile Sheet#	
DUPERIOR WATER LIGHT & POWER'S HILL AVE & STINGEN AVE. SHIERIO	CAPREMAIA W CON EARS	Phone: SKB/Shamrock Environmental, LLC 761 MN Highway 45 Cloquet, MN 55720 Phone: 9. Containers 10. 11. 12. Total Total POWER CC APOWER								
. Generator's Phone: 18/355/3191	The second second second	<i>.</i>	F		alebatan it was a si	to 5		, -:		
. Transporter 1 Company Name										
	·		-	lhono:						
T O Co Nome		Malling Address SUPPRODE VACTOR DEPENDENT A POWER CONTINUED TO STATE AND STATE OF THE CONTINU								
. Transporter 2 Company Name										
The Address of the Ad	Phone: Phone: SKB/Shamrock Environmental, LLC 761 MN Highway 45 Cloquet, MN 55720 Phone: 218-878-0112									
'. Designated Facility Name and Site Address				ntai, Li	LC					
	761 MN	Highway 45								
	Cloquet,	, MN 55720			Phone	e: 21	18-878	8-011	2	
B. U.S. DOT Description (including Proper Shipping	g name)	·. 1	9. Cor	tainers	10).	1	1.		12.
6.6. 20. 2006, parti (Phone: Phone: The and Site Address SKB/Shamrock Environmental, LLC 761 MN Highway 45 Cloquet, MN 55720 Phone: 2 (including Proper Shipping name) 9. Containers 10. Total No. Type Quantity Phone: 2 No. Type Quantity Phone: 2 Including Proper Shipping name) 10. Total No. Type Quantity Phone: 2 Including Proper Shipping name) 14. Special Handling Procedures Including Properties Included Above (Indicate waste stream Approval # below) Including Properties Included Above (Indicate waste stream Approval # below) Including Properties Included Above (Indicate waste stream Approval # below) Including Properties Included Above (Indicate waste stream Approval # below) Including Properties Included Above (Indicate waste stream Approval # below) Including Properties Included Above (Indicate waste stream Approval # below) Including Properties Included Above (Indicate waste stream Approval # below) Including Properties Included Above (Indicate waste stream Approval # below) Including Properties Included Above (Indicate waste stream Approval # below) Including Properties Included Above (Indicate waste stream Approval # below) Included Above (Indicate waste stream Approval # below) Included Above (Indicate waste stream Approval # below)	No	Type							
		Tity		-						
· Flow Hezardone Industrial Name		Phone: KB/Shamrock Environmental, LLC 61 MN Highway 45 loquet, MN 55720 Phone: 218-878-0112 9. Containers 10 11 11 12 Waste No. Type Quantity Wt/Vol She Waste stream Approval # below) 14. Special Handling Procedures for Wastes Listed Above SKB Use Only Load # Ithat the contents of this consignment are fully and accurately described above by larked, and labeled, and are in all respects in proper condition for transport by highwovernment regulations.								
(OIL IMPACTED SOULDERRIS).										
<u> </u>							1			
.			1 1	,	1 1	1				
							_			
			1	. ,	1 1	1				
<u> </u>							'			
			No. Type Quantity Wt/Vol Sheet#							
12 Additional Descriptions for Materials Listed Above (in	rdicate waste stress	m Approval # helow)	14. Sr	ecial Hand	llina Proced	ures fo	or Waste	s Listed	Above	
a. CL_12-0049 OIL IMPACTED SOB./0										
b. CL										
c, CL		1,						,		
d. CL			L				21/2 1			
	iformation	•		•					У	
Emergency Contact:							Load #	*		
								٠,		
				ent are fu	illy and ac	curate	ely desc	ribed a	bove by	i
proper shipping name and are classified, pack	ed, marked, an	nd labeled, and ar	onsignm e in all r	espects ir	proper co	onditio	on for tr	anspor	t by high	ıway
proper shipping name and are classified, pack according to applicable international and natio	ed, marked, an	nd labeled, and ar nt regulations.	onsignme in all r	espects ir	proper co	onditio	on for tr	anspor	L by High	iway
proper shipping name and are classified, pack according to applicable international and nation	ed, marked, an	nd labeled, and ar	onsignme in all r	espects in	proper co	onditio	on for tr	anspor	L by High	iway
proper shipping name and are classified, pack according to applicable international and nation	ed, marked, an nal governmer	nd labeled, and ar nt regulations.	onsignme in all re	espects in	proper co	onditio	on for tr	anspor	L by High	iway
proper shipping name and are classified, pack according to applicable international and natio Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Ma	ed, marked, an nal governmer	nd labeled, and ar nt regulations. Signature	onsignme in all m	espects in	proper co	onditio	on for tr	anspor	h D	iway
proper shipping name and are classified, pack according to applicable international and natio Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name	ed, marked, an nal governmer	nd labeled, and ar nt regulations.	onsignme in all m	espects in	n proper co	onditio	on for tr	Mont	h D	ay
proper shipping name and are classified, pack according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name	ed, marked, ar nal governmer terials	nd labeled, and ar nt regulations. Signature	onsignme in all re	espects in	n proper co	ondition	on for tr	Mont	h D	ay
proper shipping name and are classified, pack according to applicable international and national Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of	ed, marked, ar nal governmer terials	nd labeled, and arnt regulations. Signature Signature	onsignme in all m	espects in	n proper co	ondition	oń for tr	Mont	th D	ay
proper shipping name and are classified, pack according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name	ed, marked, ar nal governmer terials	nd labeled, and ar nt regulations. Signature	onsignme in all m	espects in	n proper co	ondition	on for tr	Mont	th D	ay ay ay
proper shipping name and are classified, pack according to applicable international and nation. Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	ed, marked, ar nal governmer terials	nd labeled, and arnt regulations. Signature Signature	onsignme in all m	espects in	n proper co	ondition	oń for tr	Mont	th D	ay ay ay
proper shipping name and are classified, pack according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	ed, marked, ar nal governmer terials	nd labeled, and arnt regulations. Signature Signature	onsignme in all m	espects in	n proper co	ondition	on for tr	Mont	th D	ay ay ay
proper shipping name and are classified, pack according to applicable international and national Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of	ed, marked, ar nal governmer terials	nd labeled, and arnt regulations. Signature Signature	onsignme in all m	Akung	n proper co	ondition	on for tr	Mont	th D	ay ay ay
proper shipping name and are classified, pack according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	ed, marked, ar nal governmer terials	nd labeled, and arnt regulations. Signature Signature	onsignme in all m	espects in	n proper co	onditio	on for tr	Mont	th D	ay ay ay
proper shipping name and are classified, pack according to applicable international and nation. Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	ed, marked, ar nal governmer terials	nd labeled, and arnt regulations. Signature Signature	onsignme in all m	espects in	n proper co	ondition	on for tr	Mont	th D	ay ay ay
proper shipping name and are classified, pack according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name 19. Discrepancy Indication Space	ed, marked, ar mai governmer terials Materials	signature Signature Signature	e in all r	espects in	n proper co	naiti	on tor tr	Mont / /	t by high	ay ay ay
proper shipping name and are classified, pack according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	ed, marked, ar mai governmer terials Materials	signature Signature Signature	e in all r	espects in	n proper co	naiti	on tor tr	Mont / /	t by high	ay ay ay



Non Hazardous Industrial Waste

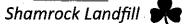
Shipping Manifest	1. General	tor's US EPA ID No	. (if any)			1. Pag	e 1 of	page(s)
3. Generator's Name and Facility Address			1 1	Apilina Ad				
SUPERIOR WATER LIGHT & WWEE	TYN MWENT	- 17-17/ NYS 18745745		lailing Ad العادية		racon i	FORTY A	POWER CO
HOLLAVE & STATSWAAVE OUTTOIN	DR. W. 346	en var i sam i misaren. Sekta			ELL AVY.			
. Generator's Phone \$18 - 335 - 340 f			F	ax:	antical and a second	CITAL E AD	FilthdThay 2	2 4 1 5 1 4 5 1 5 5 5 5 5 5 5 5 5 5 5 5 5
. Transporter 1 Company Name								
)h				
Transporter 2 Company Name			- F	hone:				
. Iransporter 2 Company Name	•							
Decimated Facility Name and Olive Address."		· · · · · · · · · · · · · · · · · · ·		Phone:				****
Designated Facility Name and Site Address	SKB/S	hamrock Env	ironme	ntal, LI	LC			
	761 M	N Highway 4:	5					
	Cloque	et, MN 55720	•	i	Phone:	218-8	378-01	12
. U.S. DOT Description (including Proper Shippin	-		9. Con	tainers	10.		11.	12.
	,				Total		Unit	Waste Profile
	· · · · · · · · · · · · · · · · · · ·		No.	Type	Quantit	У	Wt/Vol	Sheet#
· Hen Hezardevs Indinirial Wante					1 1 1			
(CIL IMPACTIO SCIL/DEFERIS)	100							
	-							
							1	
] , ,]					
		A STATE OF THE STA						
			<u> </u>					
			, ,	,	1 1 1	1		
3. Additional Descriptions for Materials Listed Above (inc	dicata wanto atra	om Annoved # baland	14 85		ng Procedure:	n fou litter		Abaya
CLITA COAS OF THE WATER THE PACIFIC ROLL OF		an Approval # Delow)	14, Sp	ciai manuii	ng Procedure:	S IOF Wat	sies Listeu	Annye
. CL	00.1100a * +41 Your 70c*							
. CL								
. CL		· .						
5. Special Handling Instructions and Additional In	formation					SKE	Use Onl	У
Emergency Contact:						Load	d#	
8. GENERATOR'S CERTIFICATION: I hereby de	alara that the			6.411				
proper shipping name and are classified, packet	ciare mai me ed. marked. a	e contents of this c and labeled, and a	onsignme e in all re:	ent are tuil spects in i	y and accura proper cond	ately de ition for	scribed a transpor	bove by t hv highway
	nal governme	ent regulations.	-, •				шшири	, g,
according to applicable international and nation	3 - 1 - 1 - 1 - 1	. •					N.A	h Day Y
according to applicable international and nation		Signature	<u> المحمود م</u> المحمود المحمود ال	17			Mont	h Day Ye
according to applicable international and nation Printed/Typed Name		Signature	a jar	12	A CONTRACT OF THE PROPERTY OF			- 1 / + 7 / /
Printed/Typed Name		Signature	T.	12	- Allendary of			<u> </u>
according to applicable international and nation Printed/Typed Name COSTA SOCIAL 7. Transporter 1 Acknowledged of Receipt of Material		The second secon	Comment of the second	17. 5	The state of the s		1 ^d	h De 2
Printed/Typed Name		Signature Signature		17. 5.	The state of the s		Mont	h Day) Y
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Company of the Printed/Typed Name Printed/Typed Name	erials	The second secon			The state of the s		1 ^d	h Da() Y
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials (Typed Name) Printed/Typed Name Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I	erials	Signature	Access of the second	12 2	The second secon		Mont	
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Company of the Printed/Typed Name Printed/Typed Name	erials	The second secon			The state of the s		1 ^d	
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Acknowledged of Receipt of Material Acknowledgement of Receipt of I Printed/Typed Name	erials	Signature		<u> </u>			Mont	
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	erials	Signature		<u> </u>	- Commence of the commence of		Mont	
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	erials	Signature		12 52			Mont	
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials (Acknowledged of Receipt of Materials) 8. Transporter 2 Acknowledgement of Receipt of I	erials	Signature		<u> </u>	The same of the sa		Mont	
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	erials	Signature	Control of the second s	12 22			Mont	
Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Acknowledged of Receipt of Material Acknowledgement of Receipt of I Printed/Typed Name Discrepancy Indication Space	erials Materials	Signature		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			Mont Mont	h Day Ye
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Acknowledged of Receipt of Material Acknowledgement of Receipt of I Printed/Typed Name	erials Materials	Signature	covered	by this Ma	anifest exce	pt as no	Mont Mont	h Day Y





Shipping Manifest	1. Generator's US EPA ID No	o. (if any)	1. Page	e 1 of page(s)
Generator's Name and Facility Address SUPERION WATER LIGHT A FOWER BILL AVE. & SPEEDING AND BURER Generator's Phone 15-333-3101				GET & POWER CO NOP., WI 34880
. Transporter 1 Company Name		Phone:		
. Transporter 2 Company Name				
Designated Facility Name and Site Address	SKB/Shamrock Env 761 MN Highway 4 Cloquet, MN 55720	5	LC Phone: 218-8	278-0112
L. U.S. DOT Description (including Proper Shippin		9. Containers No. Type	10. Total Quantity	11. 12. Unit Waste Profile Wt/Vol Sheet#
· Wil Harankos Industrial Wiske (OIL IMPAC IN SOLADEBRIS)				
3. Additional Descriptions for Materials Listed Above (in L. CL) 15-0049 OIL BAPACTED SOIL (C. CL) . CL		14. Special Handl	ing Procedures for Wa	stes Listed Adove
 Special Handling Instructions and Additional In Emergency Contact: 	formation			3 Use Only d #
GENERATOR'S CERTIFICATION: 1 hereby de proper shipping name and are classified, pack according to applicable international and natio	ed, marked, and labeled, and a	consignment are ful tre in all respects in	ly and accurately de proper condition for	escribed above by r transport by highway
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials (1997)	Signature			Month Day Y
Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of	Signature		and a second	Month Day Y
Printed/Typed Name	Signature			Month Day Y
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of rec	ceipt of non-hazardous materia	ls covered by this M	lanifest except as n	oted in item 19.
Printed/Typed Name	Signature	 		Month Day Y





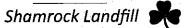
Shipping Manifest	1. Generate	or's US EPA ID No). (if any)	1		1	. Pag	e 1 of	pag	e(s)
Generator's Name and Facility Address			<u> </u>	 Mailing A	ddress					
MATERICA WATEL LISHT & FOWER	KIND MEMA	Du Mubat.	•	MP	RICE				POWER (30)
MILLAVE & STEVEN AVE DUPPE	10E, WI 548	40			HILL A	/ II. S		rior, t	MESSAS IM	
. Generator's Phone(১৯-৩৩৯-১৮) . Transporter 1 Company Name				Fax:						
Transportor Toompany Hame										
alteration of	:		······································	Phone:						
Transporter 2 Company Name	•									
Designated Facility Name and Site Address		· · · · · · · · · · · · · · · · · · ·		Phone:						
Designated Facility Name and Site Address		namrock Env		ental, L	LC					
		I Highway 4:	5	•						
		, MN 55720			Phor	ne: 2	18-8	378-01	12	
U.S. DOT Description (including Proper Shippi	ng name)		9. Co	ontainers		10.		11.	12	
			No.	Туре		otal antity		Unit Wt/Vol	Waste F Shee	
Non Hazardone Industrial Waske				1						
CALHAPACTED SOLDDEBRIS)				1						
				<u> </u>						
							-			
			1 1		, ,	ı				
	•									
							-			
			111	1.1						
4										
. Additional Descriptions for Materials Listed Above (i		m Approval # below)	14. S	pecial Hand	dling Proce	dures f	or Was	stes Listed	Above	
CL 19-0049 OIL IMPACTED SOLES	LWB KIB									
CL	÷			** .						
CL	<u>.</u>		-							
i. Special Handling Instructions and Additional I	nformation						SKB	Use Onl	iy	
Emergency Contact:				-			Load	#		
							1			
GENERATOR'S CERTIFICATION: I hereby d	eclare that the	contents of this c	onsignn	nent are fu	illy and ac	curat	ely de	scribed a	above by	
proper shipping name and are classified, pack	ked, marked, ar	nd läbeled, and ar	e in all r	espects in	proper c	onditi	on for	transpor	t by highway	/
	aren Anacı ili ilel	it regulations.			- 2					
according to applicable international and nation								Mont	h Day	Ye
according to applicable international and nation		Signature	4	g to good	Complete Service	£		· · · · · · · · · · · · · · · · · · ·		1 77
according to applicable international and national and national and national architecture and printed/Typed Name Transporter 1 Acknowledged of Receipt of Markovitational and national architecture and national architecture.		Signature	4.	17	(Au	3				\perp
according to applicable international and national and national and national architecture and printed/Typed Name Transporter 1 Acknowledged of Receipt of Marketine and national architectures are according to applicable international and national architecture.			C.	17	C. Ass.	3				
Printed/Typed Name Pransporter 1 Acknowledged of Receipt of Ma		Signature Signature		22	C. Ass.			Mont		
according to applicable international and national architectors are printed/Typed Name Transporter 1 Acknowledged of Receipt of Market Printed/Typed Name	aterials			27	C. Ass.	3		Mont		
according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to a possible international according to a possible int	aterials			<u> </u>	(3		Mont	h Day	Ye
according to applicable international and national and na	aterials	Signature		177 27	1 Ass.	3		//	h Day	Ye
according to applicable international and national and na	aterials	Signature)//)/)	1 Ass.	3		//	h Day	Ye
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name 9. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	aterials	Signature		<u> </u>	- A	3		//	h Day	Ye
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name 9. Transporter 2 Acknowledgement of Receipt	aterials	Signature			- Ass.			//	h Day	Ye
according to applicable international and national and na	aterials	Signature		177 27	- A			//	h Day	Ye
according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to a printed/Typed Name Printed/Typed Name Printed/Typed Name	aterials	Signature			- An.	3		//	h Day	Ye
according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international according to applicable international according to applicable international according to applicable international according to a construction according	aterials If Materials	Signature Signature	a covere	d by this N	Manifest e	xcept	as no	Mont	h Day	Ye



Non Hazardous Industrial Waste

Shipping Manifest	1. Generator's US EPA ID N	o. (if any)			1. Page 1 of	page(s)
Generator's Name and Facility Address SUPERIOR WATER LIGHT & POWER HILLAYE & STINSON AVE SUPERIOR						EPOWER (SO)
. Generator's Phone: 18-353-3191	they was interested	Fa		ulio Avus, i	umeriuk,	AAY 19 4/44/11
Transporter 1 Company Name						
. Transporter 2 Company Name		Ph	one:			
, manager at a company manager		Ph	one:			
Designated Facility Name and Site Address	SKB/Shamrock Env		tal, L	LC		
	761 MN Highway 4		•	D1	N10 070 01	110
. U.S. DOT Description (including Proper Shipping	Cloquet, MN 55720	9. Conta	inore	Phone: 2	218-878-01	12.
. 0.0. Do Description (moldaing) Topal Shipping	у пашеу	1	Туре	Total Quantity	11. Unit Wt/Vol	Waste Profile Sheet#
Mon Herordous Industrial Wester (OIL IMPACTED SOIL/DEERIS)						
			:			
•						
				.		·
3. Additional Descriptions for Materials Listed Above (inc. CL-1,19-(049 OIL TAPACTED SOIL/D) CL CL CL CL		14. Opec	ац палу	lling Procedures	TOT VVISICS LISTE	AL ALLOYO
Special Handling Instructions and Additional Inf Emergency Contact:	ormation				SKB Use O	nly
er en en en en en en en en en en en en en						
 GENERATOR'S CERTIFICATION: 1 hereby dec proper shipping name and are classified, packe according to applicable international and nation 	d, marked, and labeled, and a					
Printed/Typed Name	Signature		12	, etc.	Мо	nth Day Ye
7. Transporter 1 Acknowledged of Receipt of Mate	erials	il day and the second		New of		1 1 1 1 1 1 1 1
Printed/Typed Name	Signature	And for	Parker Strategy	and a contract and the second recognitions	Mo	nth Day Ye
8. Transporter 2 Acknowledgement of Receipt of N					ė*	<i>₹</i>
Printed/Typed Name	Signature				Mo	nth Day Y∈ 〕 i I
9. Discrepancy Indication Space	· · · · · · · · · · · · · · · · · · ·					
				4		
						
0. Facility Owner or Operator: Certification of rece	eipt of non-hazardous materia	s covered b	y this N	Manifest excep	ot as noted in i	tem 19.





Shipping Manifest	1. Generato	r's US EPA ID No.	(if any)			1. Pag	ge 1 of	pag	e(s)
3. Generator's Name and Facility Address SUPERIOR WATER LIGHT & POWER DILL AVE & STIMSEN AVE SUBERF								: POWER (ML 34690	30
5. Transporter 1 Company Name		: '						***************************************	
5. Transporter 2 Company Name				Phone:					
7. Designated Facility Name and Site Address	SKB/Sh	namrock Envi		hone: ntal, LL	C				
		l Highway 45 s, MN 55720	-		Phone:	218-	878-01	12	
3. U.S. DOT Description (including Proper Shippin	ng name)		9. Cor No.	tainers Type	10. Total Quanti		11. Unit Wt/Vol	12 Waste F Shee	rofile
* Non Harmolous Industrial Weste (OIL: IMPACTED SOIL/DEBRIS)	:								
			·			h <u></u>			
3. Additional Descriptions for Materials Listed Above (i - CL _{CL 19} -0049 OR. IMPACTED) SOILA - CL - CL		m Approval # below)	14. Sp	ecial Handli	ng Procedure	es for W	astes Liste	d Above	
Special Handling Instructions and Additional In Emergency Contact:	nformation			<u> </u>			B Use Or ad #	nly	
6. GENERATOR'S CERTIFICATION: I hereby d proper shipping name and are classified, pack according to applicable international and nation	ked, marked, ar	nd labeled, and ar	onsignm e in all re	ent are full espects in	y and accur proper cond	rately o	lescribed or transpo	above by ort by highwa	У
Printed/Typed Name		Signature	· Japanese ·	port of the love of	A Commission of the Commission	esp.	Mor	nth/ Day	/ /Ye
7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of		Signature	y Marie	Borney	1 stylin		Mor / /	oth Day	Ye
Printed/Typed Name		Signature					Mor	nth Day	Ye
9. Discrepancy Indication Space									21
20. Facility Owner or Operator: Certification of re	ceipt of non-ha	zardous materials	covered	by this M	lanifest exc	ept as	noted in it	em 19.	
Printed/Typed Name	· · · · · · · · · · · · · · · · · · ·	Signature					Mor	nth Day	Ye



Non Hazardous Industrial Waste

Shipping Manifest	1. Generat	or's US EPA ID N	o. <i>(if ar</i>	i <i>y)</i>]		1. Pa	ge 1 of	page(s)
3. Generator's Name and Facility Address SUPERIOR WATER LIGHT & POWER HELL AVE. & STRISEN AVE. BUVER						MOR:			DIFT &	POWER CO
4. Generator's Phone®(&-355-332)	- committee of the second of t			F	ая (а т.: • ax:	ತಂದರುವರು ಕ ^{್ಕ}	er sin n	4 "K & 11	mana Salahang Wi	2 A
5. Transporter 1 Company Name									•	
6. Transporter 2 Company Name	· · ·			F	Phone:					
or manapartor 2 dompany manie				F	hone:				•	
7. Designated Facility Name and Site Address	SKB/S	hamrock En	/irom			LC				
	761 M	N Highway 4	5							
		t, MN 55720				Pho	ne: 2	218-	878-011	.2
8. U.S. DOT Description (including Proper Shipping)	ng name)		9.	Con	tainers		10. Total		11. Unit	12. Waste Profile
· · · · · · · · · · · · · · · · · · ·			No		Туре		uantity	'	Wt/Vol	Sheet#
a. Non Hazardous industrial Waste (CIL IMPACTED SOULDEDENS)			!							
6.										
	•									
G. · ·				1						
		* ************************************								
d		· · ·		L.					+ +	
								1		
13. Additional Descriptions for Materials Listed Above (In		· · · · · · · · · · · · · · · · · · ·		Й					astes Listed	
a. CLUI 19-0049 OIL MAI CUED SOILA b. CL c. CL		аш хррочаг # овочу	17.	Оре	sciai (Tai)u	nig Fioc	edules	IOI VV	asies Listeu	ADOVE
 d. CL 15. Special Handling Instructions and Additional Ir Emergency Contact: 	nformation								B Use Onl	у
		•								
16. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, pack according to applicable international and natio	ed, marked, a	and labeled, and a ent regulations.								
Printed/Typed Name		Signature	مریز میده. مریز میده	and the same	, · • • • • • • • • • • • • • • • • • •	1	2		Mont	h Day `
17. Transporter 1' Acknowledged of Receipt of Ma	terials	-	STEEL SERVICE STREET	res.F	e ^r		·/	E francisco p	1 / 1/	
Printed/Typed Name		Signature	the contract	<i>y</i>	ple.	id de			Mont	h Day \
18. Transporter 2 Acknowledgement of Receipt of	Materials				,					
Printed/Typed Name		Signature							Mont I	h Day `
19. Discrepancy Indication Space									1 1	
	•									
			•	-						
20. Facility Owner or Operator: Certification of rec	eipt of non-h	azardous materia	ls cove	red	by this M	//////////////////////////////////////	excer	nt as i	noted in ite	m 19.
· · · · · · · · · · · · · · · · · · ·	o.p. o. non-n	Signature	.5 5046					. 40 1		
Printed/Typed Name		Signature							Mont	h Day `



Non Hazardous Industrial Waste

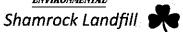
Shipping Manifest	1. General	tor's US EPA ID N	o. (if any)				1. Pa	ge 1 of	page(s)
Generator's Name and Facility Address				Mailing A	ddr	229	l	<u>-</u>		•
SUPERIOR WATER LIGHT & FOWE	R CO NEM	ADR SUBIT.		_			TAN	im I	ACHIY A	NOWER CO
HULLAVE & STAGEN AVE SUFER	108, WI 54	(44)								W. 34660
Generator's Phone \$15-355-3191	•		,	Fax:						
Transporter 1 Company Name										
A) EXPRESS NI	36		4	Phone:						
Transporter 2 Company Name										
	i			Phone:						
Designated Facility Name and Site Address	SKB/S	hamrock Env	ironn	ental. I	L	<u> </u>				
		N Highway 4		,						
		et, MN 55720				Pho	ne: 2	18-	878-01	12
U.S. DOT Description (including Proper Shipp	 _	7, 1411 (33 / 20		ontainers	-		10.		11.	12,
o.o. Do a Docomption (moldaling i Topal Chilpp	ing namo,		-	Ĺ		7	lotal		Unit	Waste Profile
			No.	Type	_	QL	antity		Wt/Vol	Sheet#
· Men Herardone behaki di Weste			1, ,	1			1	1		
(OII, IMPACTED BOIL/DÉBRIS)		-								
•					+	<u> </u>			+	
				1		1 1	1	, .		
			 		+					
			111			1 1	1	}		
	· 									
		•								
N A 1891		· · ·			<u> </u>	Ť		- 111		
3. Additional Descriptions for Materials Listed Above CLCL194049 OIL BARACTED SOIL		am Approval # below)	14. 3	speciai Han	aling	Proce	eaures	tor vva	astes Listed	ADOVE
.CL	Authorized Rithland									
CL - A-										
. CL 5. Special Handling Instructions and Additional	Information									
Emergency Contact:	mornation							1	B Use On	ly
								LO	ad#	
	•									
6. GENERATOR'S CERTIFICATION: I hereby of										
proper shipping name and are classified, pac according to applicable international and nati	kea, markea, a onal governme	and labeled, and a ent regulations.	re in all	respects	n pr	oper o	conait	юп то	r transpor	t by nighway
		Signature	i subsider .		j.					
Printed/Typed Name		Signature	Si .	Sandy Sandy Sandy Sandy	متر ۱۰۰۰	العدوم المستوان المستوان الدي والمستوان المستوان			Mont	h Day Y
7. Transporter 1 Acknowledged of Receipt of M	aterials				Ć,	Carlo Carlo De La Carlo Carlo Carlo Carlo Carlo Carlo Carlo Carlo Carlo Carlo Carlo Carlo Carlo Carlo Carlo Car				
Printed/Typed Name		Signature	7-1	17 1 m	and the second				Mont	h Day Y
UNDIO LESNIY			Cole		V-17 1 1/2	3				
3. Transporter 2 Acknowledgement of Receipt of	f Materials	भी वि		A market						
Printed/Typed Name		Signature					-		Mont	h Day Y
D. Discrepancy Indication Space										
		<u></u> ·	•							
. Facility Owner or Operator: Certification of re	eceipt of non-h	azardous materia	s covere	ed by this	Mar	nifest	excep	t as r	noted in ite	m 19.
Printed/Typed Name		Signature							Mont	h Day Y
- · · · · · · · · · · · · · · · · · · ·										



Non Hazardous Industrial Waste

Shipping Manifest	1. Generate	or's US EPA ID No.	(if any)		· [1	I. Page 1 of	page(s)
•			L.				
3. Generator's Name and Facility Address SUPERIOR WATER LIGHT & FOWER HILL AVE A STINSIE AVE SUPERI				認為新用	eich Mai	ER LIGHT :	WE SEESO
4. Generator's Phone (19-355-3101			<u>F</u>	ax:	 		
5. Transporter 1 Company Name							
			F	hone:			
6. Transporter 2 Company Name							-
			F	hone:			
7. Designated Facility Name and Site Address		hamrock Envi N Highway 45		ntal, LI	LC .		-
	Cloque	t, MN 55720			Phone: 2	18-878-01	12
8. U.S. DOT Description (including Proper Shippi			9. Con	tainers	10.	11.	12.
	,				Total	Unit	Waste Profile
			No.	Туре	Quantity	Wt/Vol	Sheet#
a. Non Hezardous ladustrial Waste (OIL HAPACTED SOIL/DEBETS)		· .					
b.					:		
					1 1 1		
•							
С.	 .		·	<u> </u>			
			1 1		F 1 1		
d.							· · · · · · · · · · · · · · · · · · ·
			1 1		1 1 1		
		•					
13. Additional Descriptions for Materials Listed Above (14 65	onial Handli	ing Propodures	for Wastes Liste	d Abovo
a. Clc. 19-0049 OIL IMPACTED SOILA		ani Approvai # below)	14. 3p	eciai manuii	ing Flocedules	IOF VVasies Liste	d Above
b. CL	antitude statem.						
c. CL							
d. CL							
15. Special Handling Instructions and Additional I	nformation [:]				٠	SKB Use O	nly
Emergency Contact:						Load #	
	·						.
16. GENERATOR'S CERTIFICATION: I hereby d proper shipping name and are classified, pack according to applicable international and nation	ked, marked, a	nd labeled, and are					
Printed/Typed Name	· ·	Signature	a a sa a co	-)	Moi	nth Day Yea
LUKHA MANNE		1 2 12	· Parker	parade in products.	Villa francisco	2	7177717
17. Transporter 1 Acknowledged of Receipt of Ma	iterials				entiert.		, , , , ,
Printed/Typed Name	+ +	Signature				Mo	nth Day Yea
Jake Enders		1000	na na majaran katalan na majaran katalan	ia-		/	
18. Transporter 2 Acknowledgement of Receipt of	Materials	A STATE OF THE PARTY OF THE PAR	wr a			1	
Printed/Typed Name		Signature				Ma	nth Day Vaid
Timed Typed Name		Olgitatule				Moi	nth Day Yea
19. Discrepancy Indication Space		<u> </u>					
A Share (A) Contragues, whenever		•				•	
				. •			
			•				
20. Facility Owner or Operator: Certification of re-	ceipt of non-ha	azardous materials	covered	by this M	anifest excep	t as noted in i	tem 19.
		· · · · · · · · · · · · · · · · · · ·		_,			
Printed/Typed Name		Signature				Mo:	nth Day Yea
i e		1					





69661

Jok Zarrayini Jo	was to kind the part of		•					
Shipping Manifest	1. Generato	or's US EPA ID No.	(if any)		1. Pag	e 1 of	page(s	š)
Generator's Name and Facility Address JUTERNE WATER LIEBT & FOW! HHE AVE & STINSEM AVE, SUFFE	IE CO MERIA ROL, WI SAG	Lui BUBST. 60	ĵ\		oress ECOR WATEP LI TLL AVE. SUEE			ją.
Generator's Phone 218-253-3184			F	ax:				
Transporter 1 Company Name								
			F	hone:				
Transporter 2 Company Name			F	hone:				
Designated Facility Name and Site Address	761 M	hamrock Envi N Highway 45 t, MN 55720		ntal, LI	C Phone: 218-8	378-01	12	
. U.S. DOT Description (including Proper Ship			9 Cor	tainers	10.	11.	12.	
. O.S. DOT Description (including Proper Ship	ping name)		No.	Type	Total Quantity	Unit Wt/Vol	Waste Pro Sheet#	
Mon Harandone Industrial Wasts (OH, IMPACTED SOIL/ORBRIS)								
				1				
			i l					
·				ii		<u> </u>		
LCL_T_19-0049 OIL_IMPACTED SOIL CL CL CL CL S. Special Handling Instructions and Additiona					SKI	3 Use On	ıly	
Emergency Contact:					Loa	d#		
 GENERATOR'S CERTIFICATION: I hereby proper shipping name and are classified, pa according to applicable international and na 	cked, marked, a	and labeled, and ar	onsignme e in all re	ent are ful spects in	ly and accurately de proper condition fo	scribed a r transpor	above by t by highway	
Printed/Typed Name	· · · · · · · · · · · · · · · · · · ·	Signature		ar and a second	La marina de la companya della compa	Mont	th Day	Y (
7. Transporter 1 Acknowledged of Receipt of I	viaterials	and the second	10	<i>3</i>	Ga Ti			
Printed/Typed Name	·	Signature		<u>. </u>	<u> </u>	Mont	th Day	Y
8. Transporter 2 Acknowledgement of Receipt	of Materials	Cianatura		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·		ub. D:	
Printed/Typed Name		Signature				Mont	th Day	Y
9. Discrepancy Indication Space								
Facility Owner or Operator: Certification of	receipt of non-h	azardous materials	covered	l by this M	1anifest except as n	oted in ite	em 19.	_
Printed/Typed Name		Signature				Mon	th Day	Y

White - Return to Generator

Canary - Facility Copy



Non Hazardous Industrial Waste

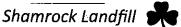
Shipping Manifest	1. Generat	or's US EPA ID No	o. (if any)			1. Page 1 of	page(s)
			<u>. L. L.</u>				
Generator's Name and Facility Address SUFERVER WATER LEGHT & FOWEX	ZWN EITHERIA	EVIC STEEDING	,	Aailing Ad		ento e reterio a	FOWIR CO
MILLAVE & STEERED AVE BUFFER	ORL WIT 549	azor escribert. Mo				me element.	
. Generator's Phone: 18-355-3191			i	- ax: Fax:	1944 1 1 2 2 3 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	ಚಲನಗಳ ಪಡೆಗಳು ಸಂಪತ್ತಕ್ಕು	A.A.4 - 10-8-80/00/2
Transporter 1 Company Name			-				
				Phone:	•		
Transporter 2 Company Name				mone.			
Transporter 2 Company Name				*		•	
Designated Frank, Name and Oil Add				Phone:		· · · · · · · · · · · · · · · · · · ·	
Designated Facility Name and Site Address		hamrock Env		ntal, L	LC		
		N Highway 4			•		
	Cloque	t, MN 55720			Phone:	218-878-01	12
U.S. DOT Description (including Proper Shippin	g name)		9. Cor	tainers	10.	11.	12,
	- •			I	Total	Unit	Waste Profile
Most Theory is are Industrial Wester			No.	Туре	Quantity	y Wt/Vol	Sheet#
e come meconocido colona apresidada sido e a citabra			l. i i				
(OILIMPACTIO SOIL/DEEKIS)							
			1				
	. *						
			<u> </u>				
				1			
		•					
			1 , ,		1 1 1		
Additional Descriptions for Materials Listed Above (in CLCL19-0019 ON, RMFACTED SOIL TO CLCL CL CL		am Approval # below)	14. 3p	eciai maric	ning Procedures	for Wastes Listed	Above
Special Handling Instructions and Additional In	formation					Torra II. o	
Emergency Contact:	IOITHALIOTT*					SKB Use On	ily
						Load #	
and the same of th							
i. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation	ed, marked, a	nd labeled, and a nt regulations.	consignme re in all re	ent are fu spects in	lly and accura proper condi	itely described a tion for transpo	above by rt by highway
Printed/Typed Name	20	Signature			$\gamma \sim 7$	Mon	
. Transporter 1 Acknowledged of Receipt of Mat			e e e e e e e e e e e e e e e e e e e	The state of the s	<u> </u>		<u> </u>
<u> </u>	eriais	· ·					•
Printed/Typed Name	and the second s	Signature	A STATE OF THE STATE OF		and the second	Mon	
Transporter 2 Acknowledgement of Receipt of	Materials	The second of th	<u> </u>	Section of	ov.	1/ 1	1191
Printed/Typed Name		Signature		•			ıь -
типеалтуреа маше		olynature				Mon	th Day `
Discrepancy Indication Space		1		·			
·							
÷							
Facility Owner or Operator: Certification of rec	eipt of non-ha	zardous material	s covered	by this N	/lanifest excep	ot as noted in ite	em 19.
Printed/Typed Name		Signature				Mon	th Day
		O.g. Ideas				IAIOLI	Day



Non Hazardous Industrial Waste

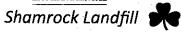
	14.0								·	
Shipping Manifest	1. Genera	tor's US EPA ID No). (if a	ny)				1. P	age 1 of	page(s)
3. Generator's Name and Facility Address			_	<u> -</u>	 Mailing A	ddros				<u> </u>
STRUCK WATER LIGHT & FOWE	IK CO INTUR	APOIT STREET						5 % G G	1 1/04/16 a	FOWER CO
EHLL AVE. & ELIHNEN AVIL BUTES	CICIE, WI SU	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\							TRIOR. \	
4. Generator's Phone 212-333-3191	· · · · · · · · · · · · · · · · · · ·				Fax:				College (College) (40) 14	CANY TO WARRY TO THE
5. Transporter 1 Company Name	7								.	-
					Phone:					
6. Transporter 2 Company Name					,	•				
					Phone:					
7. Designated Facility Name and Site Address	SKB/S	hamrock Env	iron			LC	_			<u> </u>
		N Highway 4:								
		et, MN 55720				D	hone	210	-878-01	īn
8. U.S. DOT Description (including Proper Shipp		56, 14114 55 / 20	_	000	ntainers	<u> </u>				
	ing name)		9. ·	COI	ıtainers ı		10. Tota		11. Unit	12. Waste Profile
			No).	Туре		Quan	tity	Wt/Vol	Sheet#
a. Hen Harardean Industrial Waste			١.							
(FIL IMPACTIO SOIL/DEBRES)										ı
b.		<u> </u>		J		<u>.</u>		<u> </u>		······
						İ				
).										
			ı			1	i	1 1		
				•				· · · · ·		
			1			- 1	1		.	
12 Additional Descriptions for Materials Live 4 Ab										
13. Additional Descriptions for Materials Listed Above a. CLUL 19-0039 OIL IMPACTED SOIL		am Approval # below)	14.	Sp	ecial Hand	ling Pr	ocedur	es for W	astes Listed	Above
b. CL	me wante Talens									
c. CL d. CL						-				
15. Special Handling Instructions and Additional	Information	· · · · ·								 .
Emergency Contact:	inomation							SH	B Use Onl	у
	, N							Lo	ad#	
6. GENERATOR'S CERTIFICATION: I hereby of	leclare that the	contents of this co	nsigr	nme	ent are ful	ly and	accu	rately o	described a	bove by
proper shipping name and are classified, pacl according to applicable international and nation	ked, marked, a onal governme	ind labeled, and are int regulations	e in al	re	spects in	prope	er con	dition fo	or transport	by highway
Printed/Typed Name		and the same of th	_/^_		· ·	i.e.				
/ Jane 1919		Signature	y 11"		S. S.				Month	
7. Transporter 1 Acknowledged of Receipt of Ma	aterials	1 Contraction	a propert	-	April 1 Jack	E, -, '	James and	"No age " "	1/1/	
Printed/Typed Name	10	Signature	- 45 - 12		<u> </u>					· · ·
FMV Kun Val bons	WHAT I	Jignature /	id Je	P :	Just's	Salar Salar			Month	ו Day Year
8. Transporter 2 Acknowledgement of Receipt of	f Materials		(, .*			1	-			1 1 1 1 1 1
Printed/Typed Name		Signature	_						Month	n Day Year
1.1										
9. Discrepancy Indication Space		-								
					• .					
No. of the second secon								٠		
		•								
0. Facility Owner or Operator: Certification of re-	ceipt of non-ha	zardous materials	cover	ed	by this M	anife	st exce	ept as r	noted in iter	n 19.
Printed/Typed Name		Signature		_						
Typou raino		olghature							Month I I	ı Day Year





Shipping Manifest	1. Generate	or's US EPA ID I	No. (if	any)	•			1.	Page 1 of		page(s)
· · · · · · · · · · · · · · · · · · ·				L							
J. Generator's Name and Facility Address	JOSEPH S MARKS OF	manda managa geograpi sebesah sebesah		ľ	Mailing A			:	or. Evening to		Committee of the committee of
SUFERIOF WATER LIGHT & POWER FILL AVE & STEEREN AVE, SUFERE	AMARK CEL OLO TEL AV	TYL MURRIT.									INTER CO
Generator's Phone 218-35% 3191	MR, YT MAG	\$C				III.I.	# \ .\/ {	t. 34	TPERSOR	, WI	94440
. Transporter 1 Company Name					Fax:						
, mansporter i company Name		·									
				ı	Phone:						
. Transporter 2 Company Name											
					Phone:						
. Designated Facility Name and Site Address	SKR/S1	hamrock En	wiron			IC					
				шис	111141, 1	LC					
		N Highway					.4				
		t, MN 5572	.0			P	hone	: 21	18-878-0)112	
 U.S. DOT Description (including Proper Shippin 	g name)	v	9.	Çor	ntainers		_10		11.		12.
		:		lo.	Туре		Tot Quar		Unit Wt/Vo		Waste Profile Sheet#
Fitner II romatribora and Periode Emberine I II Burden.	•		1		, y De		- Gudi	y	VVI.VC	"	Jileet#
实现是是是一个的证据的对子是不是不够,这样是这种数据的主义的。 在是 超级的现在		4	,	ı	1	,	ı	ı	,		
(CHL IMPACTED SCIE/ISBSRIE)											
			+		ļ	Н					
				1		.		1			
		<u> </u>	+			 1		1		-	
	•					١,			.		
	· · · · · · · · · · · · · · · · · · ·				. [11			L		
			Ι,			١٠,		1	,		
				j							
. Cl _{ex.} 19-0049 OIL IMPACTED SOIL <i>I</i> D . Cl . Cl . Cl	kishe dinden f										
5. Special Handling Instructions and Additional In	formation		_ļ						CVP Use	Owlea	
	·		. *						SKB Use	Offic	
									Load # _		
Emergency Contact:		4									
		4 			:						•
Emergency Contact:	ed, marked, a	nd labeled, and	s consi are in	gnme all re	ent are fu spects ir	ılly ar ı prop	nd acc	urate nditio	ly describe n for trans	ed abo	ve by highway
Emergency Contact: 5. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packet	ed, marked, a	nd labeled, and	s consi are in	gnme all re	ent are fu spects in	ılly ar	nd acc per con	urate nditio	n for trans	ed abo port by onth	/ highway
Emergency Contact: 5. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	ed, marked, a nal governme	nd labeled, and nt regulations.	s consi are in	gnme all re	ent are fu	ully ar	nd acc per co	urate	n for trans	port by	/ highway
Emergency Contact: 5. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	ed, marked, a nal governme	nd labeled, and nt regulations.	s consi are in	gnme all re	ent are fu spects in	ully ar	nd acc per co	urate	n for trans	port by	/ highway Day
Emergency Contact: 5. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	ed, marked, a nal governme	nd labeled, and nt regulations.	s consi	gnme all re	ent are fu spects in	ully ar	nd acc per co	urate	n for trans	port by	/ higȟway Day
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name	ed, marked, and government	nd labeled, and nt regulations. Signature	s consi	gnme all re	ent are fu spects in	ully ar	nd accorder con	urate	n for trans	onth	/ higȟway Day
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name	ed, marked, and government	nd labeled, and nt regulations. Signature	s consi	gnme all re	ent are fu	ully ar	nd accorder col	urate	n for trans	onth	Day)
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name	ed, marked, and government	nd labeled, and nt regulations. Signature	s consi	gnme all re	ent are fu	ully ar	nd accorder con	urate	n for trans	onth	Day Y
Emergency Contact: 5. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, and government	nd labeled, and nt regulations. Signature Signature	s consi	gnme all re	ent are fu spects ir	ully ar	nd accor co	urate	n for trans	onth	Day Y
Emergency Contact: 5. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, and government	nd labeled, and nt regulations. Signature Signature	s consi are in	gnme all re	ent are fu spects ir	ully ar	nd according	urate	n for trans	onth	Day Y
Emergency Contact: 5. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, and government	nd labeled, and nt regulations. Signature Signature	s consi	gnme all re	ent are fu spects ir	n prop	nd according to the contract of the contract o	urate	n for trans	onth	Day Y
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, and government	nd labeled, and nt regulations. Signature Signature	s consi are in	gnmall re	ent are fu	ully ar	nd accoer col	urate	n for trans	onth	Day Y
6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I	ed, marked, and government	nd labeled, and nt regulations. Signature Signature	s consi are in	gnmall re	ent are fu	ully ar	nd accoer col	urate nditio	n for trans	onth	Day Y
Emergency Contact: 5. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, and government	nd labeled, and nt regulations. Signature Signature	s consi are in	gnmeall re	ent are fu	ully ar	nd according	urate	n for trans	onth	Day Y
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name 9. Discrepancy Indication Space	ed, marked, an al government gove	nd labeled, and nt regulations. Signature Signature Signature	are in	all re	spects ir	n prop	Der Col	nditio	n for trans	onth	Day Day Day Day
Emergency Contact: 5. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, an al government gove	nd labeled, and nt regulations. Signature Signature Signature	are in	all re	spects ir	n prop	Der Col	nditio	n for trans	onth	Day Y





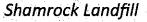
Shipping Manifest	1. Generator's	S US EPA ID No	. <i>(if any)</i>	· I	1 . 1	1. Page 1 of	page(s)
. Generator's Name and Facility Address SUFFRIOR WATER LIGHT & FOWER TILL AVE & STIMBEN AVE SUPPRIO Generator's Phone 218-335-3391	CO MEMAIN DE, WI 54880	a scest.			RFOR WAS	er light Superior	' & FOVER CO , WI M880
. Transporter 1 Company Name				Phone:			
. Transporter 2 Company Name							
Designated Facility Name and Site Address		mrock Env Highway 45	ironme	Phone: ental, L	LC		
	Cloquet, 1	MN 55720			Phone:	218-878-0)112
U.S. DOT Description (including Proper Shipping	g name)		9. Co No.	ntainers Type	10. Total Quantit	11. Unit ty Wt/Vo	
Non Hazardous Industrial Weste (OIL IMPACTED SOLLIVERSIS)		-					1
	·	. <u>.</u>			. , , ,		
3. Additional Descriptions for Materials Listed Above (inc CLT_19-0045 OIL IMPACTED SOIL.05 CL CL CL	licate weste stream A	pproval # below)	14. Sp	ecial Handl	ing Procedures	s for Wastes Lis	ted Above
 Special Handling Instructions and Additional Inf Emergency Contact; 	ormation					SKB Use (Only
GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packe according to applicable international and nation	d, marked, and I	labeled, and ar	onsignm e in all re	ent are ful espects in	ly and accura proper condi	ately describe	d above by port by highway
Printed/Typed Name	S	Signature	1	و المعمد المعمد	, M. C. C. C. C. C. C. C. C. C. C. C. C. C.	Mo	onth Day Y
7. Transporter 1 Acknowledged of Receipt of Mate							
Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of N	ļ	Signature	<u> </u>	927		/Mc	onth Day Y
Printed/Typed Name		ignature	•	<u>(m</u>			onth Day Y
D. Discrepancy Indication Space							
D. Facility Owner or Operator: Certification of rece	int of b						h 40
	ipt of non-nazar	dous materials 	covered	by this M	anitest excer	ot as noted in	item 19.



Non Hazardous Industrial Waste

Shipping Manifest	1. Generat	or's US EPA ID No	. (if any)			1. Page 1 o	f page(s)
3. Generator's Name and Facility Address	- - -			Mailing As			
SUFFRE WATER LATER & FOWER	e emant luxum and	ক্রমে প্রাক্তি একতা আগ্রম্ম লাক্ষেত্র	ı	Mailing Ac		i Shamita i di nasara ka ka	The second of th
HILLAVE & STORESH AVE DUPLE	A N. N. AVAL BASS Of NO. AVER BASS	选为任 新以出版证明。 《25					L & DOMEE CO.
	erer, vii dan	32.8°			MLL AVÆ.		à, VII laba
1. Generator's Phone 2 16 43 16 16 16 16 16 16 16 16 16 16 16 16 16				Fax:			· · · · · · · · · · · · · · · · · · ·
5. Transporter 1 Company Name							
		• * * * * * * * * * * * * * * * * * * *		DI			
3. Transporter 2 Company Name				Phone:			
. Hansporter 2 Company Name							
	•	•	1	Phone:			
7. Designated Facility Name and Site Address	CVD/CI	hamrock Envi					
				mai, L			
	761 MI	N Highway 45	5				
	Cloque	t, MN 55720			Phone:	218-878-	0112
. U.S. DOT Description (including Proper Shippin		0, 1111 (55 / 20	·	·		210-070-	
. 0.3. DOT Description (including Proper Snippir	ng name)		9. Cor	ntainers	10.	11.	
			No.	Туре	Total Quantity	Unit / Wt/V	
· Bleve Elingraminary Foundament of the mount			140.	туре	Quantity		OI SHEEL#
20-28年至1000年4月2日 141日 152 152 152 152 153 153 153 153 153 153 153 153 153 153	•		: .				
(UIL IMFACTED SOIL/DEBRIC)						11.	
			,				
				.			
		·				-	
			,				
			1 1	1	1 1 1	1	
						 -	
		'	İ				
	4					1 1	
3. Additional Descriptions for Materials Listed Above (in	ndicate waste strea	m Approval # below)	14. Spe	ecial Handli	ing Procedures	for Wastes Lis	sted Above
·CLT19-0949 OIL IMPACTED SCILAT ·CL	HBRIS -					.*	
. CL				* .		•	
•				`\$			• .
. CL							
	atormation	4.4				SKB Use	Only
5. Special Handling Instructions and Additional In	IIOIIIIalioii						·
 Special Handling Instructions and Additional In Emergency Contact: 	Hormation	:				Load #	
	HOMIAGON	:					
	nomation			,			
Emergency Contact:					· .		
Emergency Contact: 3. GENERATOR'S CERTIFICATION: hereby de	oclare that the	contents of this co	onsignme	nt are full	y and accura	tely describe	ed above by
Emergency Contact: B. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packet	eclare that the	nd labeled, and are	onsignme e in all res	ont are full spects in	y and accura proper condit	tely describe	ed above by port by highway
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation	eclare that the	nd labeled, and are	onsignme e in all res	ont are full spects in	y and accura proper condit	tely describe	ed above by port by highway
Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packet	eclare that the	nd labeled, and are	onsignme o in all res	ont are full spects in	y and accura proper condit	tely describe	port by highway
Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	eclare that the	nd labeled, and are nt regulations.	onsignme e in all res	ont are full spects in p	y and accura proper condit	tely describe	ed above by port by highway
Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	eclare that the ed, marked, ar nal governmer	nd labeled, and are nt regulations.	onsignme e in all res	ont are full spects in p	y and accura proper condit	tely describe	port by highway
Emergency Contact: D. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mat	eclare that the ed, marked, ar nal governmer	nd labeled, and are tregulations.	onsignme e in all res	ont are full spects in p	y and accura proper condit	tely describe	port by highway
Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name	eclare that the ed, marked, ar nal governmer	nd labeled, and are nt regulations.	onsignme e in all res	ont are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway Ionth Day Y
Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mat	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are tregulations.	onsignme e in all res	ont are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway
Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mat	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are tregulations.	onsignme e in all rec	ont are full spects in	y and accura proper condit	tely describe ion for trans M	port by highway Ionth Day Y
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 1. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 2. Transporter 2 Acknowledgement of Receipt o	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are not regulations. Signature Signature	onsignme e in all res	ont are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway onth Day Y / / / / onth Day/ Y
Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mat	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are tregulations.	onsignme e in all res	ont are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway Ionth Day Y
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are not regulations. Signature Signature	onsignme e in all res	ont are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway onth Day Y // / / / / / / onth Day/ Y
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are not regulations. Signature Signature	onsignme e in all res	ent are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway onth Day Y // / / / / / / onth Day/ Y
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are not regulations. Signature Signature	onsignme e in all re	ent are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway onth Day Y // / / / / / / onth Day/ Y
Emergency Contact: 3. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 9. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are not regulations. Signature Signature	onsignme e in all rec	ent are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway onth Day Y // / / / / / / onth Day/ Y
Emergency Contact: 3. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 9. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are not regulations. Signature Signature	onsignme e in all rec	ent are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway onth Day Y // / / / / / / onth Day/ Y
Emergency Contact: 3. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt o	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are not regulations. Signature Signature	onsignme e in all res	ent are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway onth Day Y // / / / / / / onth Day/ Y
Emergency Contact: 3. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 9. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are not regulations. Signature Signature	onsignme e in all res	ont are full spects in	y and accura proper condit	tely describe ion for trans M	port by highway onth Day Y // / / / / / / onth Day/ Y
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Printed/Typed Name Discrepancy Indication Space	eclare that the ed, marked, ar nal governmer rerials	nd labeled, and are tregulations. Signature Signature Signature	e in all res	spects in	proper condit	tely describe ion for trans	port by highway onth Day Y onth Day Y onth Day Y
Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Printed/Typed Name Discrepancy Indication Space	eclare that the ed, marked, ar nal governmer rerials	nd labeled, and are tregulations. Signature Signature Signature	e in all res	spects in	proper condit	tely describe ion for trans	port by highway onth Day Y onth Day Y onth Day Y
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, ar nal governmer rerials	nd labeled, and are tregulations. Signature Signature Signature	e in all res	spects in	proper condit	tely describe ion for trans	port by highway onth Day Y onth Day Y onth Day Y





Shamrock Landfill Non Hazardous Industrial Waste

Shipping Manifest	1. Generate	or's US EPA ID No.	. (if any)			1. Page 1 of	page(s)
3. Generator's Name and Facility Address SUPERIOR WATER LIGHT & POWER	CHO PSPINGA	ION STREET	<u> </u>	 //ailing Ad ਉਹਾਂਦਾ		ER LIGHT A	EOWER CO
HILL AVE. & STINSEN AVE. SUPPOSIC 4. Generator's Phone 219-333-3191			F			ULTERNOR,	
5. Transporter 1 Company Name				an.			
6. Transporter 2 Company Name				Phone:	*		
			F	Phone:			
7. Designated Facility Name and Site Address	SKB/SI	hamrock Envi	ronme	ntal, L	LC		
	761 Mî	N Highway 45	;	7			
		t, MN 55720	* .	, a	Phone: 2	218-878-01	12
3. U.S. DOT Description (including Proper Shipping		,	9. Con	ntainers	10.	11.	12.
1. A.A	g,			ı . İ	Total	Unit	Waste Profile
			No.	Type	Quantity	Wt/Vol	Sheet#
Mon Hazardene Industriai Waste				٠,	1 1 1		
(OIL IMPACTED SOIL/DEBRIS)							
			-				
		4.5		i -		1	
			<u> </u>			1	
			1 1 .		1 1 1		
CLCL19-0049 OIL IMPACTED SOIL/D CL CL .CL	BAD KARI					÷	
5. Special Handling Instructions and Additional Inf	formation					SKB Use O	nly
	•			·		Load #	
Emergency Contact:							
Emergency Contact:							
	ed, marked, a	nd labeled, and are					
GENERATOR'S CERTIFICATION: I hereby deproper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	ed, marked, a	nd labeled, and are					ort by highway
B. GENERATOR'S CERTIFICATION: I hereby deproper shipping name and are classified, packed according to applicable international and nation Printed/Typed Name	ed, marked, a nal governme	nd labeled, and an nt regulations.				ion for transpo	ort by highway
6. GENERATOR'S CERTIFICATION: I hereby deproper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials.	ed, marked, a nal governme	nd labeled, and and and regulations. Signature				ion for transpo	ort by highway
8. GENERATOR'S CERTIFICATION: I hereby deproper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials (Printed/Typed Name)	ed, marked, and government	nd labeled, and an nt regulations.				ion for transpo	ort by highway nth Day Y
B. GENERATOR'S CERTIFICATION: I hereby deeproper shipping name and are classified, packed according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I	ed, marked, and government	nd labeled, and and regulations. Signature Signature				ion for transpo	ort by highway
8. GENERATOR'S CERTIFICATION: I hereby deproper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials (Printed/Typed Name)	ed, marked, and government	nd labeled, and and and regulations. Signature				ion for transpo	ort by highway orth Day Y orth Day Y
B. GENERATOR'S CERTIFICATION: I hereby dee proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name B. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, and government	nd labeled, and and regulations. Signature Signature				Mor	ort by highway orth Day Y orth Day Y
B. GENERATOR'S CERTIFICATION: I hereby dee proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name B. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, and government	nd labeled, and and regulations. Signature Signature				Mor	ort by highway orth Day Y orth Day Y
8. GENERATOR'S CERTIFICATION: I hereby deeproper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I	ed, marked, and government	nd labeled, and and regulations. Signature Signature				Mor	ort by highway orth Day Y orth Day Y
8. GENERATOR'S CERTIFICATION: I hereby deeproper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, and government	nd labeled, and and regulations. Signature Signature				Mor	ort by highway orth Day Y orth Day Y
B. GENERATOR'S CERTIFICATION: I hereby dee proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name B. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, and government	nd labeled, and and regulations. Signature Signature				Mor	ort by highway orth Day Y orth Day Y
5. GENERATOR'S CERTIFICATION: I hereby dee proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, a nal governme erials Materials	nd labeled, and an arnt regulations. Signature Signature Signature	e in all re	spects in	proper condit	Mor Mor	ort by highway orth Day Y orth Day Y orth Day Y



Non Hazardous Industrial Waste

Shipping Manifest	1. Generato	or's US EPA ID No.	(if any)		1	. Page 1 of	page(s)
I. Generator's Name and Facility Address	1:			lailing Ad	Idrees		
	ምክርስ ኤምሃ ያው ቀ <i>ች</i> ነ	2 7公開第一個原介主義与共和的	10	-		en energeen o	POWER CO
SUPERIOR WATER LIGHT & POWER HILLAVE, & STRISEN AVE. SUPERIO					III VAN 3		
Generator's Phone 218-355-3191	ವಾಮ್ಯ ಅದರಿ ಮಾಡುವಾದ	4. 4.	F	್ಷಪತ್ರವಾಣ ax:	ALIVANY IL O	ormanasti i	(V) (24 00 N)
Transporter 1 Company Name			<u>.</u>				
Hanoportor Company Ramo				•			
	·		P	hone:			
Transporter 2 Company Name			-	hone:	•		
Designated Facility Name and Site Address	SKB/Sl	namrock Envi			LC		
	761 MN	N Highway 45					
		t, MN 55720			Phone: 2	18-878-01	12
		i, IVIIN 33720					
U.S. DOT Description (including Proper Shippin	ng name)		9. Con	tainers	10. Total	11. Unit	12. Waste Profile
	1000	-	No.	Туре	Quantity	Wt/Vol	Sheet#
Non Hazardous Industrial Waste		·		-7:			
(OILIMPACTED SOULDEBRIS)							
						ĺ	
도본분기 활성 이 등 이 기가 하는 것이다.							
		÷					
新兴种岛的自由, 1985年			_	·			
Mark the second of the second							
						1	
			, ,	,	1 1 1	, [
			44 0				4 8 5
3. Additional Descriptions for Materials Listed Above (in		Im Approval # below)	14. Spt	ciai mario	ling Procedures t	or wastes lister	1 ADOVE
CL19-0049 OIL IMPACTED SOIL/D	mid KIB						
	•						
CL				-			
, CL							
CL,	nformation					SKB Hea Or	also
CL 5. Special Handling Instructions and Additional In	nformation	<u> </u>				SKB Use Or	nly
	nformation					SKB Use Or	nly
CL 5. Special Handling Instructions and Additional In	nformation		e e			1	nly
CL i. Special Handling Instructions and Additional In Emergency Contact:						Load #	
CL S. Special Handling Instructions and Additional In Emergency Contact: 3. GENERATOR'S CERTIFICATION: I hereby de	eclare that the	contents of this co	onsignme	ent are fu	lly and accurat	Load #	above by
CL S. Special Handling Instructions and Additional In Emergency Contact: 3. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packet	eclare that the	nd labeled, and are	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	Load #	above by
CL i. Special Handling Instructions and Additional In Emergency Contact: i. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation	eclare that the	nd labeled, and are nt regulations.	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	Load #	above by
CL S. Special Handling Instructions and Additional In Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packet	eclare that the	nd labeled, and are	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	Load #ely described on for transpo	above by rt by highway
CL Special Handling Instructions and Additional In Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	eclare that the ed, marked, a nal governme	nd labeled, and are nt regulations.	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	Load #ely described on for transpo	above by rt by highway
CL 5. Special Handling Instructions and Additional In Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	eclare that the ed, marked, a nal governme	nd labeled, and are nt regulations.	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	Load #ely described on for transpo	above by rt by highway
CL 5. Special Handling Instructions and Additional In Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Contact	eclare that the ed, marked, a nal governme	nd labeled, and are nt regulations. Signature	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	ely described on for transpo	above by rt by highway hth Day Y
CL 5. Special Handling Instructions and Additional In Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name	eclare that the ed, marked, a nal governme	nd labeled, and are nt regulations.	onsignme e in all re	ent are fu	lly and accurat proper conditi	Load #ely described on for transpo	above by rt by highway rth Day Y
CL 5. Special Handling Instructions and Additional In Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Matter Printed/Typed Name	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature	onsignme e in all re	ent are fu	lly and accurat proper conditi	ely described on for transpo	above by rt by highway th Day Y
CL 5. Special Handling Instructions and Additional In Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mat Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature Signature	onsignme e in all re	ent are fu	lly and accurat proper conditi	ely described on for transpo Mon	above by rt by highway th Day Y
CL 5. Special Handling Instructions and Additional In Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Matter Printed/Typed Name	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature	onsignme e in all re	ent are fu	lly and accurat proper conditi	ely described on for transpo	above by rt by highway ith Day Y
CL Special Handling Instructions and Additional In Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature Signature	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	ely described on for transpo Mon	above by rt by highway th Day Y
CL Special Handling Instructions and Additional In Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature Signature	onsignme e in all re	ent are fu	lly and accurat proper conditi	ely described on for transpo Mon	above by rt by highway th Day Y
CL Special Handling Instructions and Additional In Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature Signature	onsignme e in all re	ent are fu	lly and accurat proper conditi	ely described on for transpo Mon	above by rt by highway th Day Y
CL 5. Special Handling Instructions and Additional In Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature Signature	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	ely described on for transpo Mon	above by rt by highway th Day Y
5. Special Handling Instructions and Additional In Emergency Contact: 3. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mat Printed/Typed Name	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature Signature	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	ely described on for transpo Mon	above by rt by highway th Day Y
CL 5. Special Handling Instructions and Additional In Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature Signature	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	ely described on for transpo Mon	above by rt by highway th Day Y
CL Special Handling Instructions and Additional In Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature Signature	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	ely described on for transpo Mon	above by rt by highway ith Day Y
CL Special Handling Instructions and Additional In Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Matter Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Printed/Typed Name Discrepancy Indication Space	eclare that the ed, marked, a nal governme terials Materials	nd labeled, and are nt regulations. Signature Signature Signature Signature	e in all re	Servi.	proper conditi	ely described on for transpo Mor	above by rt by highway th Day Y th Day Y
CL Special Handling Instructions and Additional In Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, a nal governme terials Materials	nd labeled, and are nt regulations. Signature Signature Signature Signature	e in all re	Servi.	proper conditi	ely described on for transpo Mor	above by rt by highway ith Day Y ith Day Y ith Day Y



Non Hazardous Industrial Waste

69669

Shipping Manifest	1. Generator's US EPA ID N	o. (if any)	1.	Page 1 of	page(s)
3. Generator's Name and Facility Address STIFERIOR WATER LIGHT & POWER HILL AVE. & STINSEN AVE. SUPERI 4. Generator's Phone \$18-335-3191 5. Transporter 1 Company Name	CO NEMAINI TUBUT. OR, WI 54810		ddress IRIOF, WATH IILL AV 8, 31		
NIC #4	<u> </u>	Phone:			
6. Transporter 2 Company Name		Phone:			
7. Designated Facility Name and Site Address	SKB/Shamrock Env 761 MN Highway 4 Cloquet, MN 55720	5		8-878-011	2
8. U.S. DOT Description (including Proper Shippin	ng name)	9. Containers No. Type	10. Total Quantity	11. Unit Wt/Vol	12. Waste Profile
a. Non Hasanlous Industrial Weste (CIL IMPACTED SOIL/DEBRIS)		No. Type	Quantity	VVVVOI	Sheet#
d.					
13. Additional Descriptions for Materials Listed Above (inc. a. CLCL19-0049 OIL IMPACTED SOL.4) b. CL c. CL d. CL		14. Special Handl	ing Procedures for	Wastes Listed A	Above
15. Special Handling Instructions and Additional Inf Emergency Contact:	formation		1	SKB Use Only _oad #	
16. GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packe according to applicable international and nation	id. Marked, and labeled, and ar	onsignment are full e in all respects in	ly and accurately proper condition	/ described ab for transport	pove by by highway
Printed/Typed Name LUE 1-3 DIX DIX 17. Transporter 1 Acknowledged of Receipt of Mate	Signature	March March	The second secon	Month	Day, Year
Printed/Typed Name	14 0,24.0	and the second		Month	Day Year
18. Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name	Materials Signature			Manth	
19. Discrepancy Indication Space				Month	Day Year
20. Facility Owner or Operator: Certification of rece	ipt of non-hazardous materials	covered by this Ma	anifest except as	s noted in item	19.
Printed/Typed Name	Signature	· · · · ·		Month	Day Year

White - Return to Generator

Canary - Facility Copy



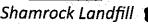
Non Hazardous Industrial Waste

63670

Shipping Manifest	1. Generato	or's US EPA ID No.	(if any)			1. P	age 1 of	page(s)
			<u> </u>	6.4 a 11 a a . A . al	-1			
Generator's Name and Facility Address SUPERIOR WATER LIGHT & POWER	ር''ዓሜ እናናና አብል '	CAN STATESTA		Mailing Ad		373730	THURST A	FOWER CO
HILLAVE & STIMSEN AVE SUITERIC	JR WI SASI	en en en en en en en en en en en en en e					eneri e Bereir	
Generator's Phone 218-355-3191		- T		Fax:	ందను ఈ కిక్క ఉందు	grap. y	estation in a	1.4.00.14.4.00000
Transporter 1 Company Name					•			
WINDON	in a ma	1		Phone:				
Transporter 2 Company Name	(1) C	Sand.		Priorie.				
Transporter 2 Company Name								
Designated Facility Name and Site Address				Phone:				
Designated Facility Name and Site Address		namrock Envi		ental, Ll	LC			
	761 MN	I Highway 45		•				
	Cloquet	t, MN 55720			Phone:	218	-878-01	12
U.S. DOT Description (including Proper Shipping	g name)		9. Co	ntainers	10.		11.	12.
			No.	Туре	Total Quant		Unit Wt/Vol	Waste Profil Sheet#
The state of the s			110.	Type	Quant	Ly	770 701	Опесия
Non Hazardous Industrial Waste		•	1 1		1 1 1	1		
(OIL IMPACTED SOIL/DEBRIS)	•							
				,				
	 	·						
			1.1			- 1		
		•						
			1.1			- 1		
				•				
Additional Descriptions for Materials Listed Above (Inc.		m Approval # below)	14. S	pecial Handl	ing Procedure	s for \	Vastes Listed	Above
CLCL19-0049 OIL IMPACTED SOIL/D	ebeij		17					
,CL	10 m		,	* *. *				
CL				•				
5. Special Handling Instructions and Additional Inf	formation					s	KB Use Οπ	lv
Emergency Contact:		et.					oad #	•
Balling Facility of the Agreement		•				-	Juliu	
	r.,							
GENERATOR'S CERTIFICATION: I hereby de-								
and the second of the second o	a, marked, ar	nd labeled, and an	e in ali r	espects in	proper cond	noitic	tor transpor	t by nignway
proper shipping name and are classified, packet according to applicable international and nation								
according to applicable international and nation		nt regulations.					<u> </u>	
according to applicable international and nation Printed/Typed Name			ari Sir	· · · · · · · · · · · · · · · · · · ·	 :		Mont	h Day
according to applicable international and nation	nal governmer	nt regulations.	ari Nas	f A	Control of the Contro		Mont	th Day
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mate	nal governmer	nt regulations. Signature		A sold	Contract of the Contract of th			
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name	nal governmer	nt regulations.	7. (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	John Jackson	No. of the last of		Mont	
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mate	nal governmer	nt regulations. Signature	16. 1 c	A. ga				
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of I	nal governmer	nt regulations. Signature Signature	(e) (44	3		Mont	th Day
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate	nal governmer	nt regulations. Signature	(6) (440				th Day
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name D. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	nal governmer	nt regulations. Signature Signature	2.6 62 c	200			Mont	th Day
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	nal governmer	nt regulations. Signature Signature	(6) (6) (6) (6) (6) (6) (6) (6) (6) (6)	La C			Mont	th Day
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	nal governmer	nt regulations. Signature Signature	8.6 <u>(2.7.</u> 6	HA.			Mont	th Day
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I	nal governmer	nt regulations. Signature Signature	<u>(6.23)</u>	44			Mont	th Day
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	nal governmer	nt regulations. Signature Signature	26 - C	44			Mont	th Day
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name Discrepancy Indication Space	erials Materials	Signature Signature Signature		44			Mont	th Day
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	erials Materials	Signature Signature Signature		d by this M	lanifest exce	ept as	Mont	th Day

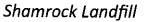
Pink - Transporter





Shipping Manifest	1. Generate	or's US EPA ID No	. (if any	()			1.	Page 1 of		page(s)
Generator's Name and Facility Address	74 75 75 2 2 2 2 3 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4	off or grown authorities and account to		M	lailing Add		MEN AND	an was to all territory	T	1. 2.5 4.75 mm
SUITEROR WATER LIGHT A TOVER - RUL AVE & STIMBER AVE BURGER										OWIR CO
Generator's Phone: 18-335-3191	ART AND AND	(A)				LLI, AVE	. SH	USRICE	., <i>90</i> 0	(5年春秋)
. Transporter 1 Company Name				- [ax:					
Transportor Foompany Name										
				F	hone:					
. Transporter 2 Company Name										
	,			F	hone:					
. Designated Facility Name and Site Address	SKB/SI	namrock Env	ironn	ne	ntal. LL	C				
		N Highway 4:								
		t, MN 55720				Dhone	· ၁1	8-878-0	1112	
HO DOT Describing for holling Brown Object	-	t, MIN 33720	100						7112	
. U.S. DOT Description (including Proper Shipping	j name)	44	9. 0	on	tainers	10. Tota		11. Unit		12. Waste Profile
		•	No.		Type	Quant		Wt/Vo		Sheet#
· Vica Hazardona Andustrial Weste			,							
(Oil IMEACTIO FOR HEIDENS)					1]	1		
•										
	-				1	1 1	ı	ı		
		4			-					
	***		1	T		J J	٠	' -		
					1		ļ	l		
					:					
		1								
3. Additional Descriptions for Materials Listed Above (ind	licate waste stree	ım Approval # below)	14.	Spe	ecial Handlii	ng Procedur	es fo	r Wastes Lis	ted At	ove
·CL*1.19-0049 OE IMPACTED SOLLDI ·CL	MBRIB									
. CL										
. CL					•					
5. Special Handling Instructions and Additional Inf	ormation				·			SKB Use	Only	
Emergency Contact:								Load # _		
								Loud //		
		· · · · · · · · · · · · · · · · · · ·			·				*	
6. GENERATOR'S CERTIFICATION: I hereby dec	clare that the	contents of this of	onsign	me	ent are fully	y and accu	rate	ly describe	ed abo	ve by
proper shipping name and are classified, packed according to applicable international and nation	o, markeo, ai al governme	na iapeiea, ana a nt regulations.	re in aii	re	spects in p	proper con	αιτιο	n for trans	port b	y nignway
			,a4 ,a- " _1.							
Printed/Typed Name		Signature				A.			onth	Day Y
7. Transporter 1 Acknowledged of Receipt of Mate			1 200	<u></u>	The same of the sa	get to the same of	-i ₁		<u> </u>	
	ais									
Printed/Typed Name		Signature						М	onth	Day Y
									٠	
Transporter 2 Asknowledgement of Popoint of A	Antoriala									
	/laterials									
Printed/Typed Name	/laterials	Signature	, s., 11 ^{ma}		ومنافعه في المعاص	er- er-minister ender e		М	onth	Day Y
Printed/Typed Name	//aterials	Signature	7-4-17 mm		. And the second	er-manage control of		M	onth	Day Y
Printed/Typed Name	Materials	Signature	,		A Company	Providence and the second		M '	onth	Day Y
Printed/Typed Name	Materials	Signature	المعاول إليان		and the second second	Prophys and a		M	onth	Day Y
Printed/Typed Name	Materials	Signature	ya, yan		- All Paris	er anna Lista II			onth	Day Y
	Materials	Signature	معور پین		A STATE OF THE STA	erreger value e		M	onth	Day Y
Printed/Typed Name	Materials	Signature	yes trans		en de la companya de la companya de la companya de la companya de la companya de la companya de la companya de	ernemen auto e		M	onth	Day Y
Printed/Typed Name / / / / / / / / / / / / / / / / / / /			3 COVER	ed	by this M	anifest exc	ent:		<u></u>	<u> </u>
Printed/Typed Name			s cover	ed	by this Ma	anifest exc	ept:	as noted in	<u></u>	<u> </u>

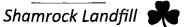




Shamrock Landfill Non Hazardous Industrial Waste

Shipping Manifest	1. Generat	or's US EPA ID N	o. (if any)			1. Pa	age 1 of	page(s)
		·			1 1			
Generator's Name and Facility Address	and all in specialists to a	to a library description of the same	i	Mailing A				
CUPERIOR WATER LIGHT & POWER HILL AVE. & STINGER AVE. SCHIED	AND METAL Officer was com-	ADI TUBET.						POWER CO
Generator's Phone: 15.33%-319)	THE WAS SELECT	2031.4		- 2345 t Fax:	HILL AVE	SUF	reer, s	n jakko
Transporter 1 Company Name				rax.				
and the second s								
		·		Phone:	·			
Transporter 2 Company Name	•				•			
		-		Phone:				
Designated Facility Name and Site Address	SKB/S	hamrock Env	/ironme	ental, L	LC			
	761 M	N Highway 4	5	ŕ				
		t, MN 55720			Phone	218	-878-011	2
U.S. DOT Description (including Proper Shippin		76, 14114 33720		ntainers		210	,	
0.5. DOT Description (including Froper Shippin	ig name)	*	9. Cor	namers	10. Tota	l	11. Unit	12. Waste Profile
			No.	Туре	Quant	ity	Wt/Vol	Sheet#
Man Hasardeen bedrebiel Wente								
(OIL IMPACTIED FOR IDEBRIS)		÷						
						l_		
				. :			ľ	
•			111			1		
•								
	•							
		•						
:	•	· · · · · · · · · · · · · · · · · · ·						
Additional Descriptions for Materials Listed Above (in CLTLLS-0049 OTLLS)		am Approval # below)	14. Sp	ecial Hand	ling Procedure	s for W	astes Listed	Above
CL 19-0049 OIL IMPACTED SOIL D	TATION OF THE PARTY OF THE PART							
CL		•						
CL								
. Special Handling Instructions and Additional In	formation					SH	(B Use Only	
Emergency Contact:			•				ad #	•
	•					"		
			<u> </u>	<u> </u>				
GENERATOR'S CERTIFICATION: I hereby de	clare that the	contents of this	consignme	ent are fu	lly and accur	ately o	described at	ove by
proper shipping name and are classified, packed according to applicable international and nation	ao, markeo, a nal governme	no labeleo, ano a nt regulations.	ire in all re	spects in	proper cond	iltion ti	or transport	by highway
			eo					
Printed/Typed Name		Signature	· Commence	1 1	13 P		Month	n Day N
Transporter 1 Acknowledged of Receipt of Mat-	oriale	4-24-2	<i>A</i>	and the second	Transfer of			
	o iaio	Lo	· · ·	•				
Printed/Typed Name		Signature	and the same	and the second	art.		Month	
Transporter 2 Acknowledgement of Receipt of I	Materials	I the state of the	AND THE RESERVE TO TH	n Andrews			1/1	1 9 (
	VIGIOTICIS	1 0:						<u> </u>
Printed/Typed Name		Signature					Month	Day Y
Discrepancy Indication Space		<u> </u>	<u> </u>					
opario, maioanon opaos								
		1.0	•					
Facility Owner or Operator: Certification of rece	eipt of non-ha	zardous material	s covered	by this M	lanifest exce	pt as i	noted in iten	n 19.
Facility Owner or Operator: Certification of receivered/Typed Name	eipt of non-ha	zardous material	s covered	by this N	lanifest exce	pt as i	noted in iten Month	





Shipping Manifest	1. Generato	or's US EPA ID N	o. (if any)			1. F	Page 1 of	page(s)
			<u> </u>	1 1				*.
S. Generator's Name and Facility Address SOPERIOR WATER LIGHT & POWER	errecht makkeren wie in die	rm TV exv vsa rbit	P	Vailing A		i venetores	্ত কলেন্দ্ৰ বিষয় কৰ	80% C 58 880880 A 1880
HILL AVE. & STOTEND AVE. SUPERIC	CLEA DO ASSEMBLES. TO A LOTE ALBOM	iyi arind. 						POWER (P)
k. Generator's Phone 219-335-3191	cald? Any healths	3.3		ુ&⊮≀કા Fax:	33144 WA	h, andah	perior, v	AT TAPERA
5. Transporter 1 Company Name	• • • • • • • • • • • • • • • • • • • •		·	un.				
·								
<u> </u>		:		² hone:				
3. Transporter 2 Company Name								
			ı	² hone:				
7. Designated Facility Name and Site Address	SKB/Sł	namrock Env	ironme	ntal. L	LC			
		N Highway 4						
					T01	010	0.070.01	10
· · · · · · · · · · · · · · · · · · ·		t, MN 55720			Phone	: Z1	8-878-01	12
U.S. DOT Description (including Proper Shipping	j name)		9. Cor	ntainers	10 Tot		11. Unit	12. Waste Profile
			No.	Туре	Quan	ai itity	Wt/Vol	Vvaste Prome Sheet#
a. Mar Hazardour Industrial Waste	· · · · · ·		1	,,,,,			1 - 1 - 1	
·				1		1		
(OIL IMPACTED SOIL/DESRIS)								
b.		2 - 2	 		1 1	1 1		
				11		, ,		
				<u> </u>				
C.			1	١.				
and the second of the second o								
1.		<u> </u>		<u></u>				
d.								
	-							
		·	<u> </u>	<u> </u>				
13. Additional Descriptions for Materials Listed Above (ind		m Approval # below)	14. Sp	ecial Hand	lling Procedu	res for	Wastes Listed	l Above
a. CLOT 19-0049 — OIL IMPACTED SOIL/DI b. CL	eeri:		'					
c. CL		* * * * * * * * * * * * * * * * * * * *						
d. CL		and the second						
15. Special Handling Instructions and Additional Inf	ormation						SKB Use On	.fv.
Emergency Contact:								ıı y
16. GENERATOR'S CERTIFICATION: I hereby dec	clare that the	contents of this	consianm	ent are fu	IIIv and acc	urately	described a	above by
proper shipping name and are classified, packet	d, marked, ar	nd labeled, and a						
according to applicable international and nation	ai governmer	nt regulations.						
		Signature	The same		1 1		Mon	th Day Y
Printed/Typed Name				J.*	and the second	Sec. 11.	-171	71/1/
Printed/Typed Name	α.	The state of the s	parke (* 1) P	. where		10000	<u></u>	
	≈. ∍rials	The second secon	garder (C.)	ENGR. P. P.	1.7.			
17. Transporter 1 Acknowledged of Receipt of Mate		The second of th	,	Something of the state of the s	7.7.		Mon	th Day V
17. Transporter 1 Acknowledged of Receipt of Mate		Signature	16	er Jak	luks -		Mon	th Day Y
17. Transporter 1 Acknowledged of Receipt of Mate	ep?	The second of th	16	y Jak	lefty -		Mon	th Day y
Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mate	ep?	Signature	16	Jál	lully -		, , , , , , , , , , , , , , , , , , , ,	<u>' </u>
Printed/Typed Name	ep?	The second of th	16	y Jak	lifty -		Mon / / Mon	<u>' </u>
Printed/Typed Name B. Transporter 2 Acknowledgement of Receipt of Name Printed/Typed Name	ep?	Signature	R	Jal	leff-		, , , , , , , , , , , , , , , , , , , ,	<u>' </u>
17. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Name Printed/Typed Name	ep?	Signature	IG	Jak	luly -		, , , , , , , , , , , , , , , , , , , ,	<u>' </u>
Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Materials (1997) 18. Transporter 2 Acknowledgement of Receipt of Materials (1997) 18. Printed/Typed Name	ep?	Signature	10	Jak	lufty -		, , , , , , , , , , , , , , , , , , , ,	<u>' </u>
17. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name	ep?	Signature	R	Jak	weg -		, , , , , , , , , , , , , , , , , , , ,	<u>' </u>
Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Materials (1997) 18. Transporter 2 Acknowledgement of Receipt of Materials (1997) 18. Printed/Typed Name	ep?	Signature	K	y Joh	lefty -		, , , , , , , , , , , , , , , , , , , ,	<u>' </u>
7. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Name Printed/Typed Name	ep?	Signature		y Jak	lufty -		, , , , , , , , , , , , , , , , , , , ,	<u>' </u>
7. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Name 9. Discrepancy Indication Space	Materials	Signature Signature	S COVERED	y Jak	Wanifest	cent a	/ <i>i</i>	th Day Y
7. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Name Printed/Typed Name	Materials	Signature Signature	s covered	y Jak	Manifest exc	cept a	/ <i>i</i>	th Day Y



Shamrock Landfill Non Hazardous Industrial Waste

GORTA

<u> </u>											`	
Shipping Manifest	1. Generat	tor's US EPA ID I	No. (if an	y)				1.1	Page 1	of	page(s)	
3. Generator's Name and Facility Address				N	lailing Ad	dress		_				
STREETOR WATER LIGHT A FOWER	CONEMA	DH SUBST.			_			\?'77T	e e e e	TT B 1	OWER CO	
THIL AVE A SCHOOL AVE STREET	(CIR, WI 348	40									I 34860	
l. Generator's Phone없음~중중중중단당		1.		F	ax:							
i. Transporter 1 Company Name												
	•			Р	hone:							
3. Transporter 2 Company Name						••						
				P	hone:							
. Designated Facility Name and Site Address	SKB/S	hamrock En	vironn									
•		N Highway		1.01	, 1/1	20				-		
						T)1		0.1	0.070	0.011	<u>-</u>	
HO POT Paradal Control		t, MN 5572				Pr			8-878	3-011	2	
. U.S. DOT Description (including Proper Shipping	ng name)		9. C	on	tainers		10 . Tota		1º Ur		12. Waste Profile	
			No.		Туре		Quan			Vol	Sheet#	
· Mon Hazardoge Industrial Warts								· -				
(CHAMPACTED SOL/DEBRIS)				Ĭ		- 1						
				ĺ	Γ							
•					.] [1					
			1 1 1			1						
	· · · · · · · · · · · · · · · · · · ·		<u> </u>			.					<u></u>	
•	*			1								
							i					
Additional Descriptions for Materials Listed Above (in	ndicata waste atrac	See Approved # below?	14 6						144			
· CLTAD-ROLD CALIBARACIED SOLA	TOTALE WASTE STOR		17. \	op e	cial Handli	ng Pic	ceaur	es for	wastes	Listed A	Dove	
. CL												
CL CL									٠.			
. GL 5. Special Handling Instructions and Additional In	oformation.	·										
Emergency Contact:	normation	•						S	KB Us	B Use Only		
zmorgonoy contact.		٠						L	oad #			
GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packed according to applicable international and nation	ed, marked, ar	nd labeled, and a	consigni are in all	mei res	nt are fully pects in p	y and prope	accu r con	rately dition	descrii for trar	bed ab	ove by by highway	
Printed/Typed Name		Signature	11 July 12 12 12 12 12 12 12 12 12 12 12 12 12		p."	, r	, get			Month	Day Y	
. Transporter 1 Acknowledged of Receipt of Mat	toriale	L	<u></u>							<u> </u>	<u> </u>	
	aio	Olan -t-			Survey		Sain Atra					
Printed/Typed Name		Signature	Land State Committee Committee Committee Committee Committee Committee Committee Committee Committee Committee	502 mg	A second	ا المعالم المامالية المامالية المامالية المامالية المامالية المامالية المامالية المامالية المامالية المامالية ا	aria da la la la la la la la la la la la la la	التنافية المناولات المناولات	er descention !	Month	Day Y	
Printed/Typed Name	li li	iel"	of the same		المنطاع معري من موريد	300	200	AP Sec.		1 1	1 / 149 1	
	Materials	Section of the Sectio	A CONTRACTOR OF THE STATE OF TH	en en en en en	THE CONTRACTOR OF THE PARTY OF	.se					· · · · · · · · · · · · · · · · · · ·	
. Transporter 2 Acknowledgement of Receipt of	Materials	Signature	Secretary of the second	en en en en								
	Materials	Signature	A Transport of A Comment	nestect	or all the second second	30 31		•		Month	Day Y	
Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	Materials	Signature	A TORREST AND A STATE OF THE ST	LEAST CO.	a side the same of	3° 3'				Month	Day Y	
Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	Materials	Signature	A Company of the Comp	united (Month	Day Y	
Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	Materials	Signature	Andrew Control	zemilen						Month 	Day Y	
. Transporter 2 Acknowledgement of Receipt of	Materials	Signature	A Company of the Comp	zeminen						Month 	Day Y	
Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	Materials	Signature	And the second second	Lenger						Month	Day Y	
Transporter 2 Acknowledgement of Receipt of Printed/Typed Name Discrepancy Indication Space			The second secon	uenet.								
Transporter 2 Acknowledgement of Receipt of Printed/Typed Name			ls covere	ed t	by this Ma	nifes	t exce	əpt as				



Non Hazardous Industrial Waste

		of the total
11. P	1. Page 1 of	page(s)
MITER	TER LIGHT	& POWIER CO
	. HUERROR	
e: 218	218-878-0)112
0.	11.	12.
tal ntity		Waste Profil
·····	11210	- Gricetin
1 1	1	
4 1		
1 1		
1 1		
ures for V	s for Wastes List	ted Above
SI	SKB Use (Only
Lc	Load #	. •
	<u> </u>	 .
urately o	ately described	d above by ort by highway
IGILIOII I	mon for dansp	Ort by highway
	· Mc	onth Day N
	, ,	
	N4-	math Day 1
	VIC محمدا	onth Day Y
	Ma	onth Day Y
		onth Day Y
		
-	<u> </u>	
ept as r	pt as noted in i	tem 19.
	Мо	nth Day Y
	cel	cept as noted in i



Non Hazardous Industrial Waste

			in a									E _{sp} J	A 10 8 10
Shipping Manifest	1. Gener	rator's I	US EPA	ID No.	(if an	y)					1. Pa	age 1 of	page(s)
3. Generator's Name and Facility Address							dailin = 0						
JUFFEIOR WATER LIGHT & POWER	r ^a ra Eathau	KA TSTT	500. *E) <0	***		N	/lailing A			S 4 36 73	27775	F 777727000 1	L POWER CO
HULLAVE SESTIVEERIAVE BUPDELC	M. WILL	17 Minera 13現合	na goldstand	A.,									e fower co
Generator's Phone2 8-355-3 (9)						F	ax:	1 2.4 1-4	let d'A	V 40%	53(JA:	was.us.,	871 [748](U
Transporter 1 Company Name					_								
Tropes at a Co.			·			F	hone:						
Transporter 2 Company Name						F	Phone:	71	L.	·414		782.	7561
Designated Facility Name and Site Address	SKB/	Sharr	rock	Envi	m	ne	ntal I	$\frac{1}{C}$	1		*** 1	**************************************	
	761 N				OIII	LIO.	11ta1, L		,				
								_					
	Cloqu	iet, M	IN 55	720				I	Pho	ne:	218	-878-01	.12
U.S. DOT Description (including Proper Shipping	y name)				9. (on	tainers			10.		11.	12.
T.				1	No.	Ì	Time			īotal Iantit	.,	Unit Wt/Vol	Waste Profil
35 and Thomas week a new Secretarian & 527 . Sec.					140.	'	Type	 .	QU	ariui	<u>у</u>	MATAOI	Sheet#
THE STANDARD WAS THEN SHILLS AND SHEET					1 1			١.,	, ,	1			
(OIL IMPACTED SOU/DEDRIE)							!	-			l	1	
						-		-			l		
				-				İ					
					\perp	ŀ				1	-		
											,		
							1		1	1	1		
					_1_1								
			*										
			•			ŀ	ľ] [1	1	1	
<u> </u>		.5		İ	11			[·]			- [
Additional Descriptions for Materials Listed Above (ind	icate waste st	ream App	roval # be	low)	14.	Spe	cial Hanc	iling F	⁻roce	dures	for W	astes Lister	d Above
CLULIS COLS CELIMPACTED SOR /OI	BRIS		*-										
CL													
CL	**		٠,	İ									
· ·							·						
 Special Handling Instructions and Additional Info Emergency Contact: 	ormation										SK	(B Use Or	nly
Enlergency Contact.											Lo	ad #	
GENERATORIS CERTIFICATION. I have been	in the sale	-									Щ.		
GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packet	lare that th	ne cont	ents of t	this cor	nsign:	me	nt are fu	illy ar	nd ac	cura	tely c	lescribed :	above by
according to applicable international and national	al governm	and iai ent rec	ulations	no are S.	ırı an	res	pects in	prop	oer c	олап	ion to	or transpo	n by highway
Printed/Typed Name			nature	N. W.			, , ,	7				Mon	th Day Y
. Transporter 1 Acknowledged of Receipt of Mater		-2,- F			e ^c	_00						/	11/1/1/
	riais				Α,		****	41.3					
Printed/Typed Name		Sig	nature			· Singapor	***	- 3				Mon	th Day Y
TO CONTRACT CONTRACT		,01	1-s					أمسي ومعالي	. T. T. S. S. S. S. S. S. S. S. S. S. S. S. S.			× 1 / 1.	7 H 19 H
Transporter 2 Acknowledgement of Receipt of M	laterials			ý	من ا		3.47.77						· • •
Printed/Typed Name		Sia	nature	مومورز	.,,,,,,						_	Man	
		9		-								Mon	th Day Y
Discrepancy Indication Space					_					-			
							-						
				**									
	•												
Facility Owner or Operator: Certification of recei	nt of non 1	1970-4		oriolo		الم		40-11			.		
	рсог п о л- г	iazard(us mate	eriais c	overe	ea t	y this M	ranife	est e	xcep	t as r	noted in ite	em 19.
Printed/Typed Name		Sia	nature					,				Mon	th Day Y
		"											<u>- </u>



Non Hazardous Industrial Waste

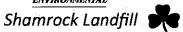
Shipping Manifest	1. Generat	tor's US E	PA ID No	. (if any)				1. Pa	ge 1 of	page(s)
3. Generator's Name and Facility Address	-				Mailing A	ddress		<u> </u>		
SUPERIOR WATER LIGHT & POWER	COMERN	a ul iun	esti :	1	_			ray i	o Terra	FOWER CO
MILLAVE & STIMBEN AVE. STEMBER	DE ON SAF	W.A	W-10" A-1	٠,						M MAN
. Generator's Phone: \$34-335-3391					Fax:				· ·	The service of the se
. Transporter 1 Company Name										
A some Course Course				1	Phone:					
. Transporter 2 Company Name										,
					Phone:					
Designated Facility Name and Site Address	SKB/S	hamroc	k Envi			IC				
		N High			iliai, L	LC				
		_	-	٠		D1		410	050.01	10
HC DOT Day of the Barrier Burney	Cloque	T, MIN	33/20			19	ione:	218-	878-01	12
. U.S. DOT Description (including Proper Shipping	g name)			9. Cor	ntainers		10. Total		11. Unit	12. Waste Profile
				No.	Туре		Quanti		Wt/Vol	Sheet#
Vion Hozardous Industrial Waste							-			
(OILIMPACIED SON/DEBENT)	•									
	_	· ·								
								I		
						-				
	:		.					- 1	1 1	
									 	
					,					
Additional Descriptions for Materials Listed Above (ind	licate waste stre:	am Approval	# below)	14. Sp	ecial Hand	lling Pr)	s for W	astes Listed	Above
CLCLAS-0049 OIL IMPACTED SOIL OF							o o o o o o o	5 101 111	10100 LIOTEG	710040
CL CL										
CL		**.								
								-		
	ormation	1.							B Use Onl	У
 Special Handling Instructions and Additional Inf Emergency Contact; 	ormation									
. Special Handling Instructions and Additional Inf	ormation							LO	ad#	
i. Special Handling Instructions and Additional Inf Emergency Contact:					· .		<u>.</u>	ļ		
i. Special Handling Instructions and Additional Inf Emergency Contact: GENERATOR'S CERTIFICATION: hereby dec	clare that the	contents	of this co	onsignme	ent are fu	lly and	l accur	ately d	escribed a	bove by
Special Handling Instructions and Additional Inf Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decompoper shipping name and are classified, packet	clare that the	nd labeled	t, and are	onsignme e in all re	ent are fu spects in	lly and	l accurr	ately d	escribed a	bove by by highway
Special Handling Instructions and Additional Information Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packet according to applicable international and nation	clare that the	ind labeled nt regulati	d, and are ions.	onsignme e in all re	ent are fu spects in	lly and prope	accura er cond	ately d	escribed a	bove by by highway
Special Handling Instructions and Additional Information Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name	clare that the	nd labeled	d, and are ions.	onsignme e in all re	ent are fu spects in	lly and prope	accurr er cond	ately d	escribed a	by highway
Special Handling Instructions and Additional Information Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name	clare that the d, marked, a al governme	ind labeled nt regulati	d, and are ions.	onsignme e in all re	ent are fu spects in	lly and prope	accura er cond	ately d	escribed a or transpor	by highway
Special Handling Instructions and Additional Information Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packer according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Transporter	clare that the d, marked, a al governme	nd labeled nt regulati	d, and are	onsignme in all re	ent are fu spects in	lly and prope	l accurr er cond	ately d	escribed a or transpor Mont	by highway
. Special Handling Instructions and Additional Inf Emergency Contact: . GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name . Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name	clare that the d, marked, a al governme	ind labeled nt regulati	d, and are ions.	onsignme in all re	ent are fu spects in	lly and prope	f accurred a	ately d	escribed a or transpor	by highway
. Special Handling Instructions and Additional Inf Emergency Contact: . GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packer according to applicable international and nation Printed/Typed Name . Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name	clare that the d, marked, a lal governme	nd labeled nt regulati	d, and are	onsignme in all re	ent are fu spects in	lly and prope	f accurrence of	ately d	escribed a or transpor Mont	by highway
Special Handling Instructions and Additional Information Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decorate proper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name	clare that the d, marked, a lal governme	nd labeled int regulati Signatu Signatu	re	onsignme in all re	ent are fu spects in	lly and prope	l accurrer cond	ately d	escribed a r transpor Mont	h Day Y
Special Handling Instructions and Additional Inference Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name Printed/Typed Name	clare that the d, marked, a lal governme	nd labeled nt regulati	re	ensignme in all re	ent are fu spects in	lly and prope	f accurrer cond	ately d	escribed a or transpor Mont	h Day Y
Special Handling Instructions and Additional Information Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Materials of the Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Materials of Typed Name Printed/Typed Name	clare that the d, marked, a lal governme	nd labeled int regulati Signatu Signatu	re	ensignme	ent are fu spects in	lly and prope	f accumer cond	ately d	escribed a r transpor Mont	h Day Y
i. Special Handling Instructions and Additional Inf Emergency Contact: i. GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Mate Printed/Typed Name	clare that the d, marked, a lal governme	nd labeled int regulati Signatu Signatu	re	ensignme	ent are fu spects in	lly and prope	f accumer cond	ately d	escribed a r transpor Mont	h Day Y
i. Special Handling Instructions and Additional Information Emergency Contact: i. GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Materials of the Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Instructional Information	clare that the d, marked, a al governme erials	nd labeled int regulati Signatu Signatu	re	onsignme in all re	ent are fu spects in	lly and prope	f accurrence cond	ately d	escribed a r transpor Mont	h Day Y
i. Special Handling Instructions and Additional Inf Emergency Contact: i. GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Mate Printed/Typed Name	clare that the d, marked, a al governme erials	nd labeled int regulati Signatu Signatu	re	onsignme in all re	ent are fu spects in	lly and prope	f accurrence on d	ately d	escribed a r transpor Mont	h Day Y
i. Special Handling Instructions and Additional Inf Emergency Contact: i. GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Mate Printed/Typed Name	clare that the d, marked, a al governme erials	nd labeled int regulati Signatu Signatu	re	onsignme in all re	ent are fu	lly and prope	f accurrence cond	ately d	escribed a r transpor Mont	h Day Y
Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decorate proper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Mate Printed/Typed Name Discrepancy Indication Space	clare that the d, marked, a al governme erials	Signatu Signatu Signatu Signatu	re	in all re	spects in	prope	y A	ately d	Mont	h Day Y
Special Handling Instructions and Additional Information Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Materials of the Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Materials of Typed Name Printed/Typed Name	clare that the d, marked, a al governme erials	Signatu Signatu Signatu Signatu	re	in all re	spects in	prope	y A	ately d	Mont	h Day Y



Non Hazardous Industrial Waste

ping Manifest 1. Generator's US EPA ID No. (if any)								of	page(s)
Ya umana nchin ne ecc	Order and the service of the service					1 000 mm	ngay sign and resistance	100 P 100	
KALIDDSOAL WWW.XXX EAG	LAI SUMBY								
20 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.0			E127 A	. 8N	i., 134.	JEDNIKA)	HE, WIL	,54190
	:		i ux.						
1	I make	کانوه موسیع از ای							
<u> </u>		Red 3 ft	Phone:				-		
	•								
	· · · · · · · · · · · · · · · · · · ·		Phone:						
	and the second s		ental, I	LC					
								•	
Cloquet	t, MN 55720			P	hone	e: 21	18-878	-0112	
ing name)		9. C	ontainers	_10.			11		12.
		No	Type		Total				Waste Profile Sheet#
		140,	iype	+	Guai	y	440	AÓI	SHEEL#
* - W		1.1			1	ı			
		1					'		
	•				ı	1	,		
		1 1 1	- 	-		1	-		
		111	ı	1 - 1	ı		ı 1		
· · · · · · · · · · · · · · · · · · ·	· .								
							•		
9		111	1	1	I				
	· ·			\square				_	
DEGRIS									
Information		1				Т	SKB Use	Only	
								,	
						ŀ		-	
ked, marked, an	nd labeled, and a	re in all r	respects in	Jily an Tiprop	er cor	urate Iditio	n for tran	sport by	/ highway Day
	And the second second	Trace of	Andreas Contraction					j y	
TOTIONS	Clave	A STATE OF THE STA							
	oignature	The state of the s	A STANCE OF THE	عاتب الخايم	والتجاويين		· · · · · · · · · · · · · · · · · · ·	Month _/	Day Y
f Materials	- Jan Marie	are give him	Stop The manual of	Part .		- 40 Lang .		\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
	Signature								
	Olgi latule							Month ⊢ i	Day Y
		-					-		
ceipt of non-had	zardous material	s covere	d by this N		est exc	ept a	as noted	in item 1	19.
	SKB/SI 761 MN Cloque ing name) indicate waste strea	SKB/Shamrock Env 761 MN Highway 4 Cloquet, MN 55720 ing name) indicate waste stream Approval # below) CNB RIS information leclare that the contents of this ced, marked, and labeled, and a conal government regulations. Signature sterials Signature	SKB/Shamrock Environm 761 MN Highway 45 Cloquet, MN 55720 ing name) 9. Co No. 14. S 15. Signature Signature Signature Signature	Fax: Phone: SKB/Shamrock Environmental, I 761 MN Highway 45 Cloquet, MN 55720 ing name) 9. Containers No. Type Indicate waste stream Approval # below) Information Info	Fax: Phone: SKB/Shamrock Environmental, LLC 761 MN Highway 45 Cloquet, MN 55720 Ing name) 9. Containers No. Type 14. Special Handling P 16. Special Handling P 16. Special Handling P 17. Special Handling P 18. Special Handling P 18. Special Handling P 18. Special Handling P 19. Special Handling P	Fax: Phone: SKB/Shamrock Environmental, LLC 761 MN Highway 45 Cloquet, MN 55720 Phone ing name) 9. Containers No. Type Quar No. Type Quar 14. Special Handling Procedu DRBRIS eclare that the contents of this consignment are fully and accided, marked, and labeled, and are in all respects in proper coronal government regulations. Signature Signature	Phone: SKB/Shamrock Environmental, LLC 761 MN Highway 45 Cloquet, MN 55720 Phone: 2 ing name) 9. Containers No. Type Quantity 14. Special Handling Procedures to DESE3 Information leclare that the contents of this consignment are fully and accurate ked, marked, and labeled, and are in all respects in proper conditional government regulations. Signature Signature	SUPPLIER WATER LITE 215 HD L AVE 30 FERCE Fax: Phone: SKB/Shamrock Environmental, LLC 761 MN Highway 45 Cloquet, MN 55720 Phone: 218-878 ing name) 9. Containers 10. U1 No. Type Quantity Wt/ Wt/ Indicate waste stream Approval # below) 14. Special Handling Procedures for Wastes to DB B B B B B B B B B B B B B B B B B B	SUPERIOR WATER LETHE 6 PACE SUPERIOR, WI Fax: Phone: SKB/Shamrock Environmental, LLC 761 MN Highway 45 Cloquet, MN 55720 Phone: 218-878-0112 Ing name) 9. Containers No. Type Quantity WtvVol Indicate waste stream Approved # below) 14. Special Handling Procedures for Wastes Listed Ab DEBASS Information SKB Use Only Load # Load # Load # Load # Reclare that the contents of this consignment are fully and accurately described above (ed, marked, and labeled, and are in all respects in proper condition for transport by onal government regulations. Signature Month Month Month





69679

Shipping Manifest	1. Generator's US EPA ID	No. (if any)		1	,	I. Pag	ge 1 of	р	age(s)
Generator's Name and Facility Address SUPERIOR WATER LASHT & POWE HILL AVE. & STEELSON AVE. SUPE			29151	MOR				(POWEI Si Jassi	
. Generator's Phone: 18 3553551 Transporter 1 Company Name	<u> </u>		Fax:						
			Phone:						
. Transporter 2 Company Name		•	i ilolie.						
. Designated Facility Name and Site Address	SKB/Shamrock B		Phone:	IC					
	761 MN Highway		/11ta1, L	LC					
	Cloquet, MN 557			Pho	one: 2	218-	878-01	12	
. U.S. DOT Description (including Proper Ship	* '		ntainers		10.		11.		12.
		No.	Туре	С	Total luantity		Unit Wt/Vol		eet#
· Non Hazarious Industrial Waste (OH. IMPACTED SOHADEERIS)									
					-!				
	•								
							-		
•				-	1 !	1			
•						•			
3. Additional Descriptions for Materials Listed Above	O finally and a street American American American	14 92	nacial Harr	dling Pro	codurae	for W	astes Lister	d Above	
- Cl _{CL} 19-0049 OIL IMPACTED SOII - CL - CL I CL									
 Special Handling Instructions and Additional Emergency Contact: 	I Information					1	(B Use Or ad #	ıly	
						·			
 GENERATOR'S CERTIFICATION: I hereby proper shipping name and are classified, pa according to applicable international and na 	icked, marked, and labeled, ar	id are in all re	ient are fi espects i	ully and n proper	accura r condit	tely o	described or transpo	above by ort by high	way
Printed/Typed Name	Signature	e . ·	, , ,	ar Park			Mor	nth Da	y. _{, ,} Y
7. Transporter 1 Acknowledged of Receipt of I	Materials	1,12	Be week						
Printed/Typed Name	Signature		<u> </u>	<u> </u>			Mor	nth Da	y. Y
/ Cイウン カナララくと 8. Transporter 2 Acknowledgement of Receipt	of Materials	10 1 6 B	6 /						# 201
Printed/Typed Name	Signature	· .					Mor	nth Da	v Y
									<u> </u>
9. Discrepancy Indication Space			1:						
	to the second								
er en en en en en en en en en en en en en		,							
Facility Owner or Operator: Cortification of	receipt of non-bazardous mat	riale covere	d by this	Manifee	t excer	nt ae	noted in it	em 19	
 Facility Owner or Operator: Certification of Printed/Typed Name 	receipt of non-hazardous mat	erials covere	d by this	Manifes	t excep	ot as	noted in it Mor		y Y

White - Return to Generator

Canary - Facility Copy



Non Hazardous Industrial Waste

Shipping Manifest	1. Generat	or's US EPA ID No	o. (if a	ny)	1			1.	Pag	e 1 of	page(s
B. Generator's Name and Facility Address SUFERIOR WATER LIGHT & FOWER HULL AVE. & STERSOM AVE. SUFERI L Generator's Phone 218-335-319)						1,10	R W				POWER CO
5. Transporter 1 Company Name			:		Phone:						
. Transporter 2 Company Name				F	Phone:						
. Designated Facility Name and Site Address	761 M	hamrock Env N Highway 4	5	me	ntal, L						
	Cloque	t, MN 55720				P	hone	: 2]	18-8	378 - 013	12
 U.S. DOT Description (including Proper Shippin 	ig name)		9. No		tainers Type		10 Tot Quar	al		11. Unit Wt/Vol	12. Waste Pro Sheet#
Hon Hazardove Indontrial Weste (OR, IMFACTIO) SOL/DIERIS)											
								.			
					1	 					<u>-</u>
-Cleangadoag — Oil Impacted Soil Ad . Cl . Cl . Cl	HE RIG										•
Special Handling Instructions and Additional In Emergency Contact:	formation								SKE	B Use Oni	
					:						
 GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packet according to applicable international and nation 	ed, marked, a	nd labeled, and a									
Printed/Typed Name		Signature	ir Andrew	٠.'		./				Mont	h Day
7. Transporter 1 Acknowledged of Receipt of Mat	erials										
Printed/Typed Name		Signature	مو گار مو	ing Lame	A.m. c	المالاسية				Mont	h Day / / 🤆
Above Hickory	Materials	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									
	Materials	Signature								Mont	h Day
8. Transporter 2 Acknowledgement of Receipt of	Materials	Signature								Mont	h Day
3. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	Materials									Mont	h Day
3. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name			S COVE	ered	by this N	<i>N</i> anife	est exc	cept	as no		



Non Hazardous Industrial Waste

Shipping Manifest	1. General	tor's US EPA ID No	o. (if any)				1. P	age 1 of	page(s)
Generator's Name and Facility Address			<u> </u>	 Mailing Ad	ddrooo		<u>L</u> .		
BUPTERCH WATER LIGHT & FOWER	COPEM	ada suest.					THE	LEGHT	& POWER CO
HILL AVIT & STIMSOH AVE STIPHER	ust IW , EV.	(#4 34)							Wi Sassio
- Generator's Phone216-353-3191 - Transporter 1 Company Name			 	Fax:					
* *	and the second								
<u> 州) らメアスでらら</u> Transporter 2 Company Name	10/60			Phone:					
. Iransporter 2 Company Name									
Designated Facility Name and Site Address				Phone:	_				
. Designated Facility Name and Site Address		hamrock Env		ental, L	LC				
		N Highway 4:	5						
		et, MN 55720			Ph	ione:	218	-878-0 1	12
. U.S. DOT Description (including Proper Shipping	j name)		9. Cor	ntainers		10.		11.	12,
&-			No.	Туре		Total Quanti		Unit Wt/Vol	Waste Profile Sheet#
· Mon Hexardone Industrial Wester		7.77							
(OIL IMPACTED SOBLEDEDED)		**.				1 1	- 1		
						-			
						1 1	Ì		
			<u> </u>						
			, ,		1	1 1	ı		
								-	
		•				\perp			
3. Additional Descriptions for Materials Listed Above (ind			14.0		·	لمل			
CLC1.19-0049 Off. IMPACTED ROLLING		am Approval # below)	14. Sp	ecial Hand	ling Pro	cedure	s tor W	/astes Liste	d Above
· CL	(n netser is, handa tilg		ĺ						
CL CL									
5. Special Handling Instructions and Additional Info	ormation						- Cr	(B Use O	-f
Emergency Contact:		2.00						ad #	пу
	•								
GENERATOR'S CERTIFICATION. I have been						_	1_		-
S. GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packet	lare that the d. marked. a	contents of this cand and an	onsignme e in all re	ent are ful spects in	lly and prope	accura r cond	ately (ition f	described or transpo	above by
according to applicable international and nation	al governme	nt regulations.			ріоро			or transpo	it by mgmway
Printed/Typed Name		Signature	46.5	, ,				Mor	nth Day Ye
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u> </u>	The second secon		<u> </u>		Security and Security			
. Transporter 1 Acknowledged of Receipt of Mate	rials 								
Limited / Turned Name		Signature	a bat	10 mg				Mor	
Printed/Typed Name			2011 6	روان المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع ا المراجعة المراجعة				<u>/ / 7 / </u>	
DAUNG LESNY	laterials	I William	31.129	17				•	
DAUNG / CS ルソ b. Transporter 2 Acknowledgement of Receipt of N	laterials	Signature	3.149	(·	•			.,
DAUNG LESNY	laterials	Signature		(mark)		•	<u>-</u>	Mor	ith Day Ye
DAUNG / CS N Y Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name	faterials	Signature				•		Mor	ith Day Ye
DAUNG / CS ルソ b. Transporter 2 Acknowledgement of Receipt of N	laterials	Signature						Mor	oth Day Ye
DAUNG / CS N Y Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name	laterials	Signature						Mor	ith Day Ye
DAUNG / CS N Y Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name	faterials	Signature			-			Mor	ith Day Ye
DAUNG / CS N Y Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name	flaterials	Signature						Mor	nth Day Ye
DAUNO / CS N Y Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name			covered	by this M	anifes	t exce	ot as		



Non Hazardous Industrial Waste

Chinning Manifest	1. Generat	tor's US EP/	A ID No	. (if a	ny)						1.	Pag	e 1 of	page(s)
Shipping Manifest		. 1 1	1	ı	ı	ı	1	ì	1					
. Generator's Name and Facility Address				1	1	viailing	a Ad	dres	SS		1			
SOFERIOR WATER LANGE & POWER	COM MA	DA BUE	WE.							MA	TE	A. I.J	EGHT A	EFORMIK CO
FILL AVE. A STEEDOM AVE. STOVEN	CAR, VI SAS	200												Wi 54660
. Generator's Phoneয়ের ্ডাইন্টা					ļ	Fax:			-	,				2 - 10 10 S - 2 10 10 He
. Transporter 1 Company Name														···
T	·	- · · · · · · · · · · · · · · · · · · ·				hone	:							. <u>.</u>
Transporter 2 Company Name				-										
	- •		* "		F	² hone	:							
. Designated Facility Name and Site Address	SKR/S	hamrock	Envi	ron				\overline{C}						
					1110	ıııaı,	ו ע							
		N Highw	-	'				•						
	Cloque	et, MN 5:	5720					P	ho	ne:	21	8-8	378-01	12
. U.S. DOT Description (including Proper Shipping	g name)			9.	Cor	ntainer	's I			10.			11.	12.
	,					ı	- 1		٦	otal		ľ	Unit	Waste Profil
· · · · · · · · · · · · · · · · · · ·				No).	Тур	e		Qι	anti	ty		Wt/Vol	Sheet#
· Mon Hazardous Industrial Waste												ł		
(CIL IMPACTED HOULDEIRIS)	•					1				ł				
			i				_							
				•	-									
				ı	ı	1		÷	J	1			1	
					İ									
				Щ.,	ــــــــــــــــــــــــــــــــــــــ									
			·									ļ		
· ·	·	<u> </u>												<u>_</u>
	** *												·	
							ı	ĺ	İ					
CLCL 19-0049 OIL IMPACTED BOILAN CL CL	BESKLIV													
5. Special Handling Instructions and Additional Inf	ormation										Т	SKR	Use On	ılv
Emergency Contact:											- 1			ш у
												Load	J#	
			7											
5. GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packe according to applicable international and nation	d. marked. a	nd labeled.	and are	nsig in a	nme li re:	ent are spects	full s in p	y an orop	d ad er c	ccur	atel litio	y de: n for	scribed a transpor	above by t by highway
		Cianotus	•					j.					Mon	th Day `
Printed/Typed Name		Signature				1		e V					1/1	, [/ [/]
The Harrison Commence		Signature				Art .						-		
The Harrison Commence	rials	Signature				- John								
. Transporter 1 Acknowledged of Receipt of Mate	rials		•										h Ann	th Day
. Transporter 1 Acknowledged of Receipt of Mate	erials	Signature				100 100 100 100 100 100 100 100 100 100	2.	Tit Share -					Mon	th Day
. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name)				2.	Transaction of					Mon	th Day \(\frac{1}{2} \)
. Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name . Transporter 2 Acknowledgement of Receipt of Mate		Signature					2.	Transaction					Mon	/// <u>//</u>
. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name							<u>Z.</u>	The same of the sa	-				Mon	/// <u>//</u>
. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name . Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name		Signature					<u>Z.</u>	The second second	-				/_	/// <u>//</u>
. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name . Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name		Signature					<u>Z.</u>	Trans.	-				/_	/// <u>//</u>
Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name		Signature						The same of the sa	-				/_	/// <u>//</u>
Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name Transporter 2 Acknowledgement of Receipt of N		Signature						France of	-				/_	/// <u>//</u>
7. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name 7. Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name		Signature						Transaction and					/_	/// <u>//</u>
Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name		Signature						T No. o.	-				/_	/// <u>//</u>
Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name Discrepancy Indication Space	//aterials	Signature	3				<u> </u>		-				Mon	th Day
Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Mater Printed/Typed Name Discrepancy Indication Space	//aterials	Signature	3	cove	red	by thi	s M	anife	est e	exce	pt a	s no	Mon	th Day
. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name . Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name	//aterials	Signature	aterials	cove	red	by thi	s M	anife	est e	×ce	pt a	s no	Mon	th Day \



Non Hazardous Industrial Waste

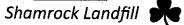
Shipping Manifest	1. Generat	or's US EPA ID	No. <i>(if any)</i>			1. Pa	ge 1 of	page(s)
. Generator's Name and Facility Address				A 4 - 195				
STOPPENDE VIATEE LAGHT & FOREE HELL AVE & STENSON AVE. SCIPED	r co nema 102, wi sa	DJI MEST. 80						POWIER CO VI 34880
. Generator's Phone: 18-355-3191 . Transporter 1 Company Name				Fax:				,
. Iransporter i Company Name								
			 	Phone:				
Transporter 2 Company Name								
Designated English, Name and Otto Adulture	· · · · · · · · · · · · · · · · · · ·	<i>y-</i>		Phone:				
Designated Facility Name and Site Address		hamrock Er		ental, L	LC			
		N Highway			•			
	_	t, MN 5572	0 .		Phone:	218-	·878-01	12
. U.S. DOT Description (including Proper Shipp	ing name)		9. Co	ntainers	10.		11.	12.
			No.	Туре	Total Quanti		Unit Wt/Vol	Waste Profile Sheet#
· Mon Harardous Industrial Wester								
(VIL IMPACTED SON (DEBRIS)				·				
			•					
				<u> </u>				
						ı		
	•							
·								
2 Additional Description (control of the control of								
3. Additional Descriptions for Materials Listed Above (CLAIS-0049 OIL IMPACTED SOIL OF	indicate waste stres	ım Approval # below	14. Sp	oecial Hand	lling Procedure	s for W	astes Listed	Above
. CL	hir Siyesi ASAFKI	•						
CL CL	•							
5. Special Handling Instructions and Additional I	nformation						· D.H O. 1	
Emergency Contact:	· iioiiiiaiioii						B Use Onl	У
						LO	ad#	
	<u>.</u>	-						
GENERATOR'S CERTIFICATION: I hereby deproper shipping name and are classified, pact	leclare that the	contents of this	consignm	ent are fu	lly and accur	ately d	escribed a	bove by
according to applicable international and nation	onal governme	nt regulations.		opcots in	proper conc	nuon ic	л папъроп	. by mgnway
Printed/Typed Name		Signature	, 	///			Mont	h: Dave V
CLOKHS MIX.	<u> </u>		<u>ma</u> pril	American (1977)	$\tilde{\xi}_{\mu+\mu}(g)$		1/ 1/	h Day Y
7. Transporter 1 Acknowledged of Receipt of Ma	iterials			1,000				1, 1
Printed/Typed Name		Signature,	<i>*</i>	,	Le ¹¹		Mont	• -
3. Transporter 2 Acknowledgement of Receipt of	Matoriala	A Company of the Comp	1. C. 1	Section Sections	astria contraction		€ €	<u> </u>
Printed/Typed Name	iviaterials	Ciarra - to -						71
minten typen rasifie	·	Signature					Mont	h Day Y
Discrepancy Indication Space								
		ν.						
				<u>_</u>				
 Facility Owner or Operator: Certification of re- 	ceipt of non-ba	zardous materi	ils covered	hy this M	lanifast avoc	nt se s	oted in its	m 10
D. Facility Owner or Operator: Certification of re- Printed/Typed Name	ceipt of non-ha	zardous materia Signature	als covered	by this M	Manifest exce	pt as n	oted in ite	



Non Hazardous Industrial Waste

Generator's Name and Facility Address		or's US EPA ID	No. (It any)	,	_	1. Page 1 of	page(s)
			_	Mailing Ad	ddress		
SUPERIOR WATER LIGHT & FOWER O	ONEMA	OM SUBST.	٠	_		EE LICHT &	POWING CO
FILL AVE. & STRISOM AVE. STEVENOR	2, WI 540	90				BEFERRY, T	
Generator's Phone; (8-355-315) Transporter 1 Company Name		· · · · · · · · · · · · · · · · · · ·		<u>Fax:</u>			
nansporter i Company Name							
				Phone:	•		
Transporter 2 Company Name		· .					
				Phone:			
Designated Facility Name and Site Address	SKB/Sł	namrock E	nvironm	ental, L	LC		
	761 MN	N Highway	45	ĺ	4		
		t, MN 5572			Phone:	218-878-01	12
U.S. DOT Description (including Proper Shipping r				ntainers	10.	14.	12.
	,			1	Total	Unit	Waste Profile
			No.	Type	Quantity	y Wt/Vol	Sheet#
Non Harardona Industrial Weste							
(MLIMPACTED SOIL/DEBEIS)							
				-			
		•					٦
	·			1			
						,	
				 	·		 -
					1 1 1		
Additional Descriptions for Materials Listed Above (indica				.			
CL _{CL} 19-0049 OH IMPACTED SOIL/DEF CL CL CL							
Special Handling Instructions and Additional Infor	mation					SKB Use On	 ly
Emergency Contact:						Load #	
		·					
GENERATOR'S CERTIFICATION: I hereby deale							
GENERATOR'S CERTIFICATION: I hereby declar proper shipping name and are classified, packed,	marked, an	id labeled, and	s consignm I are in all re	ient are fui espects in	ly and accura proper condit	tely described a tion for transpor	ibove by t by highway
according to applicable international and national	governmen	nt regulations.		·		,	,g,
Printed/Typed Name		Signature		77	· · · · · · · · · · · · · · · · · · ·	Mont	h Day V
- Lukara arking			177	And water	and the second	1 7 17	h Day Y
Transporter 1 Acknowledged of Receipt of Materia	als	, <u>, , , , , , , , , , , , , , , , , , </u>		, , , , , <			
Printed/Typed Name		Signature	1/	197	A	Mont	h Day Y
1 / May 1/2 M Pers haldring	න 🐪		Lingue	(M) X (14)	Little of the	1	
Transporter 2 Acknowledgement of Receipt of Man	terials		· '	:	1	1 1	1 / -
Printed/Typed Name	T	Signature				Mont	h Day Y
		·	· .				
Discrepancy Indication Coase							
Discrepancy Indication Space							
Discrepancy Indication Space							
Discrepancy Indication Space		•					
Discrepancy Indication Space							
	· .						
Discrepancy Indication Space Facility Owner or Operator: Certification of receipt	t of non-haz	zardous mater	als covered	d by this M	anifest excep	t as noted in ite	m 19.





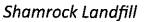
Shipping Manifest	1. Genera	itor's US EPA I	D No.	(if any)		ı		1. P	age 1 of	page(s)
Generator's Name and Facility Address JUPPELOR WATER LIGHT & FOWER	CONEM	ALM SUBSI		<u> </u>		RIO	W.			: POVIER CO
HILL AVE. & STINSON AVE. SUPERIO Generator's Phone (18-255-219)	Mt, WI 54	(960)			3915) Fax:	HLL	AVII.	BUI	ERIOR, V	Mt 34090
Transporter 1 Company Name					٠					
				ı	Phone:					
Transporter 2 Company Name										
Designated Facility Name and Site Address	CVD/C	Thomas als I	7		Phone:	TO				
		Shamrock I N Highwa		ronme	ntai, L	,LC				
		et, MN 557	-			D1	onai	219	-878-01	12
U.S. DOT Description (including Proper Shipping	_		720	9 Cor	ntainers	rı	10.11e.	210	· · · · · · · · · · · · · · · · · · ·	
The state of the s	y (10/11/0)			-	1 .		Total		11. Unit	12. Waste Profile
Where Thereinered in one free dres days to Filmaker.			-	No.	Туре	. '	Quanti	ty	Wt/Vol	Sheet#
Min Harmings behavid Wash (OIL IMPACTED SOIL/DEBRES)		*.								
		* .								
	•			H		 	1 1	í		
			•							
						,				
	1. 1		.							
Additional Descriptions for Materials Listed Above (ind	icate waste stre	eam Approval # bel	ow)	14. Spe	ecial Hand	lling Pro	ocedure	s for V	Vastes Listed	Above
CLAIR-0049 OE IMPACTED SOILÉDE	EBRII		ŀ							
CL			-							
CL	•			•						
Special Handling Instructions and Additional Inf	ormation			\ \ \				SI	(B Use On	ly
Emergency Contact:		**		1				Lo	ad #	
				Α.	÷					
 GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packed according to applicable international and nation 	d, marked, a	and labeled, ar	nd are	nsignme in all re	ent are fu spects in	illy and prope	accur cond	ately lition f	described a for transpor	bove by t by highway
Printed/Typed Name		Signature	s.*						Mont	h Day , Y
<u> EURHO</u> UJENOAE —		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		. F		Mary Jack	·			
Transporter 1 Acknowledged of Receipt of Mate	rials		and the same of th	***		je ^{ji} nganaja nakasa nganaja				
Printed/Typed Name		Signature	أمقاعا والديبية والما	Con James Con Con Con Con Con Con Con Con Con Con	is their sections.	and the first		به و مدانه این این است. ما	Mont	h Dayo Y
「たん」 こんしょうこう Transporter 2 Acknowledgement of Receipt of M	laterials	Register of the second of the	L'ALL	em landerfram em	Jan Barrens	الموسوطا موسوطا	and the State of the law of		, ,	r v / §
Printed/Typed Name		Signature			•					h Da
		Signaturo							Mont	h Day Y
Discrepancy Indication Space										<u> </u>
Caribba Ourren en Orangel III o 100 10										
Facility Owner or Operator: Certification of rece	ipt of non-h	azardous mate	erials o	covered	by this N	/lanifes	t exce	pt as	noted in ite	m 19.



Non Hazardous Industrial Waste

Chinaina Maniferat	1. Genera	ator's US EPA ID	No. (if any)					1. Pac		i tail in l	page(s
Shipping Manifest			1		[ı	1		·	J		F-5-(*
3. Generator's Name and Facility Address		,	-		Mailing A					•	 -	
SUPERIOR WATE LIGHT & PAWE FULL AVIL & STEET ON AVE. SUPER:	COMEN	AUJI SUBST										VIR CO
4. Generator's Phone 150 3-3101	enter has been	1845 C			29 (5) Fax:	HLL	- 12	7 B. E	江川	RIOR.	M.M	080
5. Transporter 1 Company Name					rax.							
6. Transporter 2 Company Name					Phone:							
or manoportor z company name												
7. Designated Facility Name and Site Address	~	<u> </u>	:		Phone:					.=		
11 Doughatou Lability Wallia and Oite Address		Shamrock Er		onmo	ental, L	LC						
•		N Highway										
		et, MN 5572	0			F	hor	ne: 2	218-	878-0	112	
U.S. DOT Description (including Proper Shipping)	ng name)		1	9. Co	ntainers			10.		11.		12.
				No.	Туре			otal antity	,	Unit Wt/Vol	W	aste Prof/ Sheet#
a. Man Haustrian bringstill Wase					7,7,					112 701		
(OIL IMPACTED SCIL/DESCIE)				ΙТ.	1 1	1 4	. [ļ	1			
		- · · · · · · · · · · · · · · · · · · ·	\perp				_	_		j i		
).												
				1			-		Ι.			,
	· · · · · · · · · · · · · · · · · · ·					•						
		i							,			
							.					
				<u>L</u>			- (L_				
				1 1	1				,			
										1		
3. Additional Descriptions for Materials Listed Above (in	idicate waste stre	eam Approval # below	1	4. Sc	ecial Hand	llina P	rocer	dures 1	for Was	etee l iete	d Above	
a Clcilia-coma — Oth impacted soilje	MDFH									otoo Libte	. C. COOVE	
o. CL o. CL												
i. CL			ĺ									
5. Special Handling Instructions and Additional In	formation								eve	lles O		
Emergency Contact:										3 Use O	nıy	
									Load	a#		
: : : : : : : : : : : : : : : : : : :		· .	_									-
GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packet	clare that the	e contents of this	cons	signm	ent are ful	lly an	d ac	curat	ely de	scribed	above l	by
according to applicable international and nation	nal governme	ent regulations.	are ii	ı alı re	spects in	prop	er co	onaiti	on tor	transpo	nt by h	ghway
Printed/Typed Name		Signature	7.	<u></u>								
17845 11168 1		Signature		part .	1	1				Mor	nth 	Day
7. Transporter 1 Acknowledged of Receipt of Mat	erials	10	- N	3, .	-/ -/-	<u>د د آه</u> کړ	10 may 10	Same Comment		1/	1 1 1	
Printed/Typed Name		Signature	·	-				•••		Mor		Dau.
Transport to a direct		Ber Stranger	د معرود درزی	and I						JVIOI	ıun 	Day
8. Transporter 2 Acknowledgement of Receipt of I	Materials	Land Landing	F	1880	12.200				-		7 1 +	1 1 1 1
Printed/Typed Name		Signature							_	Mor	ıth l	Day
		·										
9. Discrepancy Indication Space										'		'
												Ė
		-										
0. Facility Owner or Operator: Certification of rece	eipt of non-h	azardous materia	ls co	vered	by this M	lanife	est ev	cent		ted in it.	em 10	
Printed/Typed Name		· · · · · · · · · · · · · · · · · · ·		- 	~, tino (v)		J. 67		25 110			
пплеси турестванте		Signature								Mon	th [Day '
		.1								1 1	1	1 1





Shamrock Landfill Non Hazardous Industrial Waste

Shipping Manifest	1. Generator's US EPA ID	No. (if any)			1. Page 1 of	page(s)
Generator's Name and Facility Address ### TOPISMOR WATER LIGHT & PUWI	ማጀጋ ለማስጥ ጨዋታያዊ ም ል ምስጥር የመታማው ለማማ		Mailing Ad		unitara ir Todas ode	A POWER CO
THE AVE A STENOOR AVE SHE					um langi. Superna,	
. Generator's Phone 218-245-3191	and the second of the second o		= ೩೪೩೪೪ Fax:	Albada Mey Jo.	STATEST STATES	A. 18 - 12 - 24 - 24 - 24 - 24 - 24 - 24 - 24
Transporter 1 Company Name						
Alak.	MMSS A1	17	Phone:		9.50 9.	
Transporter 2 Company Name	7 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	· · · · · · · · · · · · · · · · · · ·	i none.		· · · · · · · · · · · · · · · · · · ·	
			Phone:			
Designated Facility Name and Site Address	SKB/Shamrock E			LC		
	761 MN Highway		· ,		-	
	Cloquet, MN 557			Phone:	218-878-01	12
. U.S. DOT Description (including Proper Ship	~ .		ntainers	10.	11.	12.
7° (ping namo,	1	1	Total	Unit	Waste Profile
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		No.	Туре	Quantii	ty Wt/Vol	Sheet#
 Bon Fissardous Industrial Waste (OIL IMPACTED SCILIDEDRES) 			ı	1 1 1	1	
ng na na biri andaninin na na na na na dagasari na hini dadada sari Sindan Masakari da d	and the second s					
•		. '			1	
		[F				
•						
		1 1	1	1 1 1		
3. Additional Descriptions for Materials Listed Above	indicate waste stream Approval # belo	w) 14. Sp	ecial Hand	ling Procedure	s for Wastes Liste	d Above
CLULIS-0049 OH IMPACTED SOIL	ADED RIS					
o. CL s. CL						
i. CL	•					
5. Special Handling Instructions and Additiona	Information				SKB Use O	nly
Emergency Contact:					Load #	
	•		-			
A GENERATOR'S CERTIFICATION. I hombu	declare that the contents of th	io sonolana	ant are fu	lly and analy	estable das seibad	chave by
GENERATOR'S CERTIFICATION: I hereby proper shipping name and are classified, pa	cked, marked, and labeled, an	d are in all re	ent are iu espects in	proper cond	lition for transpo	ort by highway
according to applicable international and na	tional government regulations.					
Printed/Typed Name	Signature	21	7 /		Moi	nth Day Y
626-1878 JJAN 1178			1.00	y _k : : "		<u> </u>
7. Transporter 1 Acknowledged of Receipt of N						
Printed/Typed Name	Signature	San San San San San San San San San San	S. Johnson	H.L.	Moi	ith Day Y
8. Transporter 2 Acknowledgement of Receipt	of Materials			<u>let st.</u> St.		1 1 1 1
Printed/Typed Name	Signature		<u>- ₹./*</u>		Moi	nth Day Y
			•			lii Day
9. Discrepancy Indication Space					· · · · · · · · · · · · · · · · · · ·	
			<u> </u>	<u> </u>		
0. Facility Owner or Operator: Certification of	receipt of non-hazardous mate	rials covered	by this N	1anifest exce	ept as noted in it	em 19.
Printed/Typed Name	Signature		:		Мог	nth Day Y
· · · · · · · · · · · · · · · · · · ·	3.9.12.010					, , , , , , , , , , , , , , , , ,





Shipping Manifest	i. Generator	r's US EPA ID No	. (ır any)		1	ı. Pa	ge 1 of	page(s)
3. Generator's Name and Facility Address			P	Mailing Ad	ddress	<u> </u>	·	
HOPERIOR WATER LIGHT & FOYER O THE LAVE & STRISON AVE SUFERIOR				2012 1212				YOWIR CO 41 54830
. Generator's Phone: 1993 5-3194 . Transporter 1 Company Name				Fax:				- Maria
A) (C	**************************************		!	Phone:	7/5-	المراجعة	A Sun Same	7561
i. Transporter 2 Company Name					<u> </u>		Ninger /	
. Designated Facility Name and Site Address	SKB/Sh	amrock Envi		Phone: ental, L	LC			
		Highway 45		•				
		, MN 55720			Phone:	218-	-878-011	12
3. U.S. DOT Description (including Proper Shipping)		, 1,11, 00, 20	9. Co	ntainers	10.		11.	12.
2. C.C. DOT Decomption (mondaing report on pping)	iaoy	·	No.	Туре	Total Quant		Unit Wt/Vol	Waste Profile Sheet#
a. For Hezardon, a doubled Waste (OH, HMPACTED MONAMERIS)								
o.								
3.						ı		
d.	*	·				1		
13. Additional Descriptions for Materials Listed Above (indic a. CLT, 19-0019 OH, TMF; TED SOH /DE b. CL c. CL d. CL								
15. Special Handling Instructions and Additional Info Emergency Contact:	rmation	_ 					KB Use On	ly
						100	oad #	
16. GENERATOR'S CERTIFICATION: I hereby decl proper shipping name and are classified, packed according to applicable international and national	l, marked, ar	nd labeled, and a	consignm re in all r	nent are fu	ully and accu n proper con	rately dition f	described a or transpor	above by t by highway
Printed/Typed Name		Signature	est .		<i>)</i>		Mon	th Day
17. Transporter 1 Acknowledged of Receipt of Mater	iale				الر العن معارب علي			/
Printed/Typed Name	IGIO	Signature	-		<u>/</u>		Mon	th Day
	l				Ti'n, Ma			
18. Transporter 2 Acknowledgement of Receipt of M	aterials							
		Signature	ś.:	<u> </u>	1		Mon	th Day `
Printed/Typed Name	aterials	Signature	hange Jackson and Jackson and American	an agent agent of	Andrew Control of the			th Day `
· · · · · · · · · · · · · · · · · · ·		Signature	Section 1984	The same of the sa		, :	Mon →	th Day \
Printed/Typed Name		Signature	Service Servic		and the second		M on	th Day \
Printed/Typed Name	And the second s		s covere	d by this		ept as		<u>/ 1 / 19 11</u>





Shipping Manifest	1. Generato	r's US EPA ID No	. (IF any)		1	ı	'	. Pag	ge 1 of	page	(S)
. Generator's Name and Facility Address		<u> </u>		Mailing A	ddre	SS	L_				
SUPERORY TERIBUIT & FOWER				SUPE	O.	W W				EPOWER C	()
HILLAVE & THISON AVE SIDER	IOR, WI 548	Sis			JII J	JAV.	E. S	ME	RECE,	WI 54830 -	
. Generator's Phone:□9-385-3393 . Transporter 1 Company Name	•	•		Fax:							
111 Company Name	•								•		
			•	Phone:							
Transporter 2 Company Name	•										
Designated Facility Name and Site Address	GTTT /G1			Phone:	- ~						
besignated Facility Name and Site Address		amrock Envi		ental, L	LC						
		Highway 45)			. 1	_	1.0		10	
		, MN 55720			ŀ			18-	878-01		
. U.S. DOT Description (including Proper Shippi	ing name)		9. Co	ntainers		1(Tot			11. Unit	12. Waste Pro	ofile
			No.	Type		Quai			Wt/Vol	Sheet	
- Mon Monardots Industrial Waste											
(CIL IMPAC) DEOR (DEDECE)	*	•									
	<u> </u>		<u> </u>	ļl	ļJ	<u> </u>		Ц			
				1	,		1	1			
						1	1	1			
						i_					
		•									
			-								
3. Additional Descriptions for Materials Listed Above (findicate waste etma	m Approval # belows	14 Sr	ecial Hand	llina l		uree f	or Ws	astes Listed	d Above	
CLOSSIP-OND OF BARACTED F			0,					• • • • • • • • • • • • • • • • • • • •	acco moro		
. CL . CL											
. GL											•
5. Special Handling Instructions and Additional I	Information							SK	B Use On	ıly	
Emergency Contact:									ad #		
	•										
6. GENERATOR'S CERTIFICATION: I hereby d	lociam that the	contents of this o	oneianm	ont are fi	ıllı a	nd and	u rot	olv d	operihad :	abovo by	
proper shipping name and are classified, pack	ked, marked, ar	nd labeled, and ar									
according to applicable international and nation	onal governme	nt regulations.		-		1					
		Signature	25 M		. ,	J			Моп		Y
Printed/Typed Name		and the second second	1.	J. Harris	San State of the S	A STATE OF THE STATE OF	Had a Private and the	r*			
The state of the s	atoriale	and the second									_
7. Transporter 1 Acknowledged of Receipt of Ma	aterials	Olemet 2								–	~ ~/
7. Transporter 1 Acknowledged of Receipt of Ma	aterials	Signature	· · · · · · · · · · · · · · · · · · ·	Constitution on	MP J to P L. WA	general characters of			Mon	thy Day	T I
7. Transporter 1 Acknowledged of Receipt of Ma		Signature /	- State - Stat	A STATE OF THE STA	ngg to plat na	garanti Jan Jan A	,		Mon	thy Day	
7. Transporter 1 Acknowledged of Receipt of Ma		Signature Signature	grand	A STATE OF THE STA	ngg oc plat ob	gwarth Ann Abhrill					
7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name B. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Comment of Superior		A Stranger	dga do P ^{hi} Mà	general characters of	,		Mon Mon		Y
7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name B. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Comment of Superior	* * * * * * * * * * * * * * * * * * *	La Stances	dygot par ma	garanta (Jana Amerika)					
7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name B. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Comment of Superior		- Andrewson	aggiografia	ggeneria (deservice)					
7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name 6. Transporter 2 Acknowledgement of Receipt of		Comment of Superior		- Stemmen	Aggiot Phi MA	Trace and the second					
7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name 9. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Comment of Superior		To the second	dry no Phi nh	and the second s	,				
7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Comment of Superior		A State of the sta	47302 110 41	and the second second second second second second second second second second second second second second seco					
7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	f Materials	Signature		d by this I	Mani	fest ex	cept	asr	Mon	oth Day	



Non Hazardous Industrial Waste

69696

Shipping Manifest	1. Generat	. (if any)					. Pag	e 1 of	of page			
Shipping Manifest			·] · · [ı	1					
Generator's Name and Facility Address				ħ	Mailing A							
JOPENOR MATERIJUM & FOWER (X) MEMA	DHU	BUT.								POVIDE C	
TOLL AVE & BIDIECOLA JE SUPERIO	g. VII 34	93.0				(HL	L AV	E.S	UTE	rker, i	NI SHEM	
Generator's Phone() (2-2-3 (-2)) Transporter 1 Company Name					Fax:							
. Iransporter i Company Name												
Transporter 2 Company Name		£			Phone:							
Transporter 2 Company Name	\$. V.z.**	kl _a ge ^{er}										
		•		F	Phone:							
Designated Facility Name and Site Address	SKB/S	hamroo	k Envi			I.C						
			way 45	ÇIIIIC	111141, 1							
		_	•				M	^	10 (20 01	10	
	Cloque	t, MIN	33/20			1	non	e: 2	18-8	378-01	12	
U.S. DOT Description (including Proper Shipping	name)			9. Cor	ntainers			O.		11.	12.	
		•		No.	Туре			tal ntity		Unit Wt/Vol	Waste P. Sheet	
Mes Hazardenia Industrial Waxte					.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	┼						
(OLL IMPACIFE) SOLDIMERES)	1.3			1.1	1		1	1	1			
ing in the control of the second of the seco												
					<u> </u>				1			
			f	1 1			1	1	1			
				.			İ		Ì			
						اــــا		l	Щ.			
	•		İ	1.1]		1	ı	ı			
				'								
· · · · · · · · · · · · · · · · · · ·												
				1 1	1	- 1	1	1	1 .			
$\mathcal{L}_{\mathcal{A}}$					'							
. Additional Descriptions for Materials Listed Above (indic	cate waste strea	ım Approval	# below)	14. Sp	ecial Hand	dling l	Proced	ures f	or Wa	stes Listed	i Above	
CLOUIS-GOES OF IMPACTED SCILADE	BEG		•]									
CL			i	1								
CL CL												
 Special Handling Instructions and Additional Info 	rmation			· ·	.				0175			
Emergency Contact:	manon									3 Use On	ııy	
									Loa	d#		
GENERATOR'S CERTIFICATION: I hereby deci	are that the	contents	of this co	nsianme	ent are fu	ıllv a	nd acc	curate	elv de	scribed a	above by	
proper shipping name and are classified, packed	l, marked, a	nd labele	d, and are	in all re	spects ir	pro	per co	nditi	on for	transpor	t by highway	
according to applicable international and national	ıl governme	nt regulat	ions.									
Printed/Typed Name		Signate	ıre ja	and the same of th	٠٠٠	•7				Mon	th Day	_
1 Title at and Borney 1			A STATE OF THE STA	Jan San San San San San San San San San S	A STATE OF	ederar.				7	71 710.	1/
. Transporter 1 Acknowledged of Receipt of Mater	ials	.6/1"	Salaraka	Barre P. C.	No.		-Singa Singa			ş ^f	1 1 1	1
Printed/Typed Name		Signate	ıre 🦯		e ^{ee})	127				Mon	th Day	```
LASON NILON	}		a Siring	21	1.56	MIT TO SERVE				/	Day 7 1	
. Transporter 2 Acknowledgement of Receipt of M	aterials		Jan 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	100	1	, jes				1		. /
Printed/Typed Name	· · · · ·	Signati	ıre			rod"				Mon	th Day	
and the second black continue		5.9.1211								INOU.	th Day)
Discrepancy Indication Space												
		-		•								
$(A_{ij},A_{ij}$												
			•									
												_
Facility Owner or Operator: Certification of recei	ot of non-ha	zardous	materials	covered	by this N	Manit	est ex	cept	as no	oted in ite	em 19.	
Facility Owner or Operator: Certification of receiperinted/Typed Name	ot of non-ha	zardous Signati		covered	by this N	Manii	est ex	cept	as no	oted in ite Mon		Y

White - Return to Generator

Canary - Facility Copy



Non Hazardous Industrial Waste

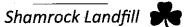
69691

Chinaina Monifost	1. Genera	1. Generator's US EPA ID No. (if any)					1. Page 1 of page(s)				
Shipping Manifest		1	1 1		1 1						
. Generator's Name and Facility Address	and the second		, N	/lailing Ad							
– SUPPEROV WATER LI "HT & FOWE - HULLAVII & SUPPON AVE, SUPP							POMBREO				
- Generator's Phone 34 34 34 34	EDITATES MY SOLF N	thus.		aaataaata Fax:	Miller PAY II. 3	HITEERE, (AN DEFENDEN				
Transporter 1 Company Name		1		<u>un.</u>							
				Phone:							
. Transporter 2 Company Name			<u></u>	-Horie,							
	4	•		Phone:							
. Designated Facility Name and Site Address	SKB/S	Shamrock Env			. C						
		N Highway 4:		11tai, L							
		et, MN 55720	,		Phone: 2	218-878-01	12				
U.S. DOT Description (including Proper Shipp		5t, MIN 55720	9. Cor	itainara T							
0.3. DOT Description (including Proper Shipp	ing name)			ı	10. Total	11. Unit	12. Waste Profile				
1.12			No.	Туре	Quantity	Wt/Vol	Sheet#				
Uen Hazadesa Inhistrial Weste					1 1 1						
(OIL IMPACIFD SOLDIERIS)	:										
•			 								
. :											
			, ,	1 .	1 1 1						
		•		•							
3. Additional Descriptions for Materials Listed Above	(indicate waste stre	eam Approval # below)	14. Sp	ecial Handl	ling Procedures	for Wastes Listed	Above				
CLULI 7-0849 OIL IMPACTED BOIL CL	ANEGRIS										
. CL			-								
CL											
5. Special Handling Instructions and Additional	Information		•			SKB Use On	ly				
Emergency Contact:						Load #					
B. GENERATOR'S CERTIFICATION: hereby	declare that the	e contents of this o	onsignme	ent are ful	lv and accurat	elv described a	shove by				
proper shipping name and are classified, pac	ked, marked, a	and labeled, and a	e in all re	spects in	proper conditi	ion for transpor	t by highway				
according to applicable international and nat	onai governme		And the second		:15						
Printed/Typed Name		Signature	- - 	and the same	us parett	Mon	th /Day-				
'. Transporter 1 Acknowledged of Receipt of M		1 god to	Secretary Sparing	the market	Company of the second	1 1	1 1 1 1				
Printed/Typed Name	- CINIO	Signature	 		x** m*						
Timeditypod reality	V. E. Lance	Signature	4		n. 16	Mont ⊢ -	th Day Y ⊂ IZFZIZ				
. Transporter 2 Acknowledgement of Receipt of	of Materials		1 /		2-00 To 42						
Printed/Typed Name		Signature	:			Mont	th Day Y				
Discrepancy Indication Space							·				
				-							
•											
						<u> </u>					
. Facility Owner or Operator: Certification of re	eceipt of non-h	azardous material	covered	by this M	lanifest excep	t as noted in ite	m 19.				
Printed/Typed Name		Signature				Moni	th Day Y				
		2.3									

White - Return to Generator

Canary - Facility Copy





69692

Shipping Manifost	1. Generate	or's US EP	A ID No.	(if any)			1. Pa	age 1 of	page	(s)
Shipping Manifest				1	1 1					
. Generator's Name and Facility Address				, ,	/lailing Ad					
SOMETHOR WATER LIGHT & POTTER	COMENA	mi sob	ST.						POWE C	()
IGO AVE A STATEON AVE SUERK	CK, WI SE	50	. :			Hi.avi		eriok, v	ME SHEETE	
. Generator's Phone: 18				1	ax:					
. Transporter 1 Company Name										
				F	Phone:					
. Transporter 2 Company Name										
			- 14 	F	Phone:					
Designated Facility Name and Site Address	SKB/S	hamrocl	k Envi			·C	•	12 200		
		N Highv			11141, 121					
			•			D1	. 410	0.70 01:	10	
	-	t, MN 5	5/20			Pnone	: 218	-878-01	12	
. U.S. DOT Description (including Proper Shipping	ng name)			9. Cor	ntainers	10. Tota		11. Unit	12. Waste Pr	مانام
				No.	Туре	Quan		Wt/Vol	vvaste Pr Sheet	
- Figs. The surfaces Industrial Waste	-				7,1-1					
(OU. DAFACTED BOILD ATRIS)				111		1 1	1			
Sign of the second of the seco							.			
							·			
			[1 1				
	•		. [1 1		i i	1 1			
							· ·			
				1.1		1 1	1 1			
	•									
3. Additional Descriptions for Materials Listed Above (i	ndicate waste stre	am Approval #	t below)	14. Sp	∟L ecial Handl	ina Procedu	res for V	Vastes Listed	l Above	
. CLTL19-0019 OH. DAPACTEL BOILE										
. CL	2 4 a 3 a 3 a 4 a 5 a 5 a 5 a 5 a 5 a 5 a 5 a 5 a 5					•				
. CL										
. CL										
5. Special Handling Instructions and Additional I	nformation						SI	KB Use On	ly	
Emergency Contact:	•	1					. Lo	oad #		· · · · · · · · · · · · · · · · · · ·
O OFNIED ATODIC OFDITION TONE I havely d								ماد د مالد د ما	-b-w- b	
GENERATOR'S CERTIFICATION: I hereby deproper shipping name and are classified, pack	eciare iriai irie ked. marked. a	nd labelec	i ins co	in all re	ent are iui spects in	Drober cor	idition f	described a for transpor	t by highway	
according to applicable international and natio				_				•		
Printed/Typed Name		Signatu	re ///	e ger		7		Mon	th Day	Y
11/18/6 1/1/20	J. 7		. In many page 1	10 July 200 18 10 10 10 10 10 10 10 10 10 10 10 10 10		and the second			Day	3
7. Transporter 1 Acknowledged of Receipt of Ma	uterials	مسمد المسمودة توع	And Branch Control	1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	* /	*12°		1 / 1	1 2 2	, per
Printed/Typed Name		Signatu						Mon	th Day	
i mitour typou realite		Signatur						IVION	th Day	Y I
and the second of the second o		1 25 25		o o o o o o o o o o o o o o o o o o o					1 2 3	
B. Transporter 2 Acknowledgement of Receipt of	Materials	Carp Mark								
	Materials	Signatur		•		•		h 4	th D	
B. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	Materials	Signatu	re			·		Mon	th Day	Y 1
Printed/Typed Name	f Materials	Signatu	re					Mon	th Day	
Printed/Typed Name	f Materials	Signatu	re					Mon	th Day	
Printed/Typed Name	f Materials	Signatu	re					Mon	th Day	
8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name 9. Discrepancy Indication Space	f Materials	Signatu	re					Mon	th Day	
Printed/Typed Name	f Materials	Signatu	re		<u> </u>			Mon	th Day	
Printed/Typed Name	f Materials	Signatu	re					Mon	th Day	<u> </u>
Printed/Typed Name 9. Discrepancy Indication Space				covered	by this M	lanifest exc	cept as			Y
Printed/Typed Name			materials	covered	l by this M	lanifest exc	cept as		em 19.	T

White - Return to Generator

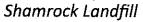
Canary - Facility Copy



Non Hazardous Industrial Waste

Shipping Manifest	1. Generat	tor's US EPA ID No	o. (if any)		1	_	1. Pa	ge 1 of	page(s)
3. Generator's Name and Facility Address ACCEPTION WASHINGTON AS POWNED AND STORY OF AND STORY OF AND STORY OF AND STORY OF AND STORY OF AND STORY OF AND STORY OF AND STORY OF AND STORY OF AND STORY OF AND STORY OF AND	ERCOMEN MOR, VASS	nda Wiese. Reg		79157		: WA:			POWER CO
l. Generator's Phone 3 (5-335-3 (9)) i. Transporter 1 Company Name	•		F	ax:					
. Transporter 2 Company Name	· · · · · · · · ·		F	Phone:					
			F	Phone:					
Designated Facility Name and Site Address	SKB/S	hamrock Env			LC			·	,
		N Highway 43		, , ,					
		t, MN 55720			Ph	one:	218-	878-011	2
. U.S. DOT Description (including Proper Ship		,	9. Con	tainers		10.		11.	12.
			No.	Туре		Total Quantit	v	Unit Wt/Vol	Waste Profile Sheet#
· Don Hamelous Johnshool Weste (AL Del ACTIO) SON ADREMIS)									
•						l			
						1 1	ı		
			.						
•		"							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		<u> </u>						 	
	1					1 1	1		
3. Additional Descriptions for Materials Listed Above CL T. 19-0040 CL BAPACTED SOF CL CL CL CL		ип Арргочаі # веложу	14. Spe	eciai Handi	ling Pro	cedures	tor W	astes Listed	Above
Special Handling Instructions and Additional Emergency Contact:	Information						ľ	B Use Only	y
GENERATOR'S CERTIFICATION: I hereby proper shipping name and are classified, page 2.	cked, marked, ai	nd labeled, and ar	onsignme e in all res	nt are ful	lly and	accura	tely d	escribed at	pove by by highway
according to applicable international and nat	ional governme	<u> </u>		j.F)			
Printed/Typed Name) N	Signature	. Janaan Jana	, 4		/ 		Month	
7. Transporter 1 Acknowledged of Receipt of M	laterials	L state that	المرسوبية الموا	la diserri	AND THE PERSON NAMED IN	Age of the second	, , , , , , , , , , , , , , , , , , ,	<u> </u>	6-17
Printed/Typed Name		Signature	1 18		1. 1			Month	n Day Y
- Herry John 1806	ere, e Newson			6.420	<u> </u>				
3. Transporter 2 Acknowledgement of Receipt	of Materials								
Printed/Typed Name		Signature						Month	Day Y
Discrepancy Indication Space	•	<u> </u>		·					
· ,		1							
Facility Owner or Operator: Certification of n	eceipt of non-ha	zardous materiale	covered l	ov thie M	lanifort	OVCOT	t ac c	oted in Hen	
	p			⊸v u na iVi				осеч ин пеп	1 177.
Printed/Typed Name	· · · · · · · · · · · · · · · · · · ·	Signature			-			Month	

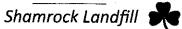




Shamrock Landfill Non Hazardous Industrial Waste

Shipping Manifest	Shipping Manifest 1. Generator's US EPA ID No. (if any)		1. Page 1 of page(s)				
B. Generator's Name and Facility Address			. <u> </u>	 /lailing Ad	dress		
SUPERIOR VIATUR LIGHT & FOWER	e COO ETELMA	on ener	,,	•		or light o	FOWER CO
HILL AVIL & STRISON AVE SUPPLY	100, VI 348	igl):				HERRIOL, V	
Generator's Phone®(\$-355-319)			· F	-ax:	periode per a dels es	The fire often a treat ent as large. The	and the control of the section
. Transporter 1 Company Name							
	*	4		3h			
Transporter O Common Name			- F	Phone:			
Transporter 2 Company Name							
			F	hone:			
. Designated Facility Name and Site Address	SKB/SI	namrock Envi	ronme	ntal, Ll	LC		
	the second second	N Highway 45		,			
		t, MN 55720	,		Dhone, 7	10 070 01	10
	•	t, IVIIN 33720				.18-878 - 01	12
 U.S. DOT Description (including Proper Shipping) 	ng name)	4	9. Con	itainers	10.	11.	12.
			No.	Туре	Total Quantity	Unit Wt/Vol	Waste Profile Sheet#
· Clarles Bloom rated range Ton Broke Sail & Shearthan			140.	1,50	Gaariary	112 101	01100111
表示公子 (2)(2)(2)(2)(2)(2)(2)(2)(2)(2)(2)(2)(2)(1 .	1 1 1		
(COLUMNACTED SOGLADMENT(S)							
	 			 		_	
	4						
•							
		·					
•		•					
	*	Sec. 16	11		1 1 1		
		•					
-CLOLIS-0049 OR IMISA PED FORA . CL . CL . CL)KO #13						
5. Special Handling Instructions and Additional In	nformation					SKB Use On	
Emergency Contact:						-	ıy
				-		Load #	
			•				
 GENERATOR'S CERTIFICATION: I hereby do proper shipping name and are classified, pack according to applicable international and national Printed/Typed Name 	ed, marked, a	nd labeled, and ar	onsignme e in all re	ent are ful spects in	ly and accurat proper conditi	on for transpor	t by highway
I DEN DIVERN	ſ	Jigi icial C	n L	الراجي الموالي	, / 	Mont	th Day) / I ②I · 〉I /
7. Transporter 1 Acknowledged of Receipt of Ma	١, .	High Section 1975 - The Control of t	J.,	in the property	Page Commence and according	- - - 	South to the
Printed/Typed Name		Signature	a				L 5
		Signature	energe Programa			Mont	
8. Transporter 2 Acknowledgement of Receipt of	Materials	TO THE STATE OF TH	All our Mileson	nyagasi mengeri		1 #	1361
Printed/Typed Name		Signature				Mont	th Day Y
Discrepancy Indication Space			•				
эт расстерансу писсаноп эрасе					4		
		•					
							Þ
		* *					
Facility Owner or Operator: Certification of rec	ceipt of non-ha	zardous materials	covered	by this M	lanifest excep	t as noted in ite	m 19.
Printed/Typed Name		Signature				Mont	h Day Y
		Jigirature					∟ay 1





	Shipping Manifest	1. Generate	or's US EPA ID No	. (if any)			1. Page 1	of	page(s)
3. (Generator's Name and Facility Address			<u> </u>	 /lailing Ad	ddress			
	THE PROPERTY OF THE PARTY OF THE PARTY.	CÓUMBA	ini uusir.	,		arios Arion mai	THE LIVE	HT & F	OPHIE GO
	FILE AVE & STEWART AVE STARES	Mi, VII Sas	80	-		HLLAVE.			
_	Generator's Phone 213-335-335.			F	ax:				
. !	ransporter 1 Company Name				•		W.		
_				F	Phone:	·			
٦.	ransporter 2 Company Name								
				Ė	hone:				
. C	Designated Facility Name and Site Address	SKB/S]	namrock Envi	ronme	ntal, L	LC			
		761 M	N Highway 45	;					
		Cloque	t, MN 55720			Phone: 2	218-878	3-0112)
	J.S. DOT Description (including Proper Shipping	_		9. Con	tainers	10.		1.	12,
				No.	Туре	Total Quantity	Ų	nit ∕Vol	Waste Profile Sheet#
_	Man Masardone industrial Warts			INO.	туре	Quaning	/ ۷۷۱	/VOI	SHEER
	MOLIMPACTED SCHAREFIEY	,		$ \cdot $			1		
_	o prosperior on a substituti de la compania del compania del compania de la compania del la compania de la compania de la compania de la compania de la compania de la compania del la compan								
						<u> </u>	•		
				$\lfloor \cdot \rfloor$					

			·			, , ,	.		
C	Additional Descriptions for Materials Listed Above (Ind Language Color Baractrico de Danado) Cl		m Approval # below)	14. Spe	ecial Hand	lling Procedures	for Wastes	Listed At	oove
	L		• .						
j. :	Special Handling Instructions and Additional Inf	ormation					SKB U	se Only	
	Emergency Contact:						Load #	-	
	CENEDATODIS CEDTIFICATIONS 1 have	lava 35 -4 41	aantanta af iti			Out and the	<u> </u>	n	
	GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packet	d. marked. aı	nd labeled, and an	onsignme e in all re:	ent are tul spects in	ny and accura proper condit	tely descr tion for tra	iped abo nsport h	ove by vy highwav
i	according to applicable international and nation	al governme	nt regulations.	,	• •			• • •	. 0 : :=0
	Printed/Typed Name		Signature	and the second	1			Month	Day Y
			Same and the second	marine and the second	an gadada sa	garagas (c. d. d. d. d. d. d. d. d. d. d. d. d. d.		g 8	12 7 4/
	Transporter 1 Acknowledged of Receipt of Mate	rials	,		2.1	1 0			
	Printed/Typed Name	and francisco	Signature		li La Jak	Market Comment	1	Month	Day Y
	Transporter 2 Acknowledgement of Receipt of N	/laterials							
	Printed/Typed Name		Signature			-		Month	Day Y
١. ا	Discrepancy Indication Space			1					
		•							
			* .						
_	English Owner or Operator Oction				L AL 1	416			
. 1	Facility Owner or Operator: Certification of rece	ipt of non-ha	zardous materials	covered	by this M	//anifest excep	t as noted	d in item	19.



Non Hazardous Industrial Waste

willippiii ji iii lailii la la la la la la la la la la la la la	ipping Manifest 1. Generator's US EPA ID No. (if a					Page 1 of page(s)			
Generator's Name and Facility Address				 Mailing Add	lrece	_			
CHARGON WATER LIGHT & POWER	PERMITS	DESTRUCT				tra i	Liuter a	14492200	
THE AVE & STITION AVE SUPED					M. AYR.				
Generator's Phone \$15-35373191				Fax:					
Transporter 1 Company Name									
				Phone:					
Transporter 2 Company Name		**		rnone.					
. Hansporter 2 Company Name									
Designated Facility Name and Site Address	CIZD/CI			Phone:	<u>C</u>				
. Designated 1 acinty Name and Ord Address		namrock Envi		entai, LL	,C				
		N Highway 45							
	Cloque	t, MN 55720			Phone:	218	-878-01	12	
. U.S. DOT Description (including Proper Shippin	ig name)		9. Co	ntainers	_10.		11.	12.	
			No.	Type	Total Quanti		Unit Wt/Vol	Waste Profile Sheet#	
The an U.S. care Service Conservation of Watershoe				1,500		-,			
\$45% (\$\$ \$6.505)					1 1 1	1			
Continuescried echaderace)		*.							
·									
		·	1 1			1			
	•	4.0							
		- · · · · · · · · · · · · · · · · · · ·			<u> </u>				
		, , , , , , , , , , , , , , , , , , ,	11		1 1 1	1.			
•									
	-								
3. Additional Descriptions for Materials Listed Above (in		am Approval # below)	14. S	pecial Handli	ng Procedure	s for V	Vastes Liste	d Above	
· <mark>Cl</mark> elligacas — cal bydaethid (b ilae	ZELEN								
. CL . CL									
. CL									
5. Special Handling Instructions and Additional In	nformation					SI	KB Use O	าไV	
Emergency Contact:							ad #	.	
							Jau #		
	*		1						
6. GENERATOR'S CERTIFICATION: 1 hereby de	eclare that the	contents of this c	onsignr	nent are full	y and accui	rately	described	above by	
proper chipping name and are classified pack	ed, marked, a	ind labeled, and at	e in all i	espects in	proper cond	dition	for transpo	ort by highway	
proper shipping name and are classified, pack	manguverrine	regulations.		,					
according to applicable international and natio		.79					Mor		
according to applicable international and natio Printed/Typed Name		Signature	. gradi //3	11	an entre		1 7 .		
according to applicable international and nation	L	Signature		La Langue	3.J.			/ 31(1)	
according to applicable international and natio Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Ma	terials		;	1. 1. 2	24			· · · · · · · · · · · · · · · · · · ·	
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name	terials	Signature	The second secon	de la company de	Building.		Mon	nth Day Y	
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name				Land Brown	<u> </u>	1 + 2	Mor	· · · · · · · · · · · · · · · · · · ·	
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of		Signature		Energy Control of the	2.34			nth Day Y	
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name		Signature		<u> </u>			Mon	nth Day Y	
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Signature		Jahren Ber				nth Day Y	
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Signature		Andrew Bree				nth Day Y	
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Signature	£ 1	Lander Berry				nth Day Y	
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of		Signature		Lander Breeze	2.24			nth Day Y	
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Signature		Sandar Breeze	2.24			nth Day Y	
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Signature		Samuel Comment				nth Day Y	
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	Materials	Signature Signature			anifest exc	ept as	Moi	nth Day Y	



Non Hazardous Industrial Waste

Shipping Manifest	1. Generator's US EPA ID No. (if any)					1. Page 1 of page(s)			
		· ·		4-111 2					
Generator's Name and Facility Address	THE STOP DATE OF	- #1 (55 to 400	N	failing Ac		r dona	t Zeitschiel de	FOWER CO	
FILLAVE & CUSTOM AVE SUPERIO	ng matanggana. Ng Mga Barai	231.34.257.3 ·			raal we. Walayik				
. Generator's Phone: এট-এর ঠ-এ চেন্	a and a contract of the contra		F	ax:	SEESTING VIII.	4.34 A.S. A	de Pallibacijalija - N	V4 - V4-2019	
Transporter 1 Company Name								 	
			_	. ·					
Transporter 2 Company Name	<u> </u>		F	hone:					
transporter 2 Company Name				•					
				hone:					
Designated Facility Name and Site Address	SKB/Shan	ırock Envi	ronme	ntal, Ll	LC				
	761 MN H	ighway 45							
	Cloquet, M	IN 55720	*		Phone:	218-	878-01	12	
U.S. DOT Description (including Proper Shippin			9. Con	tainers	10.		11.	12.	
	9		1		Total		Unit	Waste Profile	
			No.	Туре	Quantit	y	Wt/Vol	Sheet#	
 Mon Thesaydons industrial Wisdo 				_					
(DIL IMPACTED BUILDEBRES)									
	•								
								·	
				.			ļ .		
	· · · · · · · · · · · · · · · · · · ·								
A deliverage of the second of									
3. Additional Descriptions for Materials Listed Above (in CL元 [中國社會 OIL 和中國社會	dicate waste stream Ap মুখ্যানে চাই	proval # below)	14. Spe	ecial Handi	ing Procedure	s for W	astes Listed	Above	
CL	and the matter								
CL									
CL.									
5. Special Handling Instructions and Additional In	formation			:		SK	B Use On	ly	
Emergency Contact:						Loa	ad#	•	
		·							
 GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packet 	clare that the cont	tents of this co	nsignme	ent are ful	ly and accur	ately d	lescribed a	bove by	
according to applicable international and nation	nai government re	gulations.	ili an re	shecre III	brober cond	ILIOIT IL	or uanspor	L by migriway	
Printed/Typed Name								· · · · · · · · · · · · · · · · · · ·	
Frinted/Typed Ivaille	Si _ξ ∠√ ξ -	gnature	To an	300	1 100		Mont	h Day Y	
ニーン・モノ4の かとり オー・・・ キュー・ベント	6 20 No. 1	** 24.70°*	1 - A 6 - 11 -		Karan Bandi Kan				
Q 467	erials	ga" ,							
Transporter 1 Acknowledged of Receipt of Mate		/*							
Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name	Sig	gnature					Mont		
'. Transporter 1 Acknowledged of Receipt of Mate	Sig	gnature	a service and the service and	y and the			Mont	n Day Ye	
7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 9. Transporter 2 Acknowledgement of Receipt of I	Sig Materials	align at the state of the state	A STATE OF THE STA	× ===*					
7. Transporter 1 Acknowledged of Receipt of Mate	Sig Materials		A September of	,			Mont Mont		
7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	Sig Materials	align at the state of the state	A Company of the Comp						
7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	Sig Materials	align at the state of the state	of the second second	y and T					
7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	Sig Materials	align at the state of the state	e e e e e e e e e e e e e e e e e e e						
7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 2. Control of Receipt of Interest of Receipt of Interest of Receipt of Interest of Receipt of Interest of Receipt of Interest of Receipt of Interest of Receipt of Interest of Receipt of Interest of Receipt of Interest of Receipt of Interest of Interest of Receipt of Interest of I	Sig Materials	align at the state of the state	and the second s						
7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	Sig Materials	align at the state of the state	and the second						
7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	Sig Materials	align at the state of the state	and the second of						
7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	Materials Sig	gnature	Covered	by this M	lanifest evce	nt as r	Mont	h Day Y	



Non Hazardous Industrial Waste

· · · · · · · · · · · · · · · · · · ·											16.7°	الهيبة البرة أدريا أميه	
Shipping Manifest	1. Generat	or's US E	PA ID No). (if an	y)	i l		1		l. Pa	ge 1 of	pag	e(s)
3. Generator's Name and Facility Address					М	lailing Ad	ddres	SS		<u> </u>			
4. Generators Phone	ener afarksa	THE SET	goetrati			981 TENS	kin della	.rr (8)	(A no)	Yo Y	1003324 B	e forsesesses in	ta "s
Generator's Phone. Transporter I Company Name	TOTAL MARGINERS IN TOTAL TRIPLE IN SOLI WASHINGTON TOTAL	리마에 되시하기 (1977년 1일하다	F. 2862 Ch. 1		F	ax.	anazu Milit a	35. TE	5 L.E. 3	131-21	.aa.z.a. a. a. a. Se 11 143	E (NOVER) C WE NAME	P 4 F
5. Transporter 1 Company Name	Ť					33 . 17		, , , ,	1-14 -16	104.4 40	est tree tree for	84.5 1 . \$ 0.0027 s	
					Р	hone:							
6. Transporter 2 Company Name	at .												
				-	Р	hone:							
7. Designated Facility Name and Site Address	SKB/S	hamro	ck Env	ironn	ner	ntal, L	LC						
•	761 M												
	Cloque	_	-				P	hon	e- 2	18-	878-01	12	
8. U.S. DOT Description (including Proper Shipping	_	, 1,111			`ont	tainers			0.	.10	11.	12.	
er e je e e e e e e e e e e e e e e e e	g		•		í			To	tal		Unit	Waste P	rofile
		*		No.	.	Туре		Qua	intity		Wt/Vol	Shee	t#
a.			2	, ,		, !							
Her Success Industrial Waste											.		
b. (St. 1865-Cliff SOUDIDECRIS)						-		L			 		
						_ ,							
									ļ				
C.										Щ			
				1		,	1	1	1	1			
•			4	·				i			1		
d.	1	1											
							ĺ	1	1	1			
13. Additional Descriptions for Materials Listed Above (incl. a. CL	licate waste stre	ат Арргоча	l # below)	14.	Spe	cial Hand	ling F	roced	ures	for Wa	astes Liste	d Above	
b. CL													
c. CCL 19-0049 OR BAFA/ T.10 301L/06	abrio .												
d. CL	•												
15. Special Handling Instructions and Additional Inf	ormation			•						SK	B Use O	nly	
Emergency Contact:				:						Los	ad#		
16. GENERATOR'S CERTIFICATION: I hereby dec	olaro that the	oontont	of this o	opoles		nt om fu	lluar	nd 00	01 JK 04	ام برام		ahaya bu	
proper shipping name and are classified, packe	d, marked, a	ind labele	ed, and ar	e in ali	res	spects in	prop	per co	ondit	ion fo	r transpo	above by ort by highway	,
according to applicable international and nation	ial governme	nt regula	tions.	•									
Printed/Typed Name		Signat	ure ,	.2			7				Mor	nth Day	Yea
LIRAY DIX W	<u> </u>	42 4 7 7					Z Zas				1/1	7 1210	
 Transporter 1 Acknowledged of Receipt of Mate 	erials	· popul	£	,									,
Printed/Typed Name	 ,	Signat	ure 🦿	25	, C		11/11				Mor	nth Day	Ye
Jarry Carroll		۵.	7	y' or '		والمعرض فأوجع أويا	1				$\perp \perp / \perp$	150	1 / 1
18. Transporter 2 Acknowledgement of Receipt of N	//aterials		*	•									,
Printed/Typed Name		Signat	ure			-					Mor	nth Day	Yea
10 Disevenges Indication Code													
19. Discrepancy Indication Space													
•													
		. •											
												,	
												,	
	ipt of non-ha	azardous	materials	s cover	red l	by this N	1anif	est ex	сер	t as r	noted in it	em 19.	
20. Facility Owner or Operator: Certification of rece Printed/Typed Name	aipt of non-ha	azardous Signat	·	s cover	ed	by this N	1anif	est ex	сер	t as r	noted in it Mor		Yea



Non Hazardous Industrial Waste

	· · · · · · · · · · · · · · · · · · ·		455 1			T		
Shipping Manifest	1. Generat	or's US EPA ID N	lo. (if any)		. 1	1. Pa	age 1 of	page(s)
. Generator's Name and Facility Address				 Mailing Ad	ddress	٠		
STEEFIOR WATER LIGHT A DOWN THE AVE. & STEEFOH AVE. BUFE	MOR WEST	lm suest. 20		SUPE	RIOR WA			POWERCOO # 24580
l. Generator's Phone的原因是是是	<u> </u>			Fax:		2 17 17,24	* 10 00 Con 20	ent e le le revett y,
. Transporter 1 Company Name								
				Phone:				
. Transporter 2 Company Name				Priorie:				
- manoportor 2 company Marie				•				
Designated Carille, Name and Oile Address				Phone:				
Designated Facility Name and Site Address		hamrock En		ental, L	LC			
	761 M	N Highway 4	5					
	Cloque	t, MN 55720)		Phone	218	-878-011	12
. U.S. DOT Description (including Proper Ship				ntainers	10.		11.	12.
				I -	Tota	į	Unit	Waste Profile
the season is a first training to			No.	Туре	Quant	ity	Wt/Vol	Sheet#
· Hon Reservices Industrial Wester			1,,					
(OII IMPAUTED SOIL/DEBRIS)								
		:		 				
• •1								
		:						
<u> </u>	· · · · · · · · · · · · · · · · · · ·					<u> </u>		
			1					
		-			1 1			
		•						
CL-LIS-COAS OR RAPACTED SOL CL CL	ADEBRIN							
. Special Handling Instructions and Additional	Information					SH	(B Use Onl	v
Emergency Contact:							ad#	•
And the same								
	<u></u>							
B. GENERATOR'S CERTIFICATION: I hereby proper shipping name and are classified, par according to applicable international and nat	cked, marked, a	nd labeled, and	consignm are in all re	ent are fu espects in	Ily and accu proper con-	rately o	described a or transport	bove by by highway
Printed/Typed Name		Signature	- A 6	garage .	i i		Mont	h Day, Y
Street Land	1-+:-!-	A CONTRACTOR OF THE PARTY OF TH	of an Salatina security as an	Marian Marian	La harman and the		<u> </u>	
Transporter 1 Acknowledged of Receipt of M	rialerials							<u> </u>
Printed/Typed Name	ŧ	Signature	in Salahan	-	_		Mont	
Jake Endings Transporter 2 Acknowledgement of Receipt	of Matarials	The second secon	an - sample	Care per a la servicio			1 1	1.25 C.3 1
	or waterials							
Printed/Typed Name		Signature					Mont	h Day Y
Discrepancy Indication Space								
•				•				
: *								
Facility Owner or Operator: Certification of r	eceipt of non-ha	zardous materia	ls covered	by this N	/lanifest exc	ept as	noted in ite	m 19 .
Printed/Typed Name				- '				
Hamiled Machine		Signature					Monti	h Day Y

Attachment D – Maintenance Plans and Photographs

- D.1 Description of Maintenance Actions (Not Applicable)*
- D.2 Location Maps (Not Applicable)*
- D.3 Photographs (Not Applicable)*
- D.4 Inspection Log (Not Applicable)*

^{*}There is no site maintenance in relation to the site

Attachment E – Monitoring Well Information

Not Applicable - All monitoring wells on-site are part the Husky Energy facility-wide monitoring program and were not installed as part of the site investigation.

Attachment F – Source Legal Documents

- F.1 Property Deed
- F.2 Certified Survey Map*
- F.3 Verification of Zoning
- F.4 Signed Statement
- * There is no certified survey map to include

SPECIAL WARRANTY DEED

Document Name

Document Number

THIS DEED, made between MURPHY OIL USA, INC., a Delaware corporation, as to Tracts A, D, E, F, G, H and J; MURPHY OIL USA, INC.. a Delaware corporation, f/k/a New Murphy Oil USA, Inc., f/k/a Murphy Oil Corporation, as to Tracts B and I; and MURPHY OIL USA, INC., a Delaware corporation, f/k/a Murphy Corporation, a Louisiana corporation, as to Tract C and Tract K ("Grantor," whether one or more), and

CALUMET SUPERIOR, LLC, a Delaware limited liability company ("Grantee"),

for and in consideration of good and valuable consideration paid by Grantee, Grantor hereby grants, sells and conveys to Grantee the following described real estate, together with the rents. profits, fixtures, improvements, structures and other appurtenant interests constituting real property, located in Douglas County, State of Wisconsin ("Property"); subject, however, to (i) all casements, rights-of-way, covenants, restrictions, agreements, claims or other matters, rights or encumbrances of record (or referred to or described or discoverable in recorded documents or otherwise known to Grantee), (ii) liens for governmental taxes, assessments or charges, (iii) public or private rights used, laid out or dedicated for road or highway purposes, (iv) rights of owners and governmental regulation of pipelines through public rights of way or privately owned land, respectively, (v) rights of easement, or any encroachments, in and to all railroad switches, sidetracks, spur tracks or similar rights of way, and (vi) any or all reservations of minerals and mineral rights (collectively, "Permitted Encumbrances").

See Attachment A - Legal Description.

Together with all of Grantor's rights and interests in and to all pipelines serving the Property described in Attachment A and all easements and rights appurtenant thereto, and all interest of Grantor, being no less than a 12% interest, in a 7.5 mile 10" gas main extending from the Great Lakes Gas Transmission mainline to a delivery point near the Superior Refinery as more fully described in the Construction, Ownership & Operating Agreement for a Natural Gas Main in Superior, WI, dated as of November 1, 2000, between Superior Water Light & Power Company and Murphy Oil USA. Inc.

DOCUMENT# 845763

Recorded or Filed on
October 04, 2011 9:15 AM
GAYLE I. WAHNER
DOUGLAS COUNTY RECORDER

DOUGLAS COUNTY RECORDER SUPERIOR, WI 54880-2769 Fee Amount: \$30.00 Transfer Fee: \$47.052.00 Total Pages 13

Recording Area
Name and Return Address
Tamarah R. Feigl, Esq.
Fulbright & Jaworski L.L.P.
Fulbright Tower 1301 McKinney, Suite 5100 Furst am
1301 McKinney, Suite 5100 Parties
Houston, TX 77010-3095 30ck

See Attachment "A"

Parcel Identification Number (PIN)

This is not homestead property.

(is) (is not)

Grantor does hereby bind Grantor and Grantor's successors and assigns to forever warrant and defend that the title to the Property is good, indefeasible, in fee simple and free and clear of all encumbrances arising by, through, or under Grantor, except for Permitted Encumbrances.

Dated September 30, 2011	MURPHY OIL USA, INC.	
	By: [(SEAL)]	
	Name: Thomas McKinlay GUTTON	
	Title: President President	λ
	ACKNOWLEDGMENT G	B
	STATE OF ARKANSAS DE SUBLIC	
	Union COUNTY CO ARKAN	7
	Personally came before me on September 30, 2011	
	the above-named Thomas McKinlay	
	to me known to be the person(s) who executed the foregoing instrument and acknowledged the same.	
THIS INSTRUMENT DRAFTED BY:	* Lim Gutieuer	
Bryan C. Esch, Esq.	Notary Public, State of ARKAN SH 5	
DeWitt Ross & Stevens S.C.	My Commission (is permanent) (expires: 4-1-2013)	

Attachment A to Special Warranty Deed from Murphy Oil USA, Inc. to Calumet Superior, LLC dated September 30, 2011

Legal Description

TRACT A:

Lots 354 through 368, even numbers inclusive, West 18th Street, Bay Front Division. (Doc. No. 805831).

Parcel No. 02-802-01033-00.

Lots 322 through 352, even numbers inclusive, West 19th Street, Bay Front Division. (Doc. No. 766342).

Parcel No. 01-801-04149-00.

Fractional Lots 345 through 351, odd numbers inclusive, West 19th Street, Bay Front Division. (Doc. No. 806050).

Parcel No. 01-801-04161-00.

Lots 353 through 367, odd numbers inclusive, on West 19th Street, Bay Front Division. (Doc. No. 805831).

Parcel No. 02-202-01041-00.

Lots 354 through 384, even numbers inclusive, on West 19th Street, Bay Front Division. (Doc. Nos. 766342 & 805831).

Parcel No. 02-202-01054-00.

Lots 290 through 320, even numbers inclusive, West 20th Street, Bay Front Division. (Doc. No. 766342).

Parcel No. 01-801-04169-00.

Lots 321 through 352, inclusive, West 20th Street, Bay Front Division. (Doc. Nos. 766342 & 806050).

Parcel No. 01-801-04185-00.

Lots 386 through 400, even numbers inclusive, West 20th Street, Bay Front Division. (Doc. Nos. 805831, 806050 & 807145).

Parcel No. 02-802-01099-00.

Lots 353 through 384, inclusive, West 20th Street, Bay Front Division. (Doc. Nos. 766342 & 806050).

Parcel No. 02-802-01066-00.

Lots 289 through 319, odd numbers inclusive, West 21st Street, Bay Front Division. (Doc. Nos. 766342 & 805069).

Parcel No. 01-801-04218-00.

Lots 321 through 351, odd numbers inclusive, West 21st Street, Bay Front Division. (Doc. Nos. 766342 & 800813).

Parcel No. 01-801-04250-00.

Lots 353 through 415, odd numbers inclusive, West 21st Street, Bay Front Division. (Doc. No. 766342).

Parcel No. 02-802-01105-00.

Lots 385 through 416, inclusive, Herrick's Subdivision of Block 25, West 15th Street. (Doc. No. 794160).

Parcel No. 02-802-02810-00.

Lots 321 to 351, odd numbers inclusive, Linler Place, West 15th Street. (Doc. No. 794160).

Parcel No. 01-801-04630-00.

Lots 289 through 293, Block 20, McBean Blocks, West Thirteenth Street, Lots on West Fourteenth Street; together with that part of the alley which accrued thereto by reason of the vacation thereof. (Doc. Nos. 766592 & 802863).

Parcel No. 01-801-04674-00.

Lots 338 through 352, even numbers inclusive, Block 21, 16th Street, McBean Blocks West 17th Street. (Doc. No. 794160).

Parcel No. 01-801-04738-00.

Lots 1 through 18, inclusive, and Lots 20 through 26, inclusive, Block 5; Lots 1, 2 and 3 and Lots 21 through 26, inclusive, Block 6, Lots 15, 16, 17, 18, and 19, Block 4, all in Dudley Park Addition to South Superior; together with that part of the alleys, Caitlin Avenue, Fisher Avenue & Fifty-Third Street which accrued thereto by reason of the vacation thereof. (Doc. Nos. 835187 & 837523).

Parcel Nos. 08-808-03384-00, 08-808-03409-00, 08-808-03372-00 & 08-808-03412-00.

Lots 23, 24, 25 and 26, Block 5, Lots 2 through 9, inclusive, Block 6, all in Harriet Place Addition to South Superior; together with that part of Caitlin Avenue and Fifty-Third Street which accrued thereto by reason of the vacation thereof. (Doc. Nos. 835187 & 837523).

Parcel Nos. 08-808-04104-00 & 08-808-04109-00.

Lots 329 through 351, odd numbers inclusive, West 13th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Lots 322 through 352, even numbers inclusive, West 13th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Lots 321 through 351, odd numbers inclusive, West 14th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Lots 322 through 330, even numbers inclusive, West 12th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Lots 321 through 327, odd numbers inclusive, West 13th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Together with that part of 12th Street which accrued thereto by reason of the vacation thereof.

(Doc. Nos. 806050, 806973 and 723202).

Parcel Nos. 01-801-04426-00, 01-801-04442-00, 01-801-04410-00, 01-801-04397-00 & 01-801-04412-00.

Lots 225 through 271, odd numbers inclusive, Frey's Subdivision of Block 16 and of the Southeasterly One Half of Block 18, on West 19th Street. (Doc. No. 766342).

Parcel No. 01-801-04551-00.

Lots 226 through 272, even numbers inclusive, Frey's Subdivision of Block 16 and of the Southeasterly One Half of Block 18, on West 19th Street. (Doc. No. 766342).

Parcel No. 01-801-04528-00.

Lots 273 through 287, odd numbers inclusive, Hanson and Streatfield's Subdivision of Block 18 West Thirteenth Street, Lots on West Fourteenth Street. (Doc. No. 803730).

Parcel No. 01-801-04593-00.

Lots 257 through 265, inclusive, and Lots 267 through 271, odd numbers inclusive, Hanson and Streatfield's Subdivision of Block 18 West Thirteenth Street, Lots on West Fourteenth Street. (Doc. No. 804858).

Parcel Nos. 01-801-04583-00 and 01-801-04566-00.

Blocks 17, 19 and 22 and the Northeast Quarter and the South Half of Block 21, Townsite of Superior West 17th Street. (Doc. No. 794160).

Parcel No. 01-801-03209-00.

The Northeast Quarter of Section 12, Township 48 North, Range 14 West, except that part thereof lying North of County Highway A, and except Railroad Rights of Way, and except the following described property: That part of the Southeast Quarter of the Northeast Quarter of Section 12, Township 48 North, Range 14 West, described as follows: Beginning at the Southeast corner of the Northeast Quarter of Section 12; thence North 0 degrees 35 minutes 7 seconds East, along the East line of said Northeast Quarter, a distance of 362.02 feet; thence South 39 degrees 47 minutes 53 seconds West, a distance of 466.60 feet to the South line of said Northeast Quarter; thence South 89 degrees 19 minutes 05 seconds East, along said South line, a distance of 294.98 feet to the point of beginning; and except the following described property: That part of the Southeast Quarter of the Northeast Quarter of Section 12, Township 48 North, Range 14 West, described as follows: Commencing at the Southeast corner of the Northeast Quarter of Section 12, thence North 0 degrees 35 minutes 07 seconds East, along the East line of said Northeast Quarter, a distance of 362.02 feet to the point of beginning; thence continuing North 0 degrees 35 minutes 07 seconds East, along said East line, a distance of 656.36 feet; thence South 34 degrees 03 minutes 51 seconds West a distance of 1219.58 feet to the South line of said Northeast Quarter; thence South 89 degrees 19 minutes 05 seconds East, along said South line, a distance of 377.78 feet; thence North 39 degrees 47 minutes 53 seconds East a distance of 466.60 feet to the point of beginning. (Doc. No. 832177)

Parcel Nos. TS-030-01326-00, TS-030-01329-00, TS-030-01327-00 & TS-030-01328-00.

Lots 14 through 26, inclusive, Block 5, Lots 1 through 17, inclusive, Block 6, Lots 5 through 8, inclusive, Block 7, Lots 1 through 8, inclusive, Block 8, all of Block 9, all in Short Line Addition to South Superior;

together with that part of the alleys, Fifty-Fourth Street, Fifty-Fifth Street, Clough Avenue and Weeks Avenue which accrued thereto by reason of the vacation thereof. (Doc. Nos. 835187 and 837523).

Parcel Nos. 08-808-07179-00, 08-808-07197-00, 08-808-07214-00, 08-808-07218-00 & 08-808-07226-00.

Lots 481 through 512, inclusive, Lots on West 20th and West 21st Streets, in W.H. Webb's Subdivision of Block Thirty-one (31) on West 21st Street. (Doc. No. 805831).

Parcel No. 02-802-06749-00.

The Southeast Quarter of the Northeast Quarter of the Northwest Quarter of Section 2, Township 48 North, Range 14 West. (Doc. No. 835187).

Parcel No. 08-808-09932-00.

Block 13, Townsite of Superior West 13th Street, City of Superior. (Doc. No. 794162). Parcel No. 01-801-03032-00.

Lots 258 through 288, even numbers inclusive, and Lots 257 through 287, odd numbers inclusive, SW 17th Street, Subdivision of Block 18 West 17th Street, City of Superior. (Doc. No. 794160).

Parcel No. 01-801-04019-00.

Block 23, West 13th Street, Townsite of Superior. (Doc. Nos. 803374, 804371 & 806050).

Parcel Nos. 02-802-00698-01, 02-802-00698-00, 02-802-00699-00, 02-802-00734-00, 02-802-00736-00 and 02-802-00700-00.

Lots 300, 302, 304, 1301, 1303 and 1305, Subdivision of Part of the Northeast Quarter of Block 20, West Thirteenth Street, Lots on Becker Avenue, City of Superior; together with the alley which accrued thereto by reason of the vacation thereof. (Doc. Nos. 802863 and 806050)

Parcel Nos. 01-801-03856-00 & 01-801-03852-00.

All of Block 31 on West 14th Street, except right of way for Bardon Avenue, Townsite of Superior. (Doc. No. 801654).

Parcel No. 02-802-00735-00.

Lots 225 through 255, odd numbers inclusive, in the Subdivision of Blocks 16 and 17, West 12th Street, Townsite of Superior. (Doc. Nos. 808863, 812595 & 819919).

Parcel Nos. 01-801-03808-00, 01-801-03814-00 & 01-801-03815-00.

The Southeast Quarter and the Southwest Quarter and the East Half of the Northwest Quarter and the West 150 feet of the Northeast Quarter, Block 18, Townsite of Superior, West 15th Street.

The West Half of the Northwest Quarter, Block 18, West Fifteenth Street, Townsite of Superior. The Westerly Quarter of the Northeast Quarter of Block 20, Townsite of Superior, West Fifteenth Street.

The East 3/8ths of the Northeast Quarter and the East 2/5ths of the West 5/8ths of the Northeast Quarter, Block 20, West Fifteenth Street, Townsite of Superior.

The East 25 feet of the West 3/8ths of the Northeast Quarter of Block 20, West Fifteenth Street, Townsite of Superior.

The Northwest Quarter, Block 20, Townsite of Superior, West Fifteenth Street. The Southwest Quarter, Block 20, Townsite of Superior, West Fifteenth Street. The Southeast Quarter, Block 20, Townsite of Superior, West Fifteenth Street. The North Half of Block 21, Townsite of Superior, West Fifteenth Street. Block 22, Townsite of Superior, West Fifteenth Street.

(Doc. Nos. 794160 and 801793)

Parcel Nos. 01-801-03133-00, 01-801-03147-00 & 01-801-03148-00.

A certain piece of land located in the Northeast Quarter of Block Twenty, on West Thirteenth Street, in Townsite of Superior, City of Superior, Douglas County, Wisconsin, described as follows: Beginning at a point on the Westerly side of Becker Avenue Seventy-eight feet Southerly from the Northeasterly corner of the Northeasterly Quarter of Block 20 on West Thirteenth Street; thence running Southerly along Becker Avenue Fifty feet to the Southeasterly corner of said Quarter Block; thence Westerly along the Southerly line of said Block and at right angles to Becker Avenue One Hundred Seventeen feet; thence Northerly and parallel to Becker Avenue Fifty feet; thence Easterly and parallel to West Thirteenth Street One Hundred Seventeen feet to the place of beginning; together with that portion of vacated alley abutting Block.

(Doc. Nos. 766592 and 802863) Parcel No. 01-801-03855-00.

Block 23 & East 14th Street Vacated, Townsite of Superior, West 15th Street.

Block 24, Townsite of Superior, West 15th Street.

Block 26, Townsite of Superior, West 15th Street.

Block 27 & Bardon Avenue Vacated, Townsite of Superior, West 15th Street.

Block 28 & Bardon Avenue Vacated, Townsite of Superior, West 15th Street.

Block 29, Townsite of Superior, West 15th Street.

SW 1/4, Block 30, Townsite of Superior, West 15th Street.

Fractional Block 31, Except R/W, Townsite of Superior, West 15th Street.

Block 32, Except R/W, Townsite of Superior, West 15th Street.

Block 34, Except R/W, Townsite of Superior, West 15th Street.

(Doc. Nos. 794160, 801654 & Volume 508, Page 705).

Parcel No. 02-802-00736-00.

The Southwest Quarter of Block 23 on West 17th Street, Townsite of Superior.

The Northwest Quarter of Block 24 on West 17th Street, Townsite of Superior.

Block 29 on West 17th Street, Townsite of Superior.

The South Half of Block 30 on West 17th Street, Townsite of Superior.

The Northwest Quarter of Block 32 on West 17th Street, Townsite of Superior.

Block 36, except Railroad right of way and North 28th Street, on West 17th Street, Townsite of Superior.

(Doc. No. 801654)

The East Half of Block 23 on West 17th Street, Townsite of Superior.

The Northwest Quarter of Block 23 on West 17th Street, Townsite of Superior.

The West Half of the Northeast Quarter of Block 24 on West 17th Street, Townsite of Superior.

The East Half of the Northeast Quarter of Block 24 on West 17th Street, Townsite of Superior.

The South Half of Block 24 and Bardon Avenue Vacated on West 17th Street, Townsite of Superior.

Block 25 and Bardon Avenue Vacated on West 17th Street, Townsite of Superior.

Block 27 on West 17th Street, Townsite of Superior.

The North Half, the Southeast Quarter and the East Half of the Southwest Quarter of Block 28 on West 17th Street, Townsite of Superior.

The West Half of the Southwest Quarter of Block 28 on West 17th Street, Townsite of Superior.

The Northwest Quarter of Block 30 on West 17th Street, Townsite of Superior.

The West Half of the Northeast Quarter of Block 30 on West 17th Street, Townsite of Superior.

The East Half of the Northeast Quarter of Block 30 on West 17th Street, Townsite of Superior.

Block 31 on West 17th Street, Townsite of Superior.

The Northeast Quarter of Block 32 on West 17th Street, Townsite of Superior.

The South Half of Block 32 on West 17th Street, Townsite of Superior.

The Fractional Block 33, except Right of Way, on West 17th Street, Townsite of Superior.

The Southwest Quarter and the Southeast Quarter of Block 34 on West 17th Street, Townsite of Superior.

The East Quarter of the Northwest Quarter of Block 34 on West 17th Street, Townsite of Superior.

The East 3/4 of the Northeast Quarter of Block 34 on West 17th Street, Townsite of Superior.

(Doc. No. 794160)

Parcel No. 02-802-00763-00.

Blocks 15, 17 and 19, Townsite of Superior on West 19th Street.

The West Half of Block 18, Townsite of Superior on West 19th Street.

The Fractional Blocks of 20 and 21, Townsite of Superior on West 19th Street.

Blocks 13 and 14, Townsite of Superior on West 19th Street.

(Doc. No. 766342)

Parcel No. 01-801-03246-00.

Lots 353, 355 and 371, Bay Front Division, West 23rd Street.

Lots 401 and 403, Bay Front Division, West 22nd Street.

Lots 380, 382 and 384, Bay Front Division, West 22nd Street.

(Doc. Nos. 624956, 603131, 630951 and 807780).

Parcel No. 02-802-00872-00.

TRACT B:

Lots 354 through 416, even numbers inclusive, West 21st Street, Bay Front Division. (Doc. No. 528677).

Parcel No. 02-802-01104-00.

Blocks 28, 30 and 32, Townsite of Superior, West 21st Street.

Blocks 25, 27, 29, 31 and 32, Townsite of Superior, West 23rd Street.

Lots 354 through 400, even numbers inclusive, Bay Front Division, West 21st Street.

Lots 353 through 383, odd numbers inclusive, Bay Front Division, West 22nd Avenue.

Lots 385 through 399, odd numbers inclusive, Bay Front Division, West 22nd Street.

Lots 405 through 415, odd numbers inclusive, Bay Front Division, West 22nd Street.

Lots 354 through 378, even numbers inclusive, Bay Front Division, West 22nd Street.

Lots 357 through 369, odd numbers inclusive and Lots 373 through 383, odd numbers inclusive, Bay Front Division, West 23rd Street.

(Doc. Nos. 505366, 518749 and 528677).

Parcel No. 02-802-00872-00.

Lots 290 through 320, even numbers inclusive, Bay Front Division, West 21st Street.

Lots 322 through 352, even numbers inclusive, Bay Front Division, West 21st Street.

Lots 305 through 351, odd numbers inclusive, Bay Front Division, West 22nd Street.

Lots 314 through 352, even numbers inclusive, Bay Front Division, West 22nd Street.

Lots 321 through 341, odd numbers inclusive, Bay Front Division, West 23rd Street.

Lots 344 through 352, even numbers inclusive, Bay Front Division, West 23rd Street.

Lots 347, 349 and 351, Bay Front Division, West 23rd Street.

Lots 289 through 303, odd numbers inclusive, Nobles Subdivision of Block 20, West 21st Street.

Block 18, Townsite of Superior, West 21st Street.

Southwest Quarter of Block Seventeen, Townsite of Superior, West 23rd Street.

Lots 343 through 351, odd numbers inclusive, Bay Front Division, West 24th Street.

(Doc. Nos. 505366, 513195, 514949, 520340 and 528677).

Parcel No. 01-801-03339-00.

TRACT C:

Blocks 24, 26, 28 and 30, Townsite of Superior, West 23rd Street;

Blocks 22, 23, 24, 25, 26, 27, 28, 29 and 30, Townsite of Superior, West 25th Street;

Block 32, Townsite of Superior, West 26th Street;

Blocks 23, 24, 25, 26, 27, 28, 29, 30, 31 and 32, Townsite of Superior, West 27th Street, together with that part of West 27th Street which accrued thereto by reason of the vacation thereof.

Blocks 23, 24, 25, 26, 27, 28, 29, 30 and 31, Townsite of Superior, West 29th Street, together with that part of West 29th Street which accrued thereto by reason of the vacation thereof, except those parts of Blocks 30 and 31 lying East of the East line of the Wisconsin Central Railway Company Right-of-Way.

(Doc. Nos. 453215, 405966 and 458930).

Parcel No. 02-802-00872-00.

Blocks 15, 16, 18, and 20, Townsite of Superior, West 23rd Street.

The North Half and the Southeast Quarter of Block 17, Townsite of Superior, West 23rd Street.

Blocks 19 and 22, Townsite of Superior, West 23rd Street, except Lots 314, 316, 318 and 320, Bay Front Division, West 22nd Street, and Lots 343 through 352, inclusive, Bay Front Division.

Blocks 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22, Townsite of Superior, West 25th Street.

Blocks 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22, Townsite of Superior, West 27th Street.

Blocks 13, 15, 17, 19 and 21, Townsite of Superior, West 29th Street.

Together with that part of the streets and avenues which accrued thereto by reason of the vacation thereof.

(Doc. Nos. 405966 and 453215).

Parcel No. 01-801-03339-00.

TRACT D:

Lots 354 through 384, even numbers inclusive, Bay Front Division, West 23rd Street. (Doc. No. 453215).

Parcel No. 02-802-00872-00.

Lots 330 through 342, even numbers inclusive, Bay Front Division, West 23rd Street.

Lots 337, 339 and 341, Bay Front Division, West 24th Street.

(Doc. No. 453215). Parcel No. 01-801-03339-00.

TRACT E:

Lot 386, Bay Front Division, West 22nd Street. (Doc. No. 315814).

Parcel No. 02-802-00872-00.

TRACT F:

Block 23, Townsite of Superior, West 23rd Street (V 143 P 609).

Parcel No. 02-802-00872-00.

TRACT G:

That certain triangular shaped tract of land described last in deed dated August 30, 1957, from Northwestern Improvement Company to Northern Pacific Railway Company recorded January 2, 1958, in Book 254, Page 427, records of Douglas County, Wisconsin, said tract being described in said deed for reference as follows:

"A triangle of land comprising all of the Northwest Quarter Southwest Quarter (NW 1/4SW 1/4) of Section 36, Township 49 North, Range 14 West, Fourth Principal Meridian, which is situated Northwesterly of the right of way of the Northern Pacific Railway Company, being the same premises described as Parcel No. 1 in deeds recorded in Book 109 of Deeds on Pages 526 and 528, as Document Nos. 186157 and 186158 respectively, records of said county." (Document No. 840739)

Parcel No. 08-808-10047-00.

TRACT H:

The Southeast Quarter of Block 30 on West Nineteenth Street, Townsite of Superior, Douglas County, Wisconsin. (Document No. 840739)

Parcel No. 02-802-00830-00.

TRACT I:

North Half (N 1/2) of Fractional Block Thirteen (13), West Thirty-fifth (35th) Street, Townsite of Superior, according to the recorded plat or plats thereof on file and of record in the Office of the Register of Deeds in and for Douglas County, Wisconsin; together with that part of West 34th Street which accrued thereto by reason of the vacation thereof.

Block 18, West 21st Street, Townsite of Superior, Douglas County, Wisconsin.

(Doc. Nos. 522304, 528677 & 777319).

Parcel Nos. 08-808-09743-00 & 01-801-03304-00.

TRACT J:

The Southwest Quarter (SW 1/4) of Block Twenty-five (25), Townsite of Superior West 31st Street, according to the recorded plat or plats thereof on file and of record in the Office of the Register of Deeds in and for Douglas County, Wisconsin.

The Southeast Quarter (SE 1/4) of Block Fifteen (15), Townsite of Superior West 37th Street, according to the recorded plat or plats thereof on file and of record in the Office of the Register of Deeds in and for Douglas County, Wisconsin.

The Southeasterly One Hundred Seventy-five feet (SEly 175') of the Southwesterly Half (SWly 1/2) of Block Twenty (20), West Eleventh Street, Township of Superior (Southwestern Division), in the City of Superior, Douglas County, Wisconsin.

The Northwesterly One Hundred Twenty-five feet (NWly 125') of the Southwesterly One-Half (SWly 1/2) of Block Twenty (20), West Eleventh Street, Townsite of Superior, in the City of Superior, Douglas County. Wisconsin, being that part of said Block 20 which is bound on the Southwest by West Twelfth Street (now East Twelfth Street); on the Northeast by a line running midway between and parallel with West Eleventh Street and West Twelfth Street (now East Eleventh and Twelfth Streets); on the Northwest by Nettleton Avenue (now Twenty-first Avenue East); and the Southeast by a line One Hundred Twenty-five feet (125') Southeasterly from, and parallel to the Northwesterly boundary of Block 20.

The Southerly One Hundred feet (Sly 100') of Northwesterly Two Hundred Twenty-five feet (NWly 225') of Southwesterly one-half (SWly 1/2) of Block Twenty (20), on West Eleventh Street, Townsite of Superior, in the City of Superior, Douglas County, Wisconsin.

Lots 450 through 480, Even Numbers inclusive, Subdivision of North 1/2 & SE 1/4 Block 30 on West 15th Street, Lots on West 15th Street, Douglas County, Wisconsin.

Lots 449 through 463, Odd Numbers inclusive, Subdivision of North 1/2 & SE 1/4 Block 30 on West 15th Street, Lots on West 16th Street, Douglas County, Wisconsin.

Lots 386 through 416 Even Numbers inclusive, Chrisfield Johnson's Subdivision of Block 26, West 17th Street, Douglas County, Wisconsin.

Lots 385 through 415 Odd Numbers inclusive, Chrisfield Johnson's Subdivision of Block 26, West 17th Street, Douglas County, Wisconsin.

Lots 226 through 256, Even Numbers inclusive, West 17th Street, Subdivision of Block 16 West 17th Street, Douglas County, Wisconsin.

Lots 225 through 255, Odd Numbers inclusive, Southwest 18th Street, Subdivision of Block 16 West 17th Street, Douglas County, Wisconsin.

The Northeast Quarter (NE 1/4) and the East Half of the East Half of the Northwest Quarter (E 1/2 E 1/2 NW 1/4), Block Seventeen (17), West Fifteenth Street, in Townsite of Superior, City of Superior, Douglas County, Wisconsin.

The West Half of the East Half of the Northwest Quarter (W 1/2 of E 1/2 of NW 1/4) of Block Seventeen (17), West Fifteenth Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin.

The West Half of the Northwest Quarter (W 1/2 NW 1/4) of Block Seventeen (17), West Fifteenth Street, Townsite of Superior, in the City of Superior, Douglas County, Wisconsin.

The East 1/4 of SE 1/4, Block 17, Townsite of Superior West 15th Street, Douglas County, Wisconsin.

The West 3/4 of SE 1/4, Block 17, Townsite of Superior West 15th Street, Douglas County, Wisconsin.

The North Half (N 1/2) of Block Seventeen (17), West Thirteenth Street, Townsite of Superior, (Superior Division), in City of Superior, Douglas County, Wisconsin.

The South Half (S 1/2) of Block Seventeen (17), West Thirteenth Street, Townsite of Superior, (Superior Division), in City of Superior, Douglas County, Wisconsin.

Fractional Lots Two Hundred Fifty-seven (257), Two Hundred Fifty-nine (259), Two Hundred Sixty-one (261), Two Hundred Sixty-three (263) and Two Hundred Sixty-five (265), West Twelfth Street, Subdivision of Block Eighteen (18), West Eleventh Street, in Townsite of Superior, City of Superior, Douglas County, Wisconsin, together with that part of the West Half (W 1/2) of vacated Villard Street abutting said lots.

All of Block Sixteen (16), on West Twenty-First Street, in the City of Superior, Douglas County, Wisconsin.

All of Block Thirteen (13), excluding right of way, West 21st Street, Townsite of Superior, Douglas County, Wisconsin.

The Northwest Quarter (NW 1/4) and the Southwest Quarter (SW 1/4) of Block Twenty (20), Townsite of Superior West 16th Street, Douglas County, Wisconsin.

The West Half of the West Half of the Northwest Quarter (W 1/2 W 1/2 NW 1/4) of Block Nineteen (19), West Thirteenth Street, Townsite of Superior, in the City of Superior, Douglas County, Wisconsin.

The Southeast Quarter (SE 1/4) of Block Nineteen (19), West Thirteenth Street, Townsite of Superior, (Southwestern Division), in the City of Superior, Douglas County, Wisconsin.

The East One Hundred Twenty feet (E 120') of the Northeast Quarter (NE 1/4) of Block Nineteen (19), West Thirteenth Street, Townsite of Superior, (Southwestern Division), in the City of Superior, Douglas County, Wisconsin.

The Southwest Quarter (SW 1/4) of Block Nineteen (19), West 13th Street, Townsite of Superior, City of Superior, County of Douglas, Wisconsin.

The East Three-Fourths of the Northwest Quarter (E 3/4 NW 1/4), except the East Half of the East Half (E 1/2 E 1/2), Block Nineteen (19), West 13th Street, Townsite of Superior, City of Superior, County of Douglas, Wisconsin.

The East Half of the East Half of the Northwest Quarter (E 1/2 E 1/2 NW 1/4) and the West Eighty feet (W 80') of the Northeast Quarter (NE 1/4) of Block Nineteen (19), West Thirteenth Street, Townsite of superior, City of Superior, Douglas County, Wisconsin.

The East One-half (E 1/2) of the Northeast Quarter (NE 1/4) and the East One-half (E 1/2) of the Southeast Quarter (SE 1/4) of Block Nineteen (19), West Fifteenth Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin.

The NW 1/4 & W 1/2 of NE 1/4 and W 1/4 of SE 1/4 & E 3/4 of SW 1/4, Block 19, Townsite of Superior of Superior West 15th Street, Douglas County, Wisconsin.

The W 1/2 of the W 1/4 of the SW 1/4 of Block 19, Townsite of Superior West 15th Street, Douglas County, Wisconsin.

Lots 290 through 320, Even Numbers inclusive, West 17th Street, Subdivision of Block 20 West 17th Street, Douglas County, Wisconsin.

Lots 289 through 319, Odd Numbers inclusive, West 18th Street, Subdivision of Block 20 West 17th Street, Douglas County, Wisconsin.

Lots 258 through 288, Even Numbers inclusive, West 20th Street, AND Lots 257 through 287, Odd Numbers inclusive, West 21st Street, all in the Subdivision of Block 17, on West 21st Street, Townsite of Superior, Douglas County, Wisconsin.

Lots 273 through 287, Odd Numbers inclusive, West Fifteenth Street, in Plat of McBean Blocks, being a Subdivision of the Southwest Quarter (SW 1/4) of Block Seventeen (17), West Fifteenth Street, Townsite of Superior, (Southwestern Division), in the City of Superior, Douglas County, Wisconsin.

Lots 258 and 260, Block 18, 15th Street, McBean Blocks, Douglas County, Wisconsin.

Lots 299, 301 & 303, Block 20, 14th Street & alley vacated, McBean Blocks, West 13th Street, Douglas County, Wisconsin.

Lots 393 through 399, Odd Numbers inclusive, Block 25, McBean Blocks, West Thirteenth Street, City of Superior, Douglas County, Wisconsin.

Lots 281 through 287, Odd Numbers inclusive, on West Twelfth Street, in Subdivision of Block Eighteen, West Eleventh Street, Townsite of Superior (Southwestern Division), City of Superior, Douglas County, Wisconsin.

Lots 267 through 279, Odd Numbers inclusive, on West Twelfth Street, in Subdivision of Block Eighteen (18), West Eleventh Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin.

Block Thirteen (13), West Twenty-third Street, except right-of-way, in Townsite of Superior, City of Superior, Douglas County, Wisconsin, together with that part of the West 23rd Street which accrued thereto by reason of vacation thereof.

E 3/4 of Block 12 on West 37th Street, Townsite of Superior, Douglas County, Wisconsin, except right of way.

E 3/4 of Block 11 on West 39th Street, Townsite of Superior, Douglas County, Wisconsin, except right of way.

E 3/4 of Block 12 on West 39th Street, Townsite of Superior, Douglas County, Wisconsin, except right of way.

NE 1/4 of Block 12 on West 43rd Street, Townsite of Superior, Douglas County, Wisconsin.

That part of Block 10, West 41st Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin, lying north of the following described line: Beginning at the most northerly corner of Fractional Block 8, West 41st Street, Townsite of Superior, thence westerly and parallel with the south line of the Southeast Quarter of Section 35, Township Forty-Nine North, Range 14 West to the northeasterly line of Fractional Block 9, West 43rd Street, Townsite of Superior, and said line there terminating.

That part of Block 11, West 41st Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin lying East of the East right of way line of the former Soo Line Railroad.

Lots 225 through 255, Odd Numbers inclusive, Lots on 16th Street, in the Subdivision of Block 16 on West 15th Street, in the City of Superior, Douglas County, Wisconsin.

Lots 226 through 256, Even Numbers inclusive, Lots on West 15th Street, in the Subdivision of Block 16 on West 15th Street, in the City of Superior, Douglas County, Wisconsin.

(Doc. Nos. 624023, 633082, 725853, 766342, 794160, 795896, 799526, 801654, 802205, 803377, 803498, 803978, 803979, 803733, 803734, 804451, 804524, 804525, 804706,806050, 806592, 806593, 806973, 809578, 808862, 809996, 810193, 813026, 828601, 829415 & 829526).

Parcel Nos. 02-802-00947-00, 01-801-02976-01, 01-801-02976-03, 01-801-02976-05, 02-802-06614-00, 02-802-01293-00, 01-801-03987-00, 01-801-03125-00, 01-801-03131-00, 01-801-03129-00, 01-801-03128-00, 01-801-03123-00, 01-801-03042-00, 01-801-03046-00, 01-801-03805-00, 01-801-03302-00, 01-801-03294-00, 01-801-03055-00, 01-801-03047-00, 01-801-03047-01, 01-801-03047-02, 01-801-03047-03, 01-801-03047-04, 01-801-03048-00, 01-801-03136-00, 01-801-03145-00, 01-801-04051-00, 01-801-04083-00, 01-801-04706-00, 01-801-04713-00, 01-801-04679-00, 02-802-03804-00, 01-801-03807-00, 01-801-03806-00; 01-801-03326-00, 08-808-09780-00, 08-808-09821-00, 08-808-09823-00, 08-808-09892-00, 08-808-09808-09892-00, 08-808-09892-00, 08-808-09892-00, 08-808-09892

TRACT K:

That part of the West Half (W 1/2) of Section Thirty-six (36), Township forty-nine (49) North, Range Fourteen (14) West, Douglas County, Wisconsin, more fully described as follows: Commencing at the North quarter corner of said Section 36, Township 49 North, Range 14 West, thence due south along the north-south quarter line, said quarter line being the center line of Bardon Avenue, a distance of 1,456.64 feet to the south property line of 26th Avenue extended, thence south 48 degrees and 36 minutes west along the south property line of 26th Avenue, a distance of 481 feet to the point of beginning, thence continuing in the same straight line a distance of 1,323.53 feet to a point, thence south 89 degrees and 46 minutes west a distance of 151.91 feet to a point, thence South 48 degrees 36 minutes West a distance of 162.43 feet to a point, thence South 41 degrees 24 minutes east a distance of 751 feet to a point, thence north 48 degrees and 36 minutes East a distance of 1,463.36 feet to a point on the west line of Bardon Avenue a distance of 207.10 feet to a point, thence north 41 degrees and 24 minutes west a distance of 495.66 feet to the point of beginning.

(Doc. No. 459590 V 271 P 358) Parcel No. 01-801-05132-00. DOCUMENT NO.

AFFIDAVIT OF CORRECTION

DOCUMENT# **890824** Recorded or filed on 08-03-2017 at 02:22 PM

TRACY A MIDDLETON DOUGLAS COUNTY RECORDER

This document is exempt from transfer fee pursuant to Wis. Stats. 77.23(3): correction of a document previously recorded.	Fee Amount: \$30.00 FEE EXEMPT: 3 Total Pages: 15 ELECTRONICALLY RECORDED DOCUMENT	
AFFIANT, <u>John A. Moore</u> , on behalf of the undersigned Murphy Oil USA, Inc., a Delaware corporation, hereby swears or affirms that a certain document titled <u>Special Warranty Deed</u> recorded on the <u>4th</u> day of <u>October</u> , <u>2011</u> , as Document Number <u>845763</u> which was recorded in <u>Douglas</u> County, State of Wisconsin, contained the following error (if more space is needed, please attach addendum):		
The legal description set forth in Attachment A of said document is incomplete.		
AFFIANT makes this Affidavit for the purpose of correcting the above document as follows (if more space is needed, please attach addendum):	RETURN TO Danielle M. Bergner, Esq. Michael Best & Friedrich LLP 100 East Wisconsin Ave., Ste. 3300 Milwaukee, WI 53202	
The legal descriptions set forth on Exhibit A attached hereto and made a part hereof are hereby incorporated and made part of Attachment A to the above-referenced Special Warranty Deed.	See Attached Exhibit A Parcel Identification Number (PIN)	
AFFIANT is the (check one): ☐ Drafter of the document being corrected. ☐ Owner of the property described in the document being corrected. ☑ Other (explain: Affiant is the authorized representative of the Grantor na	amed in the above-referenced deed).	
The original document (in part or whole) ☑ is ☐ is not attached to this Affidavit (please attach legal description and names of grantors and grantees).	(if original document is not attached,	
Signed: MURRHY OIL USA, INC. Name/Title: John A. Moore, Sr. V	Vice President & General Counsel	
) ss. County of United)		
August UNION COUNTY NOTARY PUBLIC - ARKANSAS My Commission Expires September 07, 2024 Commission No. 12400715 *	hy Oil USA, INC., a Delaware corporation met Superior, LLC, a Delaware corporation	
Notary Public, State of <u>Arkansas</u> My Commission (expires) (is): <u>oq lo1/2024</u> .		
THIS INSTRUMENT WAS DRAFTED BY: Danielle M. Berger, Esq. Michael Best & Friedrich LLP		

This instrument □ is ☒ is not (check one) a conveyance of real property as per s. 77.21(1) Wisconsin Statutes. (A Wisconsin Real Estate Transfer Return is required for instruments that do convey real property).

EXHIBIT A LEGAL DESCRIPTIONS INCORPORATED AND MADE PART OF ATTACHMENT A TO SPECIAL WARRANTY DEED DOCUMENT NO. 845763

Parcel 1:

Block Thirteen (13) on West 31st Street, Block Fourteen (14) on West 31st Street, Block Thirteen (13) on West 33rd Street, Fractional Block Fourteen (14) on West 33rd Street, Block Fourteen (14) on West 29th Street, Subject to Northern Pacific Railway Company easement for right-of-way on Newton Avenue, Block Sixteen (16) on West 29th Street, Block Eighteen (18) on West 29th Street, Block Twenty (20) on West 29th Street and Block Twenty-two (22) on West 29th Street, all in the Townsite of Superior, now City of Superior, Douglas County, Wisconsin, together with vacated West 30th, 31st, 32nd, 33rd, and 34th streets and vacated 21st, 22nd and 23rd avenues East, lying East of Hill Avenue.

Parcel 2:

Blocks Fifteen (15), Sixteen (16) and Seventeen (17) of West 31st Street, that part lying East of the East line of Hill Avenue of Blocks, Eighteen (18), Nineteen (19) and Twenty (20) on West 31st Street, Block Fifteen (15) on West 33rd Street and that part lying East of the East line of Hill Avenue of Blocks Sixteen (16) and Seventeen (17) on West 33rd Street, all in the Townsite of Superior, Now City of Superior, Douglas County, Wisconsin, together with the vacated West 30th, 31st, 32nd, 33rd, and 34th streets and Vacated 21st, 22nd and 23rd avenues East, lying East of Hill Avenue.

Parcel No. 08-808-09689-00

Property Address: 4210 Hill Avenue, Superior, WI

AND

Block 30 on W 19th Street, EXCEPT the Southeast Quarter (SE1/4), the West One-half of Block 23 on W 19th Street, Northwest Quarter (NW1/4) of Block 25 on W 21st Street, and all of Blocks 25, 26, 27, 28, 29, 31 and 32 on W 19th Street and Blocks 27 and 29 on West 21st Street, all in the Townsite of Superior, City of Superior, Douglas County, Wisconsin.

Part of Parcel No. 02-802-00815-00

Property Address: Vacant Land on Hill Avenue

SPECIAL WARRANTY DEED

Document Name

Document Number

THIS DEED, made between MURPHY OIL USA, INC., a Delaware corporation, as to Tracts A, D, E, F, G, H and J; MURPHY OIL USA, INC., a Delaware corporation, f/k/a New Murphy Oil USA, Inc., f/k/a Murphy Oil Corporation, as to Tracts B and I; and MURPHY OIL USA, INC., a Delaware corporation, f/k/a Murphy Corporation, a Louisiana corporation, as to Tract C and Tract K ("Grantor," whether one or more), and

CALUMET SUPERIOR, LLC, a Delaware limited liability company ("Grantee"),

for and in consideration of good and valuable consideration paid by Grantee, Grantor hereby grants, sells and conveys to Grantee the following described real estate, together with the rents, profits, fixtures, improvements, structures and other appurtenant interests constituting real property, located in Douglas County, State of Wisconsin ("Property"); subject, however, to (i) all easements, rights-of-way, covenants, restrictions, agreements, claims or other matters, rights or encumbrances of record (or referred to or described or discoverable in recorded documents or otherwise known to Grantee), (ii) liens for governmental taxes, assessments or charges, (iii) public or private rights used, laid out or dedicated for road or highway purposes, (iv) rights of owners and governmental regulation of pipelines through public rights of way or privately owned land, respectively, (v) rights of easement, or any encroachments, in and to all railroad switches, sidetracks, spur tracks or similar rights of way, and (vi) any or all reservations of minerals and mineral rights (collectively, "Permitted Encumbrances").

See Attachment A - Legal Description.

Together with all of Grantor's rights and interests in and to all pipelines serving the Property described in Attachment A and all easements and rights appurtenant thereto, and all interest of Grantor, being no less than a 12% interest, in a 7.5 mile 10" gas main extending from the Great Lakes Gas Transmission mainline to a delivery point near the Superior Refinery as more fully described in the Construction, Ownership & Operating Agreement for a Natural Gas Main in Superior, WI, dated as of November 1, 2000, between Superior Water Light & Power Company and Murphy Oil USA, Inc.

DOCUMENT# 845763

Recorded or Filed on October 04, 2011 9:15 AM GAYLE I. WAHNER DOUGLAS COUNTY RECORDER SUPERIOR, WI 54880-2769 Fee Amount: \$30.00 Transfer Fee: \$47.052.00 Total Pages 13

Recording Area

Name and Return Address
Tamarah R. Feigl, Esq.
Fulbright & Jaworski L.L.P.
Fulbright Tower
1301 McKinney, Suite 5100 Furst am
Houston, TX 77010-3095 30ck

See Attachment "A"

Parcel Identification Number (PIN)

This is not homestead property

(is) (is not)

Grantor does hereby bind Grantor and Grantor's successors and assigns to forever warrant and defend that the title to the Property is good, indefeasible, in fee simple and free and clear of all encumbrances arising by, through, or under Grantor, except for Permitted Encumbrances.

Dated September 30, 2011	MURPHY OIL USA, INC. —— :
	By: [(SEAL)]
	Name: Thomas McKinlay
	Title: President
	ACKNOWLEDGMENT
	STATE OF ARKANSAS SUBLIC
	Union COUNTY CO, ARKAN
	Personally came before me on September 30, 2011
	the above-named Thomas McKinlay
	to me known to be the person(s) who executed the foregoing instrument and acknowledged the same.
THIS INSTRUMENT DRAFTED BY:	* Lim Gutiener
Bryan C. Esch, Esq.	Notary Public, State of ARKANSAS
DeWitt Ross & Stevens S.C.	My Commission (is permanent) (expires: <u>2-1-2013</u>)

LOUDDING OUT LICE INCO

Attachment A to Special Warranty Deed from Murphy Oil USA, Inc. to Calumet Superior, LLC dated September 30, 2011

Legal Description

TRACT A:

Lots 354 through 368, even numbers inclusive, West 18th Street, Bay Front Division. (Doc. No. 805831).

Parcel No. 02-802-01033-00.

Lots 322 through 352, even numbers inclusive, West 19th Street, Bay Front Division. (Doc. No. 766342).

Parcel No. 01-801-04149-00.

Fractional Lots 345 through 351, odd numbers inclusive, West 19th Street, Bay Front Division. (Doc. No. 806050).

Parcel No. 01-801-04161-00.

Lots 353 through 367, odd numbers inclusive, on West 19th Street, Bay Front Division. (Doc. No. 805831).

Parcel No. 02-202-01041-00.

Lots 354 through 384, even numbers inclusive, on West 19th Street, Bay Front Division. (Doc. Nos. 766342 & 805831).

Parcel No. 02-202-01054-00.

Lots 290 through 320, even numbers inclusive, West 20th Street, Bay Front Division. (Doc. No. 766342).

Parcel No. 01-801-04169-00.

Lots 321 through 352, inclusive, West 20th Street, Bay Front Division. (Doc. Nos. 766342 & 806050).

Parcel No. 01-801-04185-00.

Lots 386 through 400, even numbers inclusive, West 20th Street, Bay Front Division. (Doc. Nos. 805831, 806050 & 807145).

Parcel No. 02-802-01099-00.

Lots 353 through 384, inclusive, West 20th Street, Bay Front Division. (Doc. Nos. 766342 & 806050).

Parcel No. 02-802-01066-00.

Lots 289 through 319, odd numbers inclusive, West 21st Street, Bay Front Division. (Doc. Nos. 766342 & 805069).

Parcel No. 01-801-04218-00.

Lots 321 through 351, odd numbers inclusive, West 21st Street, Bay Front Division. (Doc. Nos. 766342 & 800813).

Parcel No. 01-801-04250-00.

Lots 353 through 415, odd numbers inclusive, West 21st Street, Bay Front Division. (Doc. No. 766342).

Parcel No. 02-802-01105-00.

Lots 385 through 416, inclusive, Herrick's Subdivision of Block 25, West 15th Street. (Doc. No. 794160).

Parcel No. 02-802-02810-00.

Lots 321 to 351, odd numbers inclusive, Linler Place, West 15th Street. (Doc. No. 794160).

Parcel No. 01-801-04630-00.

Lots 289 through 293, Block 20, McBean Blocks, West Thirteenth Street, Lots on West Fourteenth Street; together with that part of the alley which accrued thereto by reason of the vacation thereof. (Doc. Nos. 766592 & 802863).

Parcel No. 01-801-04674-00.

Lots 338 through 352, even numbers inclusive, Block 21, 16th Street, McBean Blocks West 17th Street. (Doc. No. 794160).

Parcel No. 01-801-04738-00.

Lots 1 through 18, inclusive, and Lots 20 through 26, inclusive, Block 5; Lots 1, 2 and 3 and Lots 21 through 26, inclusive, Block 6, Lots 15, 16, 17, 18, and 19, Block 4, all in Dudley Park Addition to South Superior; together with that part of the alleys, Caitlin Avenue, Fisher Avenue & Fifty-Third Street which accrued thereto by reason of the vacation thereof. (Doc. Nos. 835187 & 837523).

Parcel Nos. 08-808-03384-00, 08-808-03409-00, 08-808-03372-00 & 08-808-03412-00.

Lots 23, 24, 25 and 26, Block 5, Lots 2 through 9, inclusive, Block 6, all in Harriet Place Addition to South Superior; together with that part of Caitlin Avenue and Fifty-Third Street which accrued thereto by reason of the vacation thereof. (Doc. Nos. 835187 & 837523).

Parcel Nos. 08-808-04104-00 & 08-808-04109-00.

Lots 329 through 351, odd numbers inclusive, West 13th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Lots 322 through 352, even numbers inclusive, West 13th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Lots 321 through 351, odd numbers inclusive, West 14th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Lots 322 through 330, even numbers inclusive, West 12th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Lots 321 through 327, odd numbers inclusive, West 13th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Together with that part of 12th Street which accrued thereto by reason of the vacation thereof.

(Doc. Nos. 806050, 806973 and 723202).

Parcel Nos. 01-801-04426-00, 01-801-04442-00, 01-801-04410-00, 01-801-04397-00 & 01-801-04412-00.

Lots 225 through 271, odd numbers inclusive, Frey's Subdivision of Block 16 and of the Southeasterly One Half of Block 18, on West 19th Street. (Doc. No. 766342).

Parcel No. 01-801-04551-00.

Lots 226 through 272, even numbers inclusive, Frey's Subdivision of Block 16 and of the Southeasterly One Half of Block 18, on West 19th Street. (Doc. No. 766342).

Parcel No. 01-801-04528-00.

Lots 273 through 287, odd numbers inclusive, Hanson and Streatfield's Subdivision of Block 18 West Thirteenth Street, Lots on West Fourteenth Street. (Doc. No. 803730).

Parcel No. 01-801-04593-00.

Lots 257 through 265, inclusive, and Lots 267 through 271, odd numbers inclusive, Hanson and Streatfield's Subdivision of Block 18 West Thirteenth Street, Lots on West Fourteenth Street. (Doc. No. 804858).

Parcel Nos. 01-801-04583-00 and 01-801-04566-00.

Blocks 17, 19 and 22 and the Northeast Quarter and the South Half of Block 21, Townsite of Superior West 17th Street. (Doc. No. 794160).

Parcel No. 01-801-03209-00.

The Northeast Quarter of Section 12, Township 48 North, Range 14 West, except that part thereof lying North of County Highway A, and except Railroad Rights of Way, and except the following described property: That part of the Southeast Quarter of the Northeast Quarter of Section 12, Township 48 North, Range 14 West, described as follows: Beginning at the Southeast corner of the Northeast Quarter of Section 12; thence North 0 degrees 35 minutes 7 seconds East, along the East line of said Northeast Quarter, a distance of 362.02 feet; thence South 39 degrees 47 minutes 53 seconds West, a distance of 466.60 feet to the South line of said Northeast Quarter; thence South 89 degrees 19 minutes 05 seconds East, along said South line, a distance of 294.98 feet to the point of beginning; and except the following described property: That part of the Southeast Quarter of the Northeast Quarter of Section 12, Township 48 North, Range 14 West, described as follows: Commencing at the Southeast corner of the Northeast Quarter of Section 12, thence North 0 degrees 35 minutes 07 seconds East, along the East line of said Northeast Ouarter, a distance of 362.02 feet to the point of beginning; thence continuing North 0 degrees 35 minutes 07 seconds East, along said East line, a distance of 656.36 feet; thence South 34 degrees 03 minutes 51 seconds West a distance of 1219.58 feet to the South line of said Northeast Quarter; thence South 89 degrees 19 minutes 05 seconds East, along said South line, a distance of 377.78 feet; thence North 39 degrees 47 minutes 53 seconds East a distance of 466.60 feet to the point of beginning. (Doc. No. 832177)

Parcel Nos. TS-030-01326-00, TS-030-01329-00, TS-030-01327-00 & TS-030-01328-00.

Lots 14 through 26, inclusive, Block 5, Lots 1 through 17, inclusive, Block 6, Lots 5 through 8, inclusive, Block 7, Lots 1 through 8, inclusive, Block 8, all of Block 9, all in Short Line Addition to South Superior;

together with that part of the alleys, Fifty-Fourth Street, Fifty-Fifth Street, Clough Avenue and Weeks Avenue which accrued thereto by reason of the vacation thereof. (Doc. Nos. 835187 and 837523).

Parcel Nos. 08-808-07179-00, 08-808-07197-00, 08-808-07214-00, 08-808-07218-00 & 08-808-07226-00.

Lots 481 through 512, inclusive, Lots on West 20th and West 21st Streets, in W.H. Webb's Subdivision of Block Thirty-one (31) on West 21st Street. (Doc. No. 805831).

Parcel No. 02-802-06749-00.

The Southeast Quarter of the Northeast Quarter of the Northwest Quarter of Section 2, Township 48 North, Range 14 West. (Doc. No. 835187).

Parcel No. 08-808-09932-00.

Block 13, Townsite of Superior West 13th Street, City of Superior. (Doc. No. 794162). Parcel No. 01-801-03032-00.

Lots 258 through 288, even numbers inclusive, and Lots 257 through 287, odd numbers inclusive, SW 17th Street, Subdivision of Block 18 West 17th Street, City of Superior. (Doc. No. 794160).

Parcel No. 01-801-04019-00.

Block 23, West 13th Street, Townsite of Superior. (Doc. Nos. 803374, 804371 & 806050).

Parcel Nos. 02-802-00698-01, 02-802-00698-00, 02-802-00699-00, 02-802-00734-00, 02-802-00736-00 and 02-802-00700-00.

Lots 300, 302, 304, 1301, 1303 and 1305, Subdivision of Part of the Northeast Quarter of Block 20, West Thirteenth Street, Lots on Becker Avenue, City of Superior; together with the alley which accrued thereto by reason of the vacation thereof. (Doc. Nos. 802863 and 806050)

Parcel Nos. 01-801-03856-00 & 01-801-03852-00.

All of Block 31 on West 14th Street, except right of way for Bardon Avenue, Townsite of Superior. (Doc. No. 801654).

Parcel No. 02-802-00735-00.

Lots 225 through 255, odd numbers inclusive, in the Subdivision of Blocks 16 and 17, West 12th Street, Townsite of Superior. (Doc. Nos. 808863, 812595 & 819919).

Parcel Nos. 01-801-03808-00, 01-801-03814-00 & 01-801-03815-00.

The Southeast Quarter and the Southwest Quarter and the East Half of the Northwest Quarter and the West 150 feet of the Northeast Quarter, Block 18, Townsite of Superior, West 15th Street.

The West Half of the Northwest Quarter, Block 18, West Fifteenth Street, Townsite of Superior. The Westerly Quarter of the Northeast Quarter of Block 20, Townsite of Superior, West Fifteenth Street.

The East 3/8ths of the Northeast Quarter and the East 2/5ths of the West 5/8ths of the Northeast Quarter, Block 20, West Fifteenth Street, Townsite of Superior.

The East 25 feet of the West 3/8ths of the Northeast Quarter of Block 20, West Fifteenth Street, Townsite of Superior.

The Northwest Quarter, Block 20, Townsite of Superior, West Fifteenth Street. The Southwest Quarter, Block 20, Townsite of Superior, West Fifteenth Street. The Southeast Quarter, Block 20, Townsite of Superior, West Fifteenth Street. The North Half of Block 21, Townsite of Superior, West Fifteenth Street. Block 22, Townsite of Superior, West Fifteenth Street.

(Doc. Nos. 794160 and 801793)
Parcel Nos. 01-801-03133-00, 01-801-03147-00 & 01-801-03148-00.

A certain piece of land located in the Northeast Quarter of Block Twenty, on West Thirteenth Street, in Townsite of Superior, City of Superior, Douglas County, Wisconsin, described as follows: Beginning at a point on the Westerly side of Becker Avenue Seventy-eight feet Southerly from the Northeasterly corner of the Northeasterly Quarter of Block 20 on West Thirteenth Street; thence running Southerly along Becker Avenue Fifty feet to the Southeasterly corner of said Quarter Block; thence Westerly along the Southerly line of said Block and at right angles to Becker Avenue One Hundred Seventeen feet; thence Northerly and parallel to Becker Avenue Fifty feet; thence Easterly and parallel to West Thirteenth Street One Hundred Seventeen feet to the place of beginning; together with that portion of vacated alley abutting Block.

(Doc. Nos. 766592 and 802863) Parcel No. 01-801-03855-00.

Block 23 & East 14th Street Vacated, Townsite of Superior, West 15th Street.

Block 24, Townsite of Superior, West 15th Street.

Block 26, Townsite of Superior, West 15th Street.

Block 27 & Bardon Avenue Vacated, Townsite of Superior, West 15th Street.

Block 28 & Bardon Avenue Vacated, Townsite of Superior, West 15th Street.

Block 29, Townsite of Superior, West 15th Street.

SW 1/4, Block 30, Townsite of Superior, West 15th Street.

Fractional Block 31, Except R/W, Townsite of Superior, West 15th Street.

Block 32, Except R/W, Townsite of Superior, West 15th Street.

Block 34, Except R/W, Townsite of Superior, West 15th Street.

(Doc. Nos. 794160, 801654 & Volume 508, Page 705).

Parcel No. 02-802-00736-00.

The Southwest Quarter of Block 23 on West 17th Street, Townsite of Superior.

The Northwest Quarter of Block 24 on West 17th Street, Townsite of Superior.

Block 29 on West 17th Street, Townsite of Superior.

The South Half of Block 30 on West 17th Street, Townsite of Superior.

The Northwest Quarter of Block 32 on West 17th Street, Townsite of Superior.

Block 36, except Railroad right of way and North 28th Street, on West 17th Street, Townsite of Superior.

(Doc. No. 801654)

The East Half of Block 23 on West 17th Street, Townsite of Superior.

The Northwest Quarter of Block 23 on West 17th Street, Townsite of Superior.

The West Half of the Northeast Quarter of Block 24 on West 17th Street, Townsite of Superior.

The East Half of the Northeast Quarter of Block 24 on West 17th Street, Townsite of Superior.

The South Half of Block 24 and Bardon Avenue Vacated on West 17th Street, Townsite of Superior.

Block 25 and Bardon Avenue Vacated on West 17th Street, Townsite of Superior.

Block 27 on West 17th Street, Townsite of Superior.

The North Half, the Southeast Quarter and the East Half of the Southwest Quarter of Block 28 on West 17th Street, Townsite of Superior.

The West Half of the Southwest Quarter of Block 28 on West 17th Street, Townsite of Superior.

The Northwest Quarter of Block 30 on West 17th Street, Townsite of Superior.

The West Half of the Northeast Quarter of Block 30 on West 17th Street, Townsite of Superior.

The East Half of the Northeast Quarter of Block 30 on West 17th Street, Townsite of Superior.

Block 31 on West 17th Street, Townsite of Superior.

The Northeast Quarter of Block 32 on West 17th Street, Townsite of Superior.

The South Half of Block 32 on West 17th Street, Townsite of Superior.

The Fractional Block 33, except Right of Way, on West 17th Street, Townsite of Superior.

The Southwest Quarter and the Southeast Quarter of Block 34 on West 17th Street, Townsite of Superior.

The East Quarter of the Northwest Quarter of Block 34 on West 17th Street, Townsite of Superior.

The East 3/4 of the Northeast Quarter of Block 34 on West 17th Street, Townsite of Superior.

(Doc. No. 794160)

Parcel No. 02-802-00763-00.

Blocks 15, 17 and 19, Townsite of Superior on West 19th Street. The West Half of Block 18, Townsite of Superior on West 19th Street. The Fractional Blocks of 20 and 21, Townsite of Superior on West 19th Street. Blocks 13 and 14, Townsite of Superior on West 19th Street.

(Doc. No. 766342) Parcel No. 01-801-03246-00.

Lots 353, 355 and 371, Bay Front Division, West 23rd Street. Lots 401 and 403, Bay Front Division, West 22nd Street.

Lots 380, 382 and 384, Bay Front Division, West 22nd Street.

(Doc. Nos. 624956, 603131, 630951 and 807780). Parcel No. 02-802-00872-00.

TRACT B:

Lots 354 through 416, even numbers inclusive, West 21st Street, Bay Front Division. (Doc. No. 528677).

Parcel No. 02-802-01104-00.

Blocks 28, 30 and 32, Townsite of Superior, West 21st Street.

Blocks 25, 27, 29, 31 and 32, Townsite of Superior, West 23rd Street.

Lots 354 through 400, even numbers inclusive, Bay Front Division, West 21st Street.

Lots 353 through 383, odd numbers inclusive, Bay Front Division, West 22nd Avenue.

Lots 385 through 399, odd numbers inclusive, Bay Front Division, West 22nd Street.

Lots 405 through 415, odd numbers inclusive, Bay Front Division, West 22nd Street.

Lots 354 through 378, even numbers inclusive, Bay Front Division, West 22nd Street.

Lots 357 through 369, odd numbers inclusive and Lots 373 through 383, odd numbers inclusive, Bay Front Division, West 23rd Street.

(Doc. Nos. 505366, 518749 and 528677).

Parcel No. 02-802-00872-00.

Lots 290 through 320, even numbers inclusive, Bay Front Division, West 21st Street.

Lots 322 through 352, even numbers inclusive, Bay Front Division, West 21st Street.

Lots 305 through 351, odd numbers inclusive, Bay Front Division, West 22nd Street.

Lots 314 through 352, even numbers inclusive, Bay Front Division, West 22nd Street.

Lots 321 through 341, odd numbers inclusive, Bay Front Division, West 23rd Street.

Lots 344 through 352, even numbers inclusive, Bay Front Division, West 23rd Street.

Lots 347, 349 and 351, Bay Front Division, West 23rd Street.

Lots 289 through 303, odd numbers inclusive, Nobles Subdivision of Block 20, West 21st Street.

Block 18, Townsite of Superior, West 21st Street.

Southwest Quarter of Block Seventeen, Townsite of Superior, West 23rd Street.

Lots 343 through 351, odd numbers inclusive, Bay Front Division, West 24th Street.

(Doc. Nos. 505366, 513195, 514949, 520340 and 528677). Parcel No. 01-801-03339-00.

TRACT C:

Blocks 24, 26, 28 and 30, Townsite of Superior, West 23rd Street;

Blocks 22, 23, 24, 25, 26, 27, 28, 29 and 30, Townsite of Superior, West 25th Street;

Block 32, Townsite of Superior, West 26th Street;

Blocks 23, 24, 25, 26, 27, 28, 29, 30, 31 and 32, Townsite of Superior, West 27th Street, together with that part of West 27th Street which accrued thereto by reason of the vacation thereof.

Blocks 23, 24, 25, 26, 27, 28, 29, 30 and 31, Townsite of Superior, West 29th Street, together with that part of West 29th Street which accrued thereto by reason of the vacation thereof, except those parts of Blocks 30 and 31 lying East of the East line of the Wisconsin Central Railway Company Right-of-Way.

(Doc. Nos. 453215, 405966 and 458930).

Parcel No. 02-802-00872-00.

Blocks 15, 16, 18, and 20, Townsite of Superior, West 23rd Street.

The North Half and the Southeast Quarter of Block 17, Townsite of Superior, West 23rd Street.

Blocks 19 and 22, Townsite of Superior, West 23rd Street, except Lots 314, 316, 318 and 320, Bay Front Division, West 22nd Street, and Lots 343 through 352, inclusive, Bay Front Division.

Blocks 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22, Townsite of Superior, West 25th Street.

Blocks 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22, Townsite of Superior, West 27th Street.

Blocks 13, 15, 17, 19 and 21, Townsite of Superior, West 29th Street.

Together with that part of the streets and avenues which accrued thereto by reason of the vacation thereof.

(Doc. Nos. 405966 and 453215).

Parcel No. 01-801-03339-00.

TRACT D:

Lots 354 through 384, even numbers inclusive, Bay Front Division, West 23rd Street. (Doc. No. 453215).

Parcel No. 02-802-00872-00.

Lots 330 through 342, even numbers inclusive, Bay Front Division, West 23rd Street.

Lots 337, 339 and 341, Bay Front Division, West 24th Street.

(Doc. No. 453215). Parcel No. 01-801-03339-00.

TRACT E:

Lot 386, Bay Front Division, West 22nd Street. (Doc. No. 315814).

Parcel No. 02-802-00872-00.

TRACT F:

Block 23, Townsite of Superior, West 23rd Street (V 143 P 609).

Parcel No. 02-802-00872-00.

TRACT G:

That certain triangular shaped tract of land described last in deed dated August 30, 1957, from Northwestern Improvement Company to Northern Pacific Railway Company recorded January 2, 1958, in Book 254, Page 427, records of Douglas County, Wisconsin, said tract being described in said deed for reference as follows:

"A triangle of land comprising all of the Northwest Quarter Southwest Quarter (NW 1/4SW 1/4) of Section 36, Township 49 North, Range 14 West, Fourth Principal Meridian, which is situated Northwesterly of the right of way of the Northern Pacific Railway Company, being the same premises described as Parcel No. 1 in deeds recorded in Book 109 of Deeds on Pages 526 and 528, as Document Nos. 186157 and 186158 respectively, records of said county." (Document No. 840739)

Parcel No. 08-808-10047-00.

TRACT H:

The Southeast Quarter of Block 30 on West Nineteenth Street, Townsite of Superior, Douglas County, Wisconsin. (Document No. 840739)

Parcel No. 02-802-00830-00.

TRACT I:

North Half (N 1/2) of Fractional Block Thirteen (13), West Thirty-fifth (35th) Street, Townsite of Superior, according to the recorded plat or plats thereof on file and of record in the Office of the Register of Deeds in and for Douglas County, Wisconsin; together with that part of West 34th Street which accrued thereto by reason of the vacation thereof.

Block 18, West 21st Street, Townsite of Superior, Douglas County, Wisconsin.

(Doc. Nos. 522304, 528677 & 777319).

Parcel Nos. 08-808-09743-00 & 01-801-03304-00.

TRACT J:

The Southwest Quarter (SW 1/4) of Block Twenty-five (25), Townsite of Superior West 31st Street, according to the recorded plat or plats thereof on file and of record in the Office of the Register of Deeds in and for Douglas County, Wisconsin.

The Southeast Quarter (SE 1/4) of Block Fifteen (15), Townsite of Superior West 37th Street, according to the recorded plat or plats thereof on file and of record in the Office of the Register of Deeds in and for Douglas County, Wisconsin.

The Southeasterly One Hundred Seventy-five feet (SEly 175') of the Southwesterly Half (SWly 1/2) of Block Twenty (20), West Eleventh Street, Township of Superior (Southwestern Division), in the City of Superior, Douglas County, Wisconsin.

The Northwesterly One Hundred Twenty-five feet (NWly 125') of the Southwesterly One-Half (SWly 1/2) of Block Twenty (20), West Eleventh Street, Townsite of Superior, in the City of Superior, Douglas County, Wisconsin, being that part of said Block 20 which is bound on the Southwest by West Twelfth Street (now East Twelfth Street); on the Northeast by a line running midway between and parallel with West Eleventh Street and West Twelfth Street (now East Eleventh and Twelfth Streets); on the Northwest by Nettleton Avenue (now Twenty-first Avenue East); and the Southeast by a line One Hundred Twenty-five feet (125') Southeasterly from, and parallel to the Northwesterly boundary of Block 20.

The Southerly One Hundred feet (Sly 100') of Northwesterly Two Hundred Twenty-five feet (NWly 225') of Southwesterly one-half (SWly 1/2) of Block Twenty (20), on West Eleventh Street, Townsite of Superior, in the City of Superior, Douglas County, Wisconsin.

Lots 450 through 480, Even Numbers inclusive, Subdivision of North 1/2 & SE 1/4 Block 30 on West 15th Street, Lots on West 15th Street, Douglas County, Wisconsin.

Lots 449 through 463, Odd Numbers inclusive, Subdivision of North 1/2 & SE 1/4 Block 30 on West 15th Street, Lots on West 16th Street, Douglas County, Wisconsin.

Lots 386 through 416 Even Numbers inclusive, Chrisfield Johnson's Subdivision of Block 26, West 17th Street, Douglas County, Wisconsin.

Lots 385 through 415 Odd Numbers inclusive, Chrisfield Johnson's Subdivision of Block 26, West 17th Street, Douglas County, Wisconsin.

Lots 226 through 256, Even Numbers inclusive, West 17th Street, Subdivision of Block 16 West 17th Street, Douglas County, Wisconsin.

Lots 225 through 255, Odd Numbers inclusive, Southwest 18th Street, Subdivision of Block 16 West 17th Street, Douglas County, Wisconsin.

The Northeast Quarter (NE 1/4) and the East Half of the East Half of the Northwest Quarter (E 1/2 E 1/2 NW 1/4), Block Seventeen (17), West Fifteenth Street, in Townsite of Superior, City of Superior, Douglas County, Wisconsin.

The West Half of the East Half of the Northwest Quarter (W 1/2 of E 1/2 of NW 1/4) of Block Seventeen (17), West Fifteenth Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin.

The West Half of the Northwest Quarter (W 1/2 NW 1/4) of Block Seventeen (17), West Fifteenth Street, Townsite of Superior, in the City of Superior, Douglas County, Wisconsin.

The East 1/4 of SE 1/4, Block 17, Townsite of Superior West 15th Street, Douglas County, Wisconsin.

The West 3/4 of SE 1/4, Block 17, Townsite of Superior West 15th Street, Douglas County, Wisconsin.

The North Half (N 1/2) of Block Seventeen (17), West Thirteenth Street, Townsite of Superior, (Superior Division), in City of Superior, Douglas County, Wisconsin.

The South Half (S 1/2) of Block Seventeen (17), West Thirteenth Street, Townsite of Superior, (Superior Division), in City of Superior, Douglas County, Wisconsin.

Fractional Lots Two Hundred Fifty-seven (257), Two Hundred Fifty-nine (259), Two Hundred Sixty-one (261), Two Hundred Sixty-three (263) and Two Hundred Sixty-five (265), West Twelfth Street, Subdivision of Block Eighteen (18), West Eleventh Street, in Townsite of Superior, City of Superior, Douglas County, Wisconsin, together with that part of the West Half (W 1/2) of vacated Villard Street abutting said lots.

All of Block Sixteen (16), on West Twenty-First Street, in the City of Superior, Douglas County, Wisconsin.

All of Block Thirteen (13), excluding right of way, West 21st Street, Townsite of Superior, Douglas County, Wisconsin.

The Northwest Quarter (NW 1/4) and the Southwest Quarter (SW 1/4) of Block Twenty (20), Townsite of Superior West 16th Street, Douglas County, Wisconsin.

The West Half of the West Half of the Northwest Quarter (W 1/2 W 1/2 NW 1/4) of Block Nineteen (19), West Thirteenth Street, Townsite of Superior, in the City of Superior, Douglas County, Wisconsin,

The Southeast Quarter (SE 1/4) of Block Nineteen (19), West Thirteenth Street, Townsite of Superior, (Southwestern Division), in the City of Superior, Douglas County, Wisconsin.

The East One Hundred Twenty feet (E 120') of the Northeast Quarter (NE 1/4) of Block Nineteen (19), West Thirteenth Street, Townsite of Superior, (Southwestern Division), in the City of Superior, Douglas County, Wisconsin.

The Southwest Quarter (SW 1/4) of Block Nineteen (19), West 13th Street, Townsite of Superior, City of Superior, County of Douglas, Wisconsin.

The East Three-Fourths of the Northwest Quarter (E 3/4 NW 1/4), except the East Half of the East Half (E 1/2 E 1/2), Block Nineteen (19), West 13th Street, Townsite of Superior, City of Superior, County of Douglas, Wisconsin.

The East Half of the East Half of the Northwest Quarter (E 1/2 E 1/2 NW 1/4) and the West Eighty feet (W 80') of the Northeast Quarter (NE 1/4) of Block Nineteen (19), West Thirteenth Street, Townsite of superior, City of Superior, Douglas County, Wisconsin.

The East One-half (E 1/2) of the Northeast Quarter (NE 1/4) and the East One-half (E 1/2) of the Southeast Quarter (SE 1/4) of Block Nineteen (19), West Fifteenth Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin.

The NW 1/4 & W 1/2 of NE 1/4 and W 1/4 of SE 1/4 & E 3/4 of SW 1/4, Block 19, Townsite of Superior of Superior West 15th Street, Douglas County, Wisconsin.

The W 1/2 of the W 1/4 of the SW 1/4 of Block 19, Townsite of Superior West 15th Street, Douglas County, Wisconsin.

Lots 290 through 320, Even Numbers inclusive, West 17th Street, Subdivision of Block 20 West 17th Street, Douglas County, Wisconsin.

 Lots 289 through 319, Odd Numbers inclusive, West 18th Street, Subdivision of Block 20 West 17th Street, Douglas County, Wisconsin.

Lots 258 through 288, Even Numbers inclusive, West 20th Street, AND Lots 257 through 287, Odd Numbers inclusive, West 21st Street, all in the Subdivision of Block 17, on West 21st Street, Townsite of Superior, Douglas County, Wisconsin.

Lots 273 through 287, Odd Numbers inclusive, West Fifteenth Street, in Plat of McBean Blocks, being a Subdivision of the Southwest Quarter (SW 1/4) of Block Seventeen (17), West Fifteenth Street, Townsite of Superior, (Southwestern Division), in the City of Superior, Douglas County, Wisconsin.

Lots 258 and 260, Block 18, 15th Street, McBean Blocks, Douglas County, Wisconsin.

Lots 299, 301 & 303, Block 20, 14th Street & alley vacated, McBean Blocks, West 13th Street, Douglas County, Wisconsin.

Lots 393 through 399, Odd Numbers inclusive, Block 25, McBean Blocks, West Thirteenth Street, City of Superior, Douglas County, Wisconsin.

Lots 281 through 287, Odd Numbers inclusive, on West Twelfth Street, in Subdivision of Block Eighteen, West Eleventh Street, Townsite of Superior (Southwestern Division), City of Superior, Douglas County, Wisconsin.

Lots 267 through 279, Odd Numbers inclusive, on West Twelfth Street, in Subdivision of Block Eighteen (18), West Eleventh Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin.

Block Thirteen (13), West Twenty-third Street, except right-of-way, in Townsite of Superior, City of Superior, Douglas County, Wisconsin, together with that part of the West 23rd Street which accrued thereto by reason of vacation thereof.

E 3/4 of Block 12 on West 37th Street, Townsite of Superior, Douglas County, Wisconsin, except right of way.

E 3/4 of Block 11 on West 39th Street, Townsite of Superior, Douglas County, Wisconsin, except right of way.

E 3/4 of Block 12 on West 39th Street, Townsite of Superior, Douglas County, Wisconsin, except right of way.

NE 1/4 of Block 12 on West 43rd Street, Townsite of Superior, Douglas County, Wisconsin.

That part of Block 10, West 41st Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin, lying north of the following described line: Beginning at the most northerly corner of Fractional Block 8, West 41st Street, Townsite of Superior, thence westerly and parallel with the south line of the Southeast Quarter of Section 35, Township Forty-Nine North, Range 14 West to the northeasterly line of Fractional Block 9, West 43rd Street, Townsite of Superior, and said line there terminating.

That part of Block 11, West 41st Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin lying East of the East right of way line of the former Soo Line Railroad.

Lots 225 through 255, Odd Numbers inclusive, Lots on 16th Street, in the Subdivision of Block 16 on West 15th Street, in the City of Superior, Douglas County, Wisconsin.

Lots 226 through 256, Even Numbers inclusive, Lots on West 15th Street, in the Subdivision of Block 16 on West 15th Street, in the City of Superior, Douglas County, Wisconsin.

(Doc. Nos. 624023, 633082, 725853, 766342, 794160, 795896, 799526, 801654, 802205, 803377, 803498, 803978, 803979, 803733, 803734, 804451, 804524, 804525, 804706,806050, 806592, 806593, 809578, 808862, 809996, 810193, 813026, 828601, 829415 & 829526).

Parcel Nos. 02-802-00947-00, 01-801-02976-01, 01-801-02976-03, 01-801-02976-05, 02-802-06614-00, 02-802-01293-00, 01-801-03987-00,01-801-03125-00, 01-801-03131-00, 01-801-03129-00, 01-801-03128-00,01-801-03123-00, 01-801-03042-00, 01-801-03046-00, 01-801-03805-00, 01-801-03302-00, 01-801-03294-00, 01-801-03055-00,01-801-03047-00, 01-801-03047-01, 01-801-03047-02, 01-801-03047-03, 01-801-03047-04, 01-801-03048-00, 01-801-03136-00, 01-801-03145-00, 01-801-04051-00, 01-801-04083-00, 01-801-04706-00, 01-801-04713-00, 01-801-04679-00, 02-802-03804-00, 01-801-03807-00, 01-801-03806-00; 01-801-03326-00, 08-808-09780-00,08-808-09821-00, 08-808-09823-00, 08-808-09892-00, 08-808-09856-00, 01-801-03971-00 & 01-801-03955-00.

TRACT K:

That part of the West Half (W 1/2) of Section Thirty-six (36), Township forty-nine (49) North, Range Fourteen (14) West, Douglas County, Wisconsin, more fully described as follows: Commencing at the North quarter corner of said Section 36, Township 49 North, Range 14 West, thence due south along the north-south quarter line, said quarter line being the center line of Bardon Avenue, a distance of 1,456.64 feet to the south property line of 26th Avenue extended, thence south 48 degrees and 36 minutes west along the south property line of 26th Avenue, a distance of 481 feet to the point of beginning, thence continuing in the same straight line a distance of 1,323.53 feet to a point, thence south 89 degrees and 46 minutes west a distance of 151.91 feet to a point, thence South 48 degrees 36 minutes West a distance of 162.43 feet to a point, thence South 41 degrees 24 minutes east a distance of 751 feet to a point, thence north 48 degrees and 36 minutes East a distance of 1,463.36 feet to a point on the west line of Bardon Avenue a distance of 207.10 feet to a point, thence north 41 degrees and 24 minutes west a distance of 495.66 feet to the point of beginning.

(Doc. No. 459590 V 271 P 358) Parcel No. 01-801-05132-00.

Lots 290 through 320, even numbers inclusive, Bay Front Division, West 21st Street.

Lots 322 through 352, even numbers inclusive, Bay Front Division, West 21st Street.

Lots 305 through 351, odd numbers inclusive, Bay Front Division, West 22nd Street.

Lots 314 through 352, even numbers inclusive, Bay Front Division, West 22nd Street.

Lots 321 through 341, odd numbers inclusive, Bay Front Division, West 23rd Street.

Lots 344 through 352, even numbers inclusive, Bay Front Division, West 23rd Street.

Lots 347, 349 and 351, Bay Front Division, West 23rd Street.

Lots 289 through 303, odd numbers inclusive, Nobles Subdivision of Block 20, West 21st Street.

Block 18, Townsite of Superior, West 21st Street.

Southwest Quarter of Block Seventeen, Townsite of Superior, West 23rd Street.

Lots 343 through 351, odd numbers inclusive, Bay Front Division, West 24th Street.

(Doc. Nos. 505366, 513195, 514949, 520340 and 528677). Parcel No. 01-801-03339-00.

TRACT C:

Blocks 24, 26, 28 and 30, Townsite of Superior, West 23rd Street;

Blocks 22, 23, 24, 25, 26, 27, 28, 29 and 30, Townsite of Superior, West 25th Street;

Block 32, Townsite of Superior, West 26th Street;

Blocks 23, 24, 25, 26, 27, 28, 29, 30, 31 and 32, Townsite of Superior, West 27th Street, together with that part of West 27th Street which accrued thereto by reason of the vacation thereof.

Blocks 23, 24, 25, 26, 27, 28, 29, 30 and 31, Townsite of Superior, West 29th Street, together with that part of West 29th Street which accrued thereto by reason of the vacation thereof, except those parts of Blocks 30 and 31 lying East of the East line of the Wisconsin Central Railway Company Right-of-Way.

(Doc. Nos. 453215, 405966 and 458930).

Parcel No. 02-802-00872-00.

Blocks 15, 16, 18, and 20, Townsite of Superior, West 23rd Street.

The North Half and the Southeast Quarter of Block 17, Townsite of Superior, West 23rd Street.

Blocks 19 and 22, Townsite of Superior, West 23rd Street, except Lots 314, 316, 318 and 320, Bay Front Division, West 22nd Street, and Lots 343 through 352, inclusive, Bay Front Division.

Blocks 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22, Townsite of Superior, West 25th Street.

Blocks 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22, Townsite of Superior, West 27th Street.

Blocks 13, 15, 17, 19 and 21, Townsite of Superior, West 29th Street.

Together with that part of the streets and avenues which accrued thereto by reason of the vacation thereof.

(Doc. Nos. 405966 and 453215).

Parcel No. 01-801-03339-00.

TRACT D:

Lots 354 through 384, even numbers inclusive, Bay Front Division, West 23rd Street. (Doc. No. 453215).

Parcel No. 02-802-00872-00.

Lots 330 through 342, even numbers inclusive, Bay Front Division, West 23rd Street. Lots 337, 339 and 341, Bay Front Division, West 24th Street.

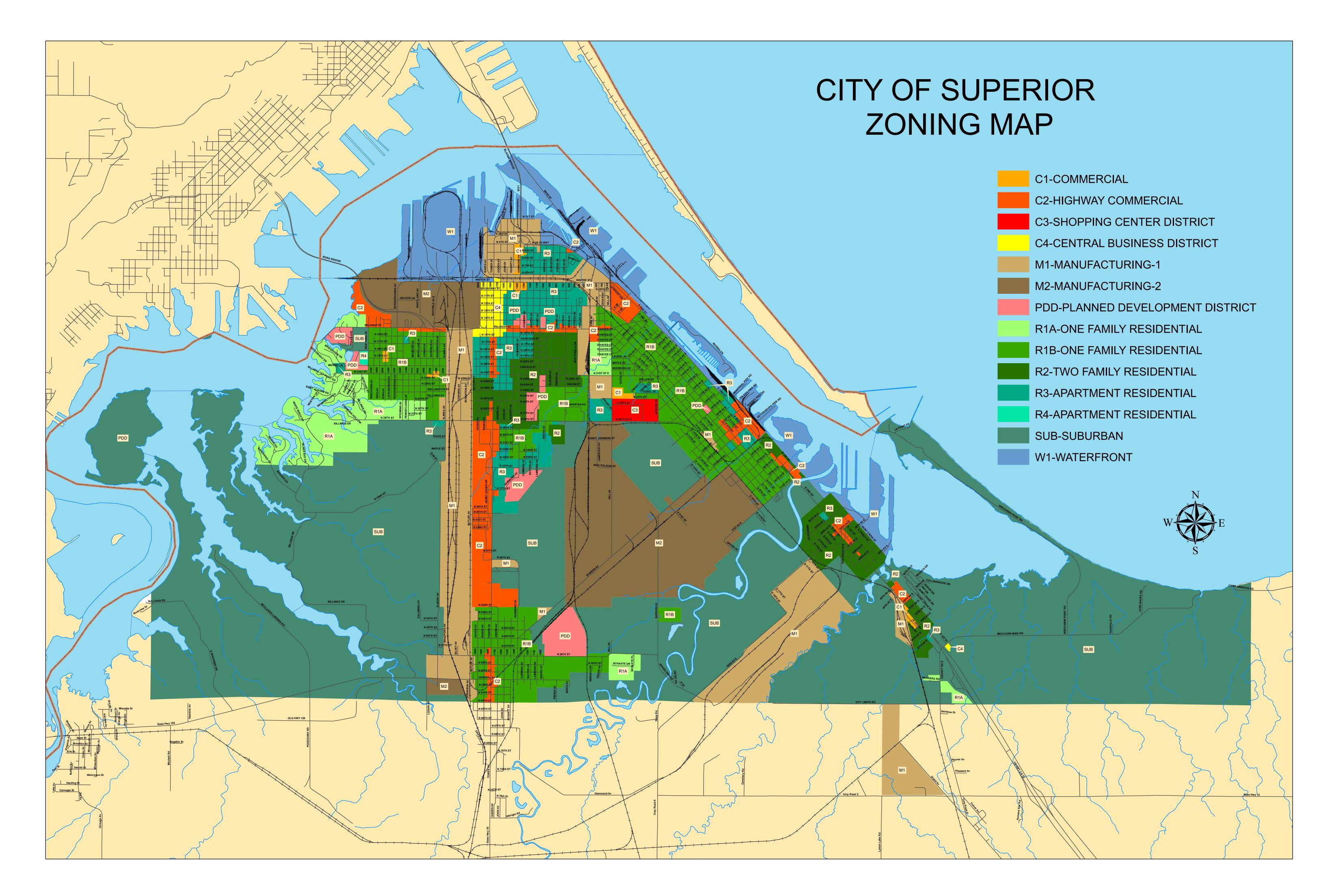


NO



Attachment F.2 – Certified Survey Map

Not Applicable - A certified survey map is not referenced in the deed.



Superior Refinery

March 26, 2020

Mr. John Sager Wisconsin Department of Natural Resources 1701 N. 4th St. Superior, WI 54880

RE:

Signed Statement for Property Legal Description Case Closure Request – BRRTS No. 02-16-585474

Dear Mr. Sager,

Pertaining to the above referenced Superior Refining Company release site located at 2407 Stinson Avenue, Superior, WI 54880 (WTM Coordinates X361726, Y692621), the following legal description and attached surveyor's figure accurately describe the property:

That part of Block 13, Townsite of Superior, West 27th Street, together with that part of the streets and avenues which accrued thereto by reason of the vacation thereof; that part of Block 14, Townsite of Superior, West 27th Street, together with that part of the streets and avenues which accrued thereto by reason of the vacation thereof; and that part of Block 13, Townsite of Superior, West 29th Street, together with that part of the streets and avenues which accrued thereto by reason of the vacation thereof; as described and shown in detail on the attached surveyor's map titled "PARCEL A – SUPERIOR WI EXHIBIT 1" generated by TKDA Engineering of Duluth, MN.

Sincerely,

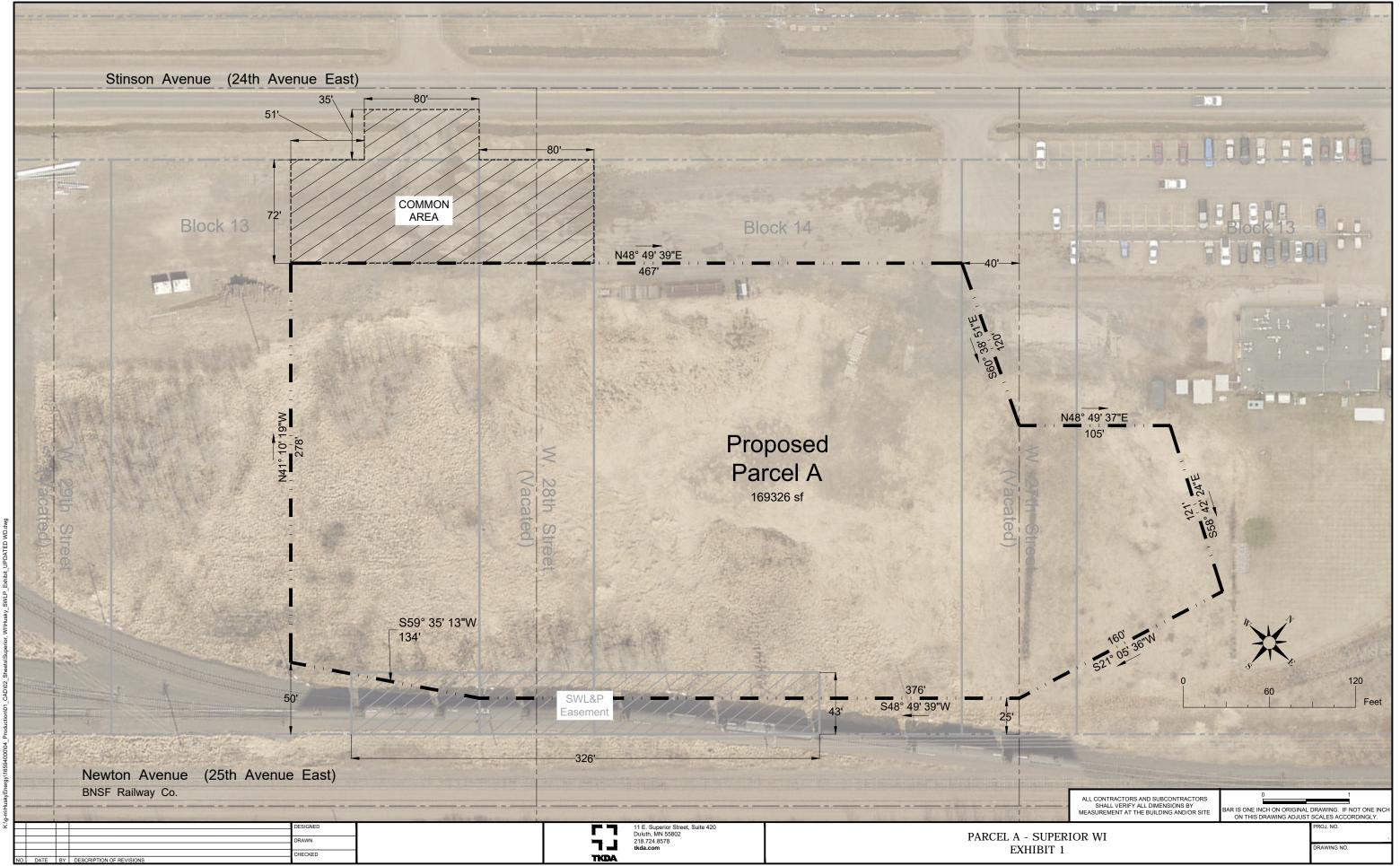
Mark Darby

Environmental Manager

Husky Energy

Superior, Wisconsin Refinery

2407 Stinson Avenue Superior, WI 54880 Bus: 715,398,3533 huskyenergy.com



pr 17, 2018 - 12:06pm

Attachment G – Source Legal Documents

- G.1 Deeds Source Property (Not Applicable)*
- G.2 Certified Survey Map (Not Applicable)*
- G.3 Verification of Zoning (Not Applicable)*
- G.4 Signed Statement (Not Applicable)*
- * There are no affected property owners to notify

Case Closure

Form 4400-202 (R 8/16)

Page 1 of 13

SUBMIT AS UNBOUND PACKAGE IN THE ORDER SHOWN

Notice: Pursuant to ch. 292, Wis. Stats., and chs. NR 726 and 746, Wis. Adm. Code, this form is required to be completed for case closure requests. The closure of a case means that the Department of Natural Resources (DNR) has determined that no further response is required at that time based on the information that has been submitted to the DNR. All sections of this form must be completed unless otherwise directed by the Department. DNR will consider your request administratively complete when the form and all sections are completed, all attachments are included, and the applicable fees required under ch. NR 749, Wis. Adm. Code, are included, and sent to the proper destinations. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records Law (ss. 19.31 - 19.39, Wis. Stats.). Incomplete forms will be considered "administratively incomplete" and processing of the request will stop until required information is provided.

Site Information											
BRRTS No.	VPLE No.										
02-16-585474											
Parcel ID No.	*										
018010333900											
FID No.	WTM Coo	ordinates									
R1 (000500	X 261726	Y 602621									
816009590 BRRTS Activity (Site) Name	361726 WTM Coordinates Represent:	692621									
Reported Contamination at Superior Refining	Source Area	Parcel Center									
Site Address	City	State ZIP Code									
2407 Stinson Avenue	Superior	WI 54880									
Acres Ready For Use	5										
Responsible Party (RP) Name											
Superior Refining Company LLC											
Company Name											
Attn: Mark Darby, Environmental Manager	4-										
Mailing Address	City	State ZIP Code									
2407 Stinson Avenue	Superior	WI 54880									
Phone Number	Email										
(715) 398-8453	mark.darby@huskyenergy.com										
Check here if the RP is the owner of the source prop	perty.										
Environmental Consultant Name											
Lynette Carney											
Consulting Firm											
Barr Engineering Company	lav.	la la la la la la la la la la la la la l									
Mailing Address	City	State ZIP Code									
325 South Lake Avenue	Duluth	MN 55802									
Phone Number	Email										
(218) 529-7141	lcarney@barr.com										
Fees and Mailing of Closure Request											
 Send a copy of page one of this form and the app (Environmental Program Associate) at http://dnr.w 	licable ch. NR 749, Wis. Adm. Code, fee(s) to t i.gov/topic/Brownfields/Contact.html#tabx3	he DNR Regional EPA Check all fees that apply:									
	\$300 Database Fee for S	oil									
\$350 Database Fee for Groundwater or	Total Amount of Payment \$ \$1,350.00										
Monitoring Wells (Not Abandoned)	Resubmittal, Fees Previo	usly Paid									
2. Send one paper copy and one e-copy on compa	ct disk of the entire closure package to the l	Regional Project Manager									

assigned to your site. Submit as unbound, separate documents in the order and with the titles prescribed by this form. For

electronic document submittal requirements, see http://dnr.wi.gov/files/PDF/pubs/rr/RR690.pdf.

Activity (Site) Name

Form 4400-202 (R 8/16)

Page 2 of 13

Site Summary

If any portion of the Site Summary Section is not relevant to the case closure request, you must fully explain the reasons why in the relevant section of the form. All information submitted shall be legible. Providing illegible information will result in a submittal being considered incomplete until corrected.

1. General Site Information and Site History

- A. Site Location: Describe the physical location of the site, both generally and specific to its immediate surroundings. The site consists of approximately 5 acres located in an area between the operating Husky Refinery and the Enbridge pipeline terminal facility in the NW 1/4 of Section 36 of T49 North, Range 14 West at 2407 Stinson Avenue, Superior, Wisconsin.
- B. Prior and current site usage: Specifically describe the current and historic occupancy and types of use. Currently the site is under lease by Superior Refining Company LLC (SRC) to Superior Water Light & Power (SWL&P) for construction of an electrical substation (Nemadji Substation). Historically the site has been used as a storage/laydown area associated with the adjacent refinery.
- C. Current zoning (e.g., industrial, commercial, residential) for the site and for neighboring properties, and how verified (Provide documentation in Attachment G).
 The City of Superior Planning and Development Department indicated that the Property is zoned M2 (Manufacturing District Heavy).
- D. Describe how and when site contamination was discovered. During substation construction earthwork activities in November 2019, SWL&P contractors encountered shallow contaminated soil (described as oily soil with debris) in two separate locations at the site. These areas are shown on Figure B.2.a.
- E. Describe the type(s) and source(s) or suspected source(s) of contamination.
 Petroleum hydrocarbons and metals were detected at low levels. The source is likely related to historic site use as a laydown area for refinery activities or related to historical fill materials.
- F. Other relevant site description information (or enter Not Applicable).

 Prior to leasing the property to SWL&P, SRC performed a Phase I Environmental Site Assessment and a Phase II Site Investigation to document the pre-lease site conditions. No actionable levels of contamination were found at that time (2018). SWL&P encountered stained soil with a petroleum odor during excavation work related to preparation of the site for substation construction. Contaminated soil was excavated to construction limits, characterized, and transported off-site for landfill disposal by SWL&P. No field screening or analytical confirmation samples were collected from the excavation extents. Approximately 1,000 tons of soil was removed by SWL&P from the two separate areas and transported to Shamrock Landfill. A subsequent Phase II Investigation was performed by SRC in 2020 to evaluate soil conditions near the limits of the SWL&P excavations and to supplement site characterization data. Results from the 2020 investigation indicate that soils remaining at the site do not pose a risk to human health or the environment.
- G. List BRRTS activity/site name and number for BRRTS activities at this source property, including closed cases. None.
- H. List BRRTS activity/site name(s) and number(s) for all properties immediately adjacent to (abutting) this source property.

216220009 LAKEHEAD PIPELINE - CRUDE OIL TANK 22

216222650 MURPHY OIL - FUEL LOADING AREA

216176579 LAKEHEAD PIPELINE CO L P

216222670 MURPHY OIL - TANK S-1, S-2

216178165 LAKEHEAD PIPELINE - TANK 21 CRUDE OIL

216275100 LAKEHEAD PIPELINE - TANK 24

216242301 MURPHY OIL - VAPOR RECOVERY UNIT 216222638 MURPHY OIL - CRUDE UNIT PROCESS AREA

216558992 ENBRIDGE ENERGY - TANK 20 VALVE

216222628 MURPHY OIL - PROPANE/BUTANE LOADING AREA

216558988 ENBRIDGE ENERGY - OFFICE EXCAVATION

216560841 ENBRIDGE ENERGY TERMINAL - LINE 5 PIG TRAP

216558987 ENBRIDGE ENERGY - TANK 9

216279246 LAKEHEAD PIPELINE CO L P

216183249 LAKEHEAD PIPELINE - MANIFOLD 3

216000522 MURPHY OIL - TANK #34

216000161 MURPHY OIL - LAKEHEAD TANK FAC

216221525 MURPHY OIL - TANK #59

216000507 MURPHY OIL - 24TH

216000523 MURPHY OIL - TANK #67

216000563 MURPHY OIL - TANK #102

216112803 HUSKY OIL LTD TANK 28

216221534 MURPHY OIL - TANK #29 & 30

316000168 LAKEHEAD PIPE LINE CO

216222617 MURPHY OIL - TANK #65 & 66

BRRTS No.

Activity (Site) Name

216246715 MURPHY OIL - SLOP OIL MANIFOLD AREA 216000508 MURPHY OIL - BARDON AVE (TANK 25) 216190549 MURPHY OIL - TANK #1 & 2 (FORMER) 216221920 MURPHY OIL - TANK #47 216221941 MURPHY OIL - TANK #39 316000736 MURPHY OIL - WAREHOUSE 216222701 MURPHY OIL - TANK BASIN #51 & 52 216558989 ENBRIDGE ENERGY - TANK 23 216275090 ENBRIDGE SUPERIOR TERMINAL 216550859 MURPHY OIL - S OF GREEN GAS UNIT 216226861 MURPHY OIL - CONTAMINATED SOIL UNDER ROADWAY 216222721 MURPHY OIL - TANK #32 & 33 216000506 MURPHY OIL - STINSON #3 216000512 LAKEHEAD PIPELINE - PUMP ST 216221947 MURPHY OIL - TANK #8 216221988 MURPHY OIL - TANK #81 216221908 MURPHY OIL - TANK #79 216513788 ENBRIDGE ENERGY - NEMADJI RIVER 216552700 ENBRIDGE ENERGY - TANK 9 PRESSURE LINE 216221933 MURPHY OIL - TANK #31 216000027 LAKEHEAD PIPELINE - PLM TOOL SHOP 216556786 ENBRIDGE ENERGY - TANK 22 216275130 LAKEHEAD PIPELINE - TANK 23 216221811 MURPHY OIL - UNDERGROUND PIPELINE 216000571 MURPHY OIL - TANK #34 & 35 216118396 MURPHY OIL USA 216558990 ENBRIDGE ENERGY - TANK 19 216577548 ENBRIDGE SUPERIOR TERMINAL- LINE 5 VALVE 553 216579604 ENBRIDGE SUPERIOR - FIELD BOOSTER 23 216526812 MURPHY OIL - TANK BASIN #68 216223154 MURPHY OIL - TANK #70 216222712 MURPHY OIL - TANK #40 216515749 MURPHY OIL - LOADING DOCK AREA 216581317 SUPERIOR REFINING COMPANY LLC

2. General Site Conditions

A. Soil/Geology

- Describe soil type(s) and relevant physical properties, thickness of soil column across the site, vertical and lateral variations in soil types.
 - Surficial geology in the region consists of glacial-lacustrine clay deposits estimated to be over 100 feet thick. This clay unit overlies sandy glacial till interbedded with sand and gravel. Soil boring data collected at the site indicates this homogenous layer of red-brown lean to fat clay till is present across the site overlain by approximately 0 to 4 feet of fill material.
- ii. Describe the composition, location and lateral extent, and depth of fill or waste deposits on the site.
 Fill at the site ranges from 0 to 4 feet deep and consists of silty gravel and/or poorly graded sand. The SWL&P substation development area was excavated to a depth of 3-4 feet in the fall of 2019 and backfilled with engineered fill. Outside of this area, fill soils appear to be reworked with native material.
- iii. Describe the depth to bedrock, bedrock type, competency and whether or not it was encountered during the investigation. The regional bedrock geology consists of sandstone of the Precambrian-age Bayfield Formation. Depth to bedrock in the area is greater than 150 feet. Bedrock was not encountered in any boreholes during the investigation.
- Describe the nature and locations of current surface cover(s) across the site (e.g., natural vegetation, landscaped areas, gravel, hard surfaces, and buildings).
 - The site is currently being developed for an electrical substation. The new surface cover at the site consists of 2-4 feet of engineered backfill overlain by gravel.

B. Groundwater

- i. Discuss depth to groundwater and piezometric elevations. Describe and explain depth variations, including high and low water table elevation and whether free product affects measurement of water table elevation. Describe the stratigraphic unit(s) where water table was found or which were measured for piezometric levels.
 - Based on the Facility-Wide Groundwater Monitoring Reports provided by SRC for the refinery facility, the recent depth to groundwater in nearby monitoring wells (one located in the southeast corner of the Property and one located approximately 50 feet northeast) is between 0.5 and 2.9 feet bgs.

BRRTS No.

Activity (Site) Name

 Discuss groundwater flow direction(s), shallow and deep. Describe and explain flow variations, including fracture flow if present.

Based on groundwater monitoring at the refinery, which includes groundwater monitoring wells located on and near the Property, shallow groundwater flow direction at the Property is expected to the northeast towards Newton Creek, ultimately discharging into Lake Superior approximately 1.7 miles northeast of the Site.

 Discuss groundwater flow characteristics: hydraulic conductivity, flow rate and permeability, or state why this information was not obtained.

Based on facility-wide groundwater monitoring program data provided by SRC for the adjacent refinery, the hydraulic conductivity of the native clay is on the order of 10E-7 centimeters per second. Assuming a horizontal hydraulic gradient of 0.003 and effective porosity of 0.06, the estimated horizontal groundwater flow velocity is approximately 0.4 cm/yr or 0.013 feet per year (ft/yr).

iv. Identify and describe locations/distance of potable and/or municipal wells within 1200 feet of the site. Include general summary of well construction (geology, depth of casing, depth of screened or open interval).
No potable and/or municipal wells were identified within 1,200 feet of the site.

3. Site Investigation Summary

A. General

 Provide a brief summary of the site investigation history. Reference previous submittals by name and date. Describe site investigation activities undertaken since the last submittal for this project and attach the appropriate documentation in Attachment C, if not previously provided.

Phase II Investigation Results - Future ALLETE Substation Site (August 2018) - A soil boring investigation was conducted in June 2018 where five borings (SB-1 through SB-5) were advanced to characterize soil at the site. Soil and groundwater samples were collected. Soil was analyzed for 8 RCRA metals, polycyclic aromatic hydrocarbons (PAHs), and volatile organic compounds (VOCs). Groundwater was analyzed for PAHs and VOCs. Based on comparisons to the WDNR residual contaminant levels (RCLs) and groundwater quality standards the isolated low concentrations or parameters detected in the samples did not pose a risk to human health or the environment.

SWL&P Nemadji Substation Phase III Investigation Results (March 2020) - Following the discovery, excavation, and off-site disposal of impacted soils by SWL&P in 2019, SRC initiated another site investigation. In January 2020, twenty-four soil borings were advanced across the site. Fifteen "remedial action delineation" borings were advanced to evaluate the effectiveness of the remedial excavation efforts performed by SWL&P. Nine additional "site characterization" borings were advanced across the site to further assess baseline conditions at the site.

Site investigation reports that summarize the 2018 and 2020 investigations are included in Attachment C.1.

- ii. Identify whether contamination extends beyond the source property boundary, and if so describe the media affected (e.g., soil, groundwater, vapors and/or sediment, etc.), and the vertical and horizontal extent of impacts. The 2018 and 2020 investigation results indicate that the impacted soil areas were isolated, contained within the limits of the site and/or have been removed.
- iii. Identify any structural impediments to the completion of site investigation and/or remediation and whether these impediments are on the source property or off the source property. Identify the type and location of any structural impediment (e.g., structure) that also serves as the performance standard barrier for protection of the direct contact or the groundwater pathway.

No structural impediments were present that prevented completion of investigation activities.

B. Soil

 Describe degree and extent of soil contamination. Relate this to known or suspected sources and known or potential receptors/migration pathways.

Contaminated soil was removed during response action activities by SWL&P in November 2019. Two areas were excavated to a depth of two to three feet; an area in the northern corner of the Property measuring approximately 50 feet by 150 feet and an area in the western corner of the Property measuring approximately 25 feet by 50 feet. A sample of from the removed soil was collected by SWL&P for disposal characterization and waste profile approval at the Shamrock Landfill.

Other areas of site were also excavated to depths of 3-4 feet during construction for the placement of engineered fill. Soil conditions below and outside of the excavation limits were not documented by SWL&P in 2019. Soil samples collected from borings in 2020 indicate that remaining soils do not pose a risk to human health or the environment.

An ongoing source of contamination has not been identified. Soils were likely impacted by historical fill and/or storage activities.

ii. Describe the concentration(s) and types of soil contaminants found in the upper four feet of the soil column. The remedial excavation performed by SWL&P removed the impacted soil from the source area. Soil samples collected in 2020 (post-excavation action) from the site were analyzed for PVOCs+Naphthalene and DRO. Benzene was detected Activity (Site) Name

Case Closure

Form 4400-202 (R 8/16)

Page 5 of 13

in one sample of native soil directly beneath fill (observed staining and sample interval from 1.5-2 feet bgs) at a concentration of 0.0399 mg/kg, exceeding the groundwater RCL but less than the RCLs for direct contact. Naphthalene and toluene were detected in the same sample at concentrations less than groundwater RCLs. DRO was detected in eight samples with concentrations ranging from 8.2 to 121 mg/kg. During the initial investigation in 2018 benzo(a)pyrene was detected in one sample at a concentration of 128 ug/kg, exceeding then non-industrial direct contact RCL but did not exceed the industrial RCL or groundwater RC, however, the soil from this area was removed during construction activities. Arsenic was detected in ten samples with concentrations ranging from 2.8 to 5.1 mg/kg. Although the arsenic detections exceed both the groundwater and direct contract RCLs, there are thought to be naturally occurring as they are below the WDNR background threshold values. Several additional metals were detected in samples from 2018 including: barium, lead, selenium and silver. With the exception of a lead detection in one surficial sample, these metal detections were below established WDNR background threshold values (background values have not been established for selenium and silver). The selenium and silver detections were flagged by the laboratory as estimated values. In addition soil from 3-4' was removed by SWL&P through the majority of the substation construction site.

iii. Identify the ch. NR 720, Wis. Adm. Code, method used to establish the soil cleanup standards for this site. This includes a soil performance standard established in accordance with s. NR 720.08, a Residual Contaminant Level (RCL) established in accordance with s. NR 720.10 that is protective of groundwater quality, or an RCL established in accordance with s. NR 720.12 that is protective of human health from direct contact with contaminated soil. Identify the land use classification that was used to establish cleanup standards. Provide a copy of the supporting calculations/ information in Attachment C.

Soil sample analytical results were compared to the groundwater and direct contact (both industrial and non-industrial) RCLs. With the exception of naturally occurring metals, metals flagged as estimated values, and detections from soil samples collected in 2018 which was removed during construction, only one benzene concentration exceeded the groundwater RCL.

C. Groundwater

 Describe degree and extent of groundwater contamination. Relate this to known or suspected sources and known or potential receptors/migration pathways. Specifically address any potential or existing impacts to water supply wells or interception with building foundation drain systems.

Not applicable. A refinery-wide groundwater monitoring program is in place and groundwater contamination has not been identified at this site.

 Describe the presence of free product at the site, including the thickness, depth, and locations. Identify the depth and location of the smear zone.

Not applicable. No evidence of the presence of free product was encountered at the site.

D. Vapor

 Describe how the vapor migration pathway was assessed, including locations where vapor, soil gas, or indoor air samples were collected. If the vapor pathway was not assessed, explain reasons why.
 Not applicable. A source of potential vapor issues has not been identified.

 Identify the applicable DNR action levels and the land use classification used to establish them. Describe where the DNR action levels were reached or exceeded (e.g., sub slab, indoor air or both).

The site is in an industrial area and has been undeveloped until now. An electrical substation is under construction.

E. Surface Water and Sediment

 Identify whether surface water and/or sediment was assessed and describe the impacts found. If this pathway was not assessed, explain why.

Not applicable. Surface water/sediment features are not present at the site.

ii. Identify any surface water and/or sediment action levels used to assess the impacts for this pathway and how these were derived. Describe where the DNR action levels were reached or exceeded. Not applicable.

4. Remedial Actions Implemented and Residual Levels at Closure

A. General: Provide a brief summary of the remedial action history. List previous remedial action report submittals by name and date. Identify remedial actions undertaken since the last submittal for this project and provide the appropriate documentation in Attachment C.

During site development in November 2019 impacted soils were excavated and transported off-site for disposal. Documentation of soil characterization and disposal are provided in Attachment C.2.

B. Describe any immediate or interim actions taken at the site under ch NR 708, Wis. Adm. Code. The actions described above were taken as part of an interim action to address the impacted soils encountered during construction. The investigation results provided in this closure request are being used to document the effectiveness of the interim action completed by SWL&P.

- C. Describe the active remedial actions taken at the source property, including: type of remedial system(s) used for each media affected; the size and location of any excavation or in-situ treatment; the effectiveness of the systems to address the contaminated media and substances; operational history of the systems; and summarize the performance of the active remedial actions. Provide any system performance documentation in Attachment A.7.
 Not applicable.
- D. Describe the alternatives considered during the Green and Sustainable Remediation evaluation in accordance with NR 722.09 and any practices implemented as a result of the evaluation. Not applicable.
- E. Describe the nature, degree and extent of residual contamination that will remain at the source property or on other affected properties after case closure.
 Benzene was detected in one sample exceeding the groundwater RCL at a concentration of 0.0399 mg/kg. Naphthalene
 (0.166 mg/kg) and toluene (0.0512 mg/kg) were detected in this same sample at concentrations less than the groundwater.

(0.166 mg/kg) and toluene (0.0512 mg/kg) were detected in this same sample at concentrations less than the groundwater and direct contact RCLs. DRO was detected in eight samples with concentrations ranging from 8.2 to 121 mg/kg. Other naturally occurring metals (arsenic, barium, lead, selenium, silver) were also detected in the 2018 samples with concentrations either below the WDNR background threshold values or flagged by the laboratory as estimated values.

- F. Describe the residual soil contamination within four feet of ground surface (direct contact zone) that attains or exceeds RCLs established under s. NR 720.12, Wis. Adm. Code, for protection of human health from direct contact.
 Naturally occurring arsenic was detected in ten samples with concentrations ranging from 2.8 to 5.1 mg/kg.
- G. Describe the residual soil contamination that is above the observed low water table that attains or exceeds the soil standard(s) for the groundwater pathway.

Benzene was detected in one sample (SB-6, 1.5-2 feet) exceeding the groundwater RCL at a concentration of 0.0399 mg/kg. Additional naturally occurring metals were also detected above the groundwater RCL including: arsenic, barium, lead, selenium and silver but were either below the WDNR background threshold value or were flagged by the laboratory as estimated values,

H. Describe how the residual contamination will be addressed, including but not limited to details concerning: covers, engineering controls or other barrier features; use of natural attenuation of groundwater; and vapor mitigation systems or measures.

The site is being developed as an electrical substation. The majority of the site has been excavated and covered with new compacted fill material and substation facilities. As a result, residual contamination levels do not require remediation or controls to limit exposure. The clay soil which has been documented across the site along with the compacted and relatively impervious gravel surface designed to divert surface water flow away from the site will limit infiltration and potential of migration of residual soil contamination to groundwater. Additionally, it has been demonstrated through the documented groundwater flow velocities and annual groundwater monitoring completed as part of the SRC facility-wide groundwater monitoring program that petroleum compounds have not been detected in groundwater in the vicinity of this historical release.

- If using natural attenuation as a groundwater remedy, describe how the data collected supports the conclusion that natural attenuation is effective in reducing contaminant mass and concentration (e.g., stable or receding groundwater plume).
 Not applicable.
- J. Identify how all exposure pathways (soil, groundwater, vapor) were removed and/or adequately addressed by immediate, interim and/or remedial action(s).
 - Contaminated soils were removed and transported to an off-site disposal facility. The source has been removed and groundwater impacts have not been identified.
- K. Identify any system hardware anticipated to be left in place after site closure, and explain the reasons why it will remain. Not applicable.
- L. Identify the need for a ch. NR 140, Wis. Adm. Code, groundwater Preventive Action Limit (PAL) or Enforcement Standard (ES) exemption, and identify the affected monitoring points and applicable substances. Not applicable.
- M. If a DNR action level for vapor intrusion was exceeded (for indoor air, sub slab, or both) describe where it was exceeded and how the pathway was addressed.
 Not applicable.

Case Closure

Activity (Site) Name

Form 4400-202 (R 8/16)

Page 7 of 13

- N. Describe the surface water and/or sediment contaminant concentrations and areas after remediation. If a DNR action level was exceeded, describe where it was exceeded and how the pathway was addressed.
 Not applicable.
- 5. Continuing Obligations: Includes all affected properties and rights-of-way (ROWs). In certain situations, maintenance plans are also required, and must be included in Attachment D.
 Directions: For each of the 3 property types below, check all situations that apply to this closure request.
 (NOTE: Monitoring wells to be transferred to another site are addressed in Attachment E.)

Π		on applies to the or Right of Way			
	Property Ty	pe:		Case Closure Situation - Continuing Obligation (database fees will apply, ii xiv.)	Maintenance Plan
	Source Property	Affected Property (Off-Source)	ROW	(addeddd fed fill spp.), ii- yarry	Required
i.		\boxtimes	\boxtimes	None of the following situations apply to this case closure request.	NA
ii.				Residual groundwater contamination exceeds ch. NR 140 ESs.	NA
iii.	\boxtimes			Residual soil contamination exceeds ch. NR 720 RCLs.	NA
iv.				Monitoring Wells Remain:	
				Not Abandoned (filled and sealed)	NA
				Continued Monitoring (requested or required)	Yes
V,				Cover/Barrier/Engineered Cover or Control for (soil) direct contact pathways (includes vapor barriers)	Yes
vi.				Cover/Barrier/Engineered Cover or Control for (soil) groundwater infiltration pathway	Yes
vii,				Structural Impediment: impedes completion of investigation or remedial action (not as a performance standard cover)	NA
/iii.				Residual soil contamination meets NR 720 industrial soil RCLs, land use is classified as industrial	NA
ix.			NA	Vapor Mitigation System (VMS) required due to exceedances of vapor risk screening levels or other health based concern	Yes
X.			NA	Vapor: Dewatering System needed for VMS to work effectively	Yes
xi.			NA.	Vapor: Compounds of Concern in use: full vapor assessment could not be completed	NA
xìi			NA	Vapor: Commercial/industrial exposure assumptions used.	NA
xiii.				Vapor: Residual volatile contamination poses future risk of vapor intrusion	NA
xiv.				Site-specific situation: (e. g., fencing, methane monitoring, other) (discuss with project manager before submitting the closure request)	Site specific
P	or remed	ial action?	or other ass		Yes No
E					Yes No
(. If the ans	wer to question	1 6.B. is yes	s, is the leak detection system currently being monitored?	Yes O No

Activity (Site) Name

Case Closure

Form 4400-202 (R 8/16)

Page 8 of 13

General Instructions

All information shall be legible. Providing illegible information will result in a submittal being considered incomplete until corrected. For each attachment (A-G), provide a Table of Contents page, listing all 'applicable' and 'not applicable' items by Closure Form titles (e.g., A.1. Groundwater Analytical Table, A.2. Soil Analytical Results Table, etc.). If any item is 'not applicable' to the case closure request, you must fully explain the reasons why.

Data Tables (Attachment A)

Directions for Data Tables:

- Use bold and italics font for information of importance on tables and figures. Use bold font for ch. NR 140, Wis. Adm. Code ES attainments or exceedances, and italicized font for ch. NR 140, Wis. Adm. Code, PAL attainments or exceedances
- Use bold font to identify individual ch. NR 720 Wis. Adm. Code RCL exceedances. Tables should also include the corresponding groundwater pathway and direct contact pathway RCLs for comparison purposes. Cumulative hazard index and cumulative cancer risk exceedances should also be tabulated and identified on Tables A.2 and A.3.
- Do not use shading or highlighting on the analytical tables.
- Include on Data Tables the level of detection for results which are below the detection level (i.e., do not just list as no detect (ND)).
- Include the units on data tables.
- Summaries of all data must include information collected by previous consultants.
- Do not submit lab data sheets unless these have not been submitted in a previous report. Tabulate all data required in s. NR 716.15 (3)(c), Wis. Adm. Code, in the format required in s. NR 716.15(4)(e), Wis. Adm. Code.
- Include in Attachment A all of the following tables, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: A.1. Groundwater Analytical Table; A.2. Soil Analytical Results Table, etc.).
- For required documents, each table (e.g., A.1., A.2., etc.) should be a separate Portable Document Format (PDF).

Data Tables

- Groundwater Analytical Table(s): Table(s) showing the analytical results and collection dates for all groundwater sampling points (e.g., monitoring wells, temporary wells, sumps, extraction wells, potable wells) for which samples have been collected.
- Soil Analytical Results Table(s): Table(s) showing all soil analytical results and collection dates. Indicate if sample was collected above or below the observed low water table (unsaturated versus saturated).
- Residual Soil Contamination Table(s): Table(s) showing the analytical results of only the residual soil contamination at the time of closure. This table shall be a subset of table A.2 and should include only the soil sample locations that exceed an RCL. Indicate if sample was collected above or below the observed low water table (unsaturated versus saturated). Table A.3 is optional only if a total of fewer than 15 soil samples have been collected at the site.
- Vapor Analytical Table(s): Table(s) showing type(s) of samples, sample collection methods, analytical method, sample results, date of sample collection, time period for sample collection, method and results of leak detection, and date, method and results of communication testing
- Other Media of Concern (e.g., sediment or surface water): Table(s) showing type(s) of sample, sample collection method, analytical method, sample results, date of sample collection, and time period for sample collection.
- Water Level Elevations: Table(s) showing all water level elevation measurements and dates from all monitoring wells. If present, free product should be noted on the table.
- Other: This attachment should include: 1) any available tabulated natural attenuation data; 2) data tables pertaining to engineered remedial systems that document operational history, demonstrate system performance and effectiveness, and display emissions data; and (3) any other data tables relevant to case closure not otherwise noted above. If this section is not applicable, please explain the reasons why.

Maps, Figures and Photos (Attachment B)

Directions for Maps, Figures and Photos:

- Provide on paper no larger than 11 x 17 inches, unless otherwise directed by the Department. Maps and figures may be submitted in a larger electronic size than 11 x 17 inches, in a PDF readable by the Adobe Acrobat Reader. However, those larger-size documents must be legible when printed.
- Prepare visual aids, including maps, plans, drawings, fence diagrams, tables and photographs according to the applicable portions of ss. NR 716.15(4), 726.09(2) and 726.11(3), (5) and (6), Wis. Adm. Code.
- Include all sample locations.
- Contour lines should be clearly labeled and defined.
- Include in Attachment B all of the following maps and figures, in the order prescribed below, with the specific Closure Form titles noted on the separate attachments (e.g., Title: B.1. Location Map; B.2. Detailed Site Map, etc).
- For the electronic copies that are required, each map (e.g., B.1.a., B.2.a, etc.,) should be a separate PDF.
- Maps, figures and photos should be dated to reflect the most recent revision.

Location Maps

- B.1.a. Location Map: A map outlining all properties within the contaminated site boundaries on a United States Geological Survey (U.S.G.S.) topographic map or plat map in sufficient detail to permit easy location of all affected and/or adjacent parcels. If groundwater standards are exceeded, include the location of all potable wells, including municipal wells, within 1200 feet of the area of contamination.
- B.1.b. Detailed Site Map: A map that shows all relevant features (buildings, roads, current ground surface cover, individual property boundaries for all affected properties, contaminant sources, utility lines, monitoring wells and potable wells) within the contaminated area. This map is to show the location of all contaminated public streets, and highway and railroad rights-of-way in relation to the source property and in relation to the boundaries of groundwater contamination attaining or exceeding a ch. NR 140 ES, and/or in relation to the boundaries of soil contamination attaining or exceeding a RCL. Provide parcel identification numbers for all affected properties.
- RR Sites Map: From RR Sites Map (http://dnrmaps.wi.gov/sl/?Viewer=RR Sites) attach a map depicting the source property, and all open and closed BRRTS sites within a half-mile radius or less of the property.

BRRTS No.

Activity (Site) Name

B.2. Soil Figures

- B.2.a. Soil Contamination: Figure(s) showing the location of all identified unsaturated soil contamination. Use a single contour to show the horizontal extent of each area of contiguous soil contamination that exceeds a soil to groundwater pathway RCL as determined under ch. NR 720.Wis. Adm. Code. A separate contour line should be used to indicate the horizontal extent of each area of contiguous soil contamination that exceeds a direct contact RCL exceedances (0-4 foot depth).
- B.2.b. Residual Soil Contamination: Figure(s) showing only the locations of soil samples where unsaturated soil contamination remains at the time of closure (locations represented in Table A.3). Use a single contour to show the horizontal extent of each area of contiguous soil contamination that exceeds a soil to groundwater pathway RCL as determined under ch. NR 720 Wis. Adm. Code. A separate contour line should be used to indicate the horizontal extent of each area of contiguous soil contamination that exceeds a direct contact RCL exceedence (0-4 foot depth).

B.3. Groundwater Figures

B.3.a. Geologic Cross-Section Figure(s): One or more cross-section diagrams showing soil types and correlations across the site, water table and piezometric elevations, and locations and elevations of geologic rock units, if encountered. Display on one or more figures all of the following:

 Source location(s) and vertical extent of residual soil contamination exceeding an RCL. Distinguish between direct contact and the groundwater pathway RCLs.

Source location(s) and lateral and vertical extent if groundwater contamination exceeds ch. NR 140 ES.

Surface features, including buildings and basements, and show surface elevation changes.

Any areas of active remediation within the cross section path, such as excavations or treatment zones.

- Include a map displaying the cross-section location(s), if they are not displayed on the Detailed Site Map (Map B.1.b.)
- B.3.b. Groundwater Isoconcentration: Figure(s) showing the horizontal extent of the post-remedial groundwater contamination exceeding a ch. NR 140, Wis. Adm. Code, PAL and/or an ES. Indicate the date and direction of groundwater flow based on the most recent sampling data.
- B.3.c. Groundwater Flow Direction: Figure(s) representing groundwater movement at the site. If the flow direction varies by more than 20° over the history of the site, submit two groundwater flow maps showing the maximum variation in flow direction.
- B.3.d. Monitoring Wells: Figure(s) showing all monitoring wells, with well identification number. Clearly designate any wells that: (1) are proposed to be abandoned; (2) cannot be located; (3) are being transferred; (4) will be retained for further sampling, or (5) have been abandoned.

B.4. Vapor Maps and Other Media

- B.4.a. Vapor Intrusion Map: Map(s) showing all locations and results for samples taken to investigate the vapor intrusion pathway in relation to residual soil and groundwater contamination, including sub-slab, indoor air, soil vapor, soil gas, ambient air, and communication testing. Show locations and footprints of affected structures and utility corridors, and/or where residual contamination poses a future risk of vapor intrusion.
- B.4.b. Other media of concern (e.g., sediment or surface water): Map(s) showing all sampling locations and results for other media investigation. Include the date of sample collection and identify where any standards are exceeded.
- B.4.c. Other: Include any other relevant maps and figures not otherwise noted above. (This section may remain blank).
- B.5. Structural Impediment Photos: One or more photographs documenting the structural impediment feature(s) which precluded a complete site investigation or remediation at the time of the closure request. The photographs should document the area that could not be investigated or remediated due to a structural impediment. The structural impediment should be indicated on Figures B.2.a and B.2.b.

Documentation of Remedial Action (Attachment C)

Directions for Documentation of Remedial Action:

- Include in Attachment C all of the following documentation, in the order prescribed below, with the specific Closure Form titles noted
 on the separate attachments (e.g., Title: C.1. Site Investigation Documentation; C.2. Investigative Waste, etc.).
- If the documentation requested below has already been submitted to the DNR, please note the title and date of the report for that
 particular document requested.
 - C.1. Site investigation documentation, that has not otherwise been submitted with the Site Investigation Report.

C.2. Investigative waste disposal documentation.

- C.3. Provide a description of the methodology used along with all supporting documentation if the RCLs are different than those contained in the Department's RCL Spreadsheet available at: http://dnr.wi.gov/topic/Brownfields/Professionals.html.
- C.4. Construction documentation or as-built report for any constructed remedial action or portion of, or interim action specified in s. NR 724.02(1), Wis. Adm. Code.
- C.5. Decommissioning of Remedial Systems. Include plans to properly abandon any systems or equipment.
- C.6. Other. Include any other relevant documentation not otherwise noted above (This section may remain blank).

Maintenance Plan(s) and Photographs (Attachment D)

Directions for Maintenance Plans and Photographs:

Attach a maintenance plan for each affected property (source property, each off-source affected property) with continuing obligations requiring future maintenance (e.g., direct contact, groundwater protection, vapor intrusion). See Site Summary section 5 for all affected property(s) requiring a maintenance plan. Maintenance plan guidance and/or templates for: 1) Cover/barrier systems; 2) Vapor intrusion; and 3) Monitoring wells, can be found at: http://dnr.wi.gov/topic/Brownfields/Professionals.html#tabx3

- D.1. Descriptions of maintenance action(s) required for maximizing effectiveness of the engineered control, vapor mitigation system, feature or other action for which maintenance is required:
 - Provide brief descriptions of the type, depth and location of residual contamination.

02-16-585474	
BRRTS No.	

Reported Contamination at Superior Refining

Activity (Site) Name

Case Closure Form 4400-202 (R 8/16)

Page 10 of 13

- Provide a description of the system/cover/barrier/monitoring well(s) to be maintained.
- Provide a description of the maintenance actions required for maximizing effectiveness of the engineered control, vapor mitigation system, feature or other action for which maintenance is required.
- Provide contact information, including the name, address and phone number of the individual or facility who will be conducting the maintenance.
- D.2. Location map(s) which show(s): (1) the feature that requires maintenance; (2) the location of the feature(s) that require(s) maintenance - on and off the source property; (3) the extent of the structure or feature(s) to be maintained, in relation to other structures or features on the site; (4) the extent and type of residual contamination; and (5) all property boundaries.
- D.3. Photographs for site or facilities with a cover or other performance standard, a structural impediment or a vapor mitigation system, include one or more photographs documenting the condition and extent of the feature at the time of the closure request. Pertinent features shall be visible and discernible. Photographs shall be submitted with a title related to the site name and location, and the date on which it was taken.
- Inspection log, to be maintained on site, or at a location specified in the maintenance plan or approval letter. The inspection and maintenance log is found at: http://dnr.wi.gov/files/PDF/forms/4400/4400-305.pdf

Monitoring Well Information (Attachment E)

Directions for Monitoring Well Information:

For all wells that will remain in use, be transferred to another party, or that could not be located; attach monitoring well construction and development forms (DNR Form 4400-113 A and B: http://dnr.wl.gov/topic/groundwater/documents/forms/4400 113 1 2.pdf)

Sel	ect (One:
•	No	monitoring wells were installed as part of this response action.
0	Allr	monitoring wells have been located and will be properly abandoned upon the DNR granting conditional closure to the site
0	Sele	ect One or More:
		Not all monitoring wells can be located, despite good faith efforts. Attachment E must include a description of efforts made to locate the wells.
		One or more wells will remain in use at the site after this closure. Attachment E must include documentation as to the reason (s) the well(s) will remain in use. When one or more monitoring wells will remain in use this is considered a continuing
		obligation and a maintenance plan will be required and must be included in Attachment D. One or more monitoring wells will be transferred to another owner upon case closure being granted. Attachment E should include documentation identifying the name, address and email for the new owner(s). Provide documentation from the party accepting future responsibility for monitoring well(s).

Source Legal Documents (Attachment F)

Directions for Source Legal Documents:

Label documents with the specific closure form titles (e.g., F.1. Deed, F.2. Certified Survey Map, etc.). Include all of the following documents, in the order listed:

- Deed: The most recent deed with legal description clearly listed.
 - Note: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.
- Certified Survey Map: A copy of the certified survey map or the relevant section of the recorded plat map for those properties where the legal description in the most recent deed refers to a certified survey map or a recorded plat map. In cases where the certified survey map or recorded plat map are not legible or are unavailable, a copy of a parcel map from a county land information office may be substituted. A copy of a parcel map from a county land information office shall be legible, and the parcels identified in the legal description shall be clearly identified and labeled with the applicable parcel identification number.
- Verification of Zoning: Documentation (e.g., official zoning map or letter from municipality) of the property's or properties' current zoning status.
- Signed Statement: A statement signed by the Responsible Party (RP), which states that he or she believes that the attached legal description(s) accurately describe(s) the correct contaminated property or properties. This section applies to the source property only. Signed statements for Other Affected Properties should be included in Attachment G.

Reported Contamination at Superior Refining

Activity (Site) Name

Case Closure

Form 4400-202 (R 8/16)

Page 11 of 13

Notifications to Owners of Affected Properties (Attachment G)

Directions for Notifications to Owners of Affected Properties:

Complete the table on the following page for sites which require notification to owners of affected properties pursuant to ch. 292, Wis. Stats, and ch. NR 725 and 726, Wis. Adm. Code. Personal information collected will be used for administrative purposes and may be provided to requesters to the extent required by Wisconsin's Open Records law [ss. 19.31–19.39, Wis. Stats.]. The DNR's "Guidance on Case Closure and the Requirements for Managing Continuing Obligations" (PUB-RR-606) lists specific notification requirements http://dnr.wi.gov/files/PDF/pubs/rr/RR606.pdf.

State law requires that the responsible party provide a 30-day, written advance notification to certain persons prior to applying for case closure. This requirement applies if: (1) the person conducting the response action does not own the source property; (2) the contamination has migrated onto another property; and/or (3) one or more monitoring wells will not be abandoned. Use form 4400-286, Notification of Continuing Obligations and Residual Contamination, at http://dnr.wl.gov/files/PDF/forms/4400/4400-286.pdf

Include a copy of each notification sent and accompanying proof of delivery, i.e., return receipt or signature confirmation.

Include the following documents for each property, keeping each property's documents grouped together and labeled with the letter G and the corresponding ID number from the table on the following page. (Source Property documents should only be included in Attachment F):

- Deed: The most recent deed with legal descriptions clearly listed for all affected properties.
 Note: If a property has been purchased with a land contract and the purchaser has not yet received a deed, a copy of the land contract which includes the legal description shall be submitted instead of the most recent deed. If the property has been inherited, written documentation of the property transfer should be submitted along with the most recent deed.
- Certified Survey Map: A copy of the certified survey map or the relevant section of the recorded plat map for those properties where
 the legal description in the most recent deed refers to a certified survey map or a recorded plat map. In cases where the certified
 survey map or recorded plat map are not legible or are unavailable, a copy of a parcel map from a county land information office may
 be substituted. A copy of a parcel map from a county land information office shall be legible, and the parcels identified in the legal
 description shall be clearly identified and labeled with the applicable parcel identification number.
- Verification of Zoning: Documentation (e.g., official zoning map or letter from municipality) of the property's or properties' current zoning status.
- Signed Statement: A statement signed by the Responsible Party (RP), which states that he or she believes the attached legal description(s) accurately describe(s) the correct contaminated property or properties.

Case Closure

Page 12 of 13

Form 4400-202 (R 8/16)

-									ı	Reas	ons	Not	ifica	tion	Lette	er S	ent:		
D	Address of Affected Property	Parcel ID No.	Date of Receipt of Letter	Type of Property Owner	WTMX	WTMY	Residual Groundwater Contamination = or > ES	Residual Soil Contamination Exceeds RCLs	Monitoring Wells: Not Abandoned	Monitoring Wells: Continued Monitoring	Cover/Barrier/Engineered Control	Structural Impediment	Industrial RCLs Met/Applied	Vapor Mitigation System(VMS)	Dewatering System Needed for VMS	Compounds of Concern in Use	Commercial/Industrial Vapor Exposure Assumptions Applied	Residual Volatile Contamination Poses Future Risk of Vapor Intrusion	Site Specification Situation
A		-1111								1									
В														Т					
						Y.													
)																			

02-16-5	5854	74
BRRTS	No.	

Reported Contamination at Superior Refining

Case Closure Form 4400-202 (R 8/16) Activity (Site) Name

Page 13 of 13

Signatures and Findings for Closure Determination

This page has been updated as of February 2019 to comply with the requirements of Wis. Admin. Code ch. NR 712.

Check the correct box for this case closure request and complete the corresponding certification statement(s) listed below to

demonstrate that the requirements of Wis. Admin. Code ch. NR 712 have been mot be delegated per Wis. Admin. Code § NR 712.09 (1). Per Wis. Admin. Code § supervised by the person certifying.	et. The responsibility	for signing the certification may
The investigation and/or response action(s) for this site evaluated and/or a remedies). Both a professional engineer and a hydrogeologist must sign the		
The investigation and the response action(s) for this site did not evaluate of sign this document per Wis. Admin. Code ch. NR 712.	or address groundwat	er. A professional engineer must
Engineering Certification	- 2 2 2 2	
State of Wisconsin, registered in accordance with the requirements of ch. A-E 4, prepared in accordance with the Rules of Professional Conduct in ch. A-E 8, Wis. all information contained in this document is correct and the document was prepared by the NR 700 to 726, Wis. Adm. Code. Signature Title Sr. Civil Engineer	Wis. Adm. Code; that Adm. Code; and that	t, to the best of my knowledge, hall applicable requirements in 34139
Hydrogeologist Certification		- Contraction
I, Lynette Carney , hereby certis. NR 712.03 (1), Wis. Adm. Code, am registered in accordance with the requirements of ch. GHSS 3, Wis. Adm. Code, and that, to the contained in this document is correct and the document was prepared in compliant 726, Wis. Adm. Code. Signature	nents of ch. GHSS 2, ne best of my knowled	dge, all of the information
Title Sr. Geologist	Date	03/26/2020

Attachment A – Data Tables

- A.1 Groundwater Analytical Table
- A.2 Soil Analytical Results Tables
- A.3 Residual Soil Contamination Table
- A.4 Vapor Analytical Table (Not Applicable)
- A.5 Other Media of Concern (Not Applicable)
- A.6 Water Level Elevations (Not Applicable)
- A.7 Other (Not Applicable)

Table A.1 Groundwater Analytical Table (2018) Nemadji Substation Phase II Investigation Superior, WI

	ugauc	on Superior, WI	Location	SB-3
			Date	6/22/2018
	1		Depth	14.5 - 19.5 ft
		Wisconsin	Wisconsin	
Parameter	Units	Groundwater Public	Groundwater	
		Health Enforcement Standards	Preventive Action Limits	
Effective Date	+	07/01/2015	07/01/2015	
Exceedance Key		No Exceedances	No Exceedances	
Semivolatile Organic Compounds		NO Exceedances	NO Exceedances	
Acenaphthene	ug/l			< 0.0043 U
Acenaphthylene	ug/l			< 0.0063 U
Anthracene	ug/l	3000	600	< 0.0083 U
Benz(a)anthracene	ug/l			< 0.0053 U
Benzo(a)pyrene	ug/l	0.2	0.02	< 0.0054 U
Benzo(b)fluoranthene	ug/l	0.2	0.02	< 0.017 U
Benzo(g,h,i)perylene	ug/l			< 0.013 U
Benzo(k)fluoranthene	ug/l			< 0.014 U
Chrysene	ug/l	0.2	0.02	< 0.012 U
Dibenz(a,h)anthracene	ug/l			< 0.012 U
Fluoranthene	ug/l	400	80	< 0.025 U
Fluorene	ug/l	400	80	< 0.0080 U
Indeno(1,2,3-cd)pyrene	ug/l	465		< 0.018 U
Naphthalene	ug/l	100	10	< 0.0092 U
Phenanthrene	ug/l	050	50	< 0.014 U
Pyrene	ug/l	250	50	< 0.020 U
Volatile Organic Compounds	//	70	7	< 0.00 H
1,1,1,2-Tetrachloroethane 1,1,1-Trichloroethane	ug/l ug/l	70 200	7 40	< 0.20 U < 0.14 U
1.1.2.2-Tetrachloroethane	ug/l	0.2	0.02	< 0.14 U
1,1,2-Trichloroethane	ug/l	5	0.5	< 0.17 U
1.1-Dichloroethane	ug/l	850	85	< 0.17 U
1,1-Dichloroethylene	ug/l	7	0.7	< 0.16 U
1,1-Dichloropropene	ug/l	•	J.,	< 0.20 U
1,2,3-Trichlorobenzene	ug/l			< 0.21 U
1,2,3-Trichloropropane	ug/l	60	12	< 0.26 U
1,2,4-Trichlorobenzene	ug/l	70	14	< 0.20 U
1,2,4-Trimethylbenzene	ug/l	480 c	96 c	< 0.20 U
1,2-Dibromo-3-chloropropane (DBCP)	ug/l	0.2	0.02	< 1.7 U
1,2-Dibromoethane (EDB)	ug/l	0.05	0.005	< 0.24 U
1,2-Dichlorobenzene	ug/l	600	60	< 0.14 U
1,2-Dichloroethane	ug/l	5	0.5	< 0.22 U
1,2-Dichloroethylene, cis	ug/l	70	7	< 0.15 U
1,2-Dichloroethylene, trans	ug/l	100	20	< 0.12 U
1,2-Dichloropropane	ug/l	5	0.5	< 0.16 U
1,3,5-Trimethylbenzene	ug/l	480 c	96 c	< 0.12 U
1,3-Dichlorobenzene	ug/l	600	120	< 0.16 U
1,3-Dichloropropane 1,3-Dichloropropene, cis	ug/l ug/l	0.4	0.04	< 0.070 U < 0.20 U
1,3-Dichloropropene, cis	ug/I ug/I	0.4	0.04	< 0.20 U
1,4-Dichlorobenzene	ug/l	75	15	< 0.17 U
2,2-Dichloropropane	ug/l	7.5	10	< 0.17 U
Acetone	ug/l	9000	1800	< 9.2 U
Allyl chloride	ug/l			< 0.29 U
Benzene	ug/l	5	0.5	< 0.10 U
Bromobenzene	ug/l			< 0.21 U
Bromochloromethane	ug/l			< 0.27 U
Bromodichloromethane	ug/l	0.6	0.06	< 0.22 U
Bromoform	ug/l	4.4	0.44	< 0.80 U
Bromomethane	ug/l	10	1	< 1.8 U
Butylbenzene	ug/l			< 0.24 U
Butylbenzene, sec	ug/l			< 0.15 U
Butylbenzene, tert	ug/l			< 0.15 U

Table A.1 Groundwater Analytical Table (2018) Nemadji Substation Phase II Investigation Superior, WI

			Location	SB-3
			Date	6/22/2018
			Depth	14.5 - 19.5 ft
		Wisconsin	Wisconsin	
Parameter	Units	Groundwater Public	Groundwater	
Parameter	Units	Health Enforcement	Preventive Action	
		Standards	Limits	
Effective Date		07/01/2015	07/01/2015	
Exceedance Key		No Exceedances	No Exceedances	
Carbon tetrachloride	ug/l	5	0.5	< 0.19 U
Chlorobenzene	ug/l	100	20	< 0.17 U
Chlorodibromomethane	ug/l	60	6	< 0.12 U
Chloroethane	ug/l	400	80	< 0.49 U
Chloroform	ug/l	6	0.6	< 0.45 U
Chloromethane	ug/l	30	3	< 0.16 U
Chlorotoluene, o	ug/l			< 0.16 U
Chlorotoluene, p	ug/l			< 0.13 U
Cumene (isopropyl benzene)	ug/l			< 0.18 U
Cymene p- (toluene isopropyl p-)	ug/l			< 0.15 U
Dibromomethane (methylene bromide)	ug/l			< 0.16 U
Dichlorodifluoromethane (Freon-12)	ug/l	1000	200	< 0.23 U
Dichlorofluoromethane (Freon-21)	ug/l	7000		< 0.14 U
Ethyl benzene	ug/l	700	140	< 0.14 U
Ethyl ether	ug/l	1000	100	< 0.095 U
Hexachlorobutadiene	ug/l			< 0.31 U
Methyl ethyl ketone (2-butanone)	ug/l	4000	800	< 0.99 U
Methyl isobutyl ketone (MIBK)	ug/l	500	50	< 0.42 U
Methyl tertiary butyl ether (MTBE)	ug/l	60	12	< 0.16 U
Methylene chloride	ug/l	5	0.5	< 0.98 U
Naphthalene	ug/l	100	10	< 0.48 U
Propylbenzene	ug/l			< 0.10 U
Styrene	ug/l	100	10	< 0.19 U
Tetrachloroethylene	ug/l	5	0.5	< 0.17 U
Tetrahydrofuran	ug/l	50	10	< 2.2 U
Toluene	ug/l	800	160	2.1
Trichloroethylene (TCE)	ug/l	5	0.5	< 0.15 U
Trichlorofluoromethane (Freon-11)	ug/l	3490	698	< 0.23 U
Trichlorotrifluoroethane (Freon 113)	ug/l			< 0.22 U
Vinyl chloride	ug/l	0.2	0.02	< 0.092 U
Xylene, total	ug/l	2000 (4)	400 (4)	< 0.31 U

⁽⁴⁾ Xylene includes meta-, ortho-, and para-xylene combined.

c Value represents the criteria for Trimethylbenzes (1,2,4- and 1,3,5- combined).

U The analyte was analyzed for, but was not detected.

Table A.2.a Soil Analytical Results Table (2020) Nemadji Substation Phase II Investigation Superior, WI

				Location	SB-6	SB-6	SB-7	SB-7	SB-8	SB-8	SB-9	SB-10	SB-10	SB-10	SB-11	SB-11	SB-12	SB-13	SB-14	SB-15	SB-16	SB-17	SB-18
															-	-						_	
				Date	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/07/2020	1/07/2020
				Depth	1.5 - 2 ft	5 - 6 ft	2 - 4 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	5 - 6 ft	1 - 2 ft	2 - 4 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	2 - 4 ft
			Wisconsin Not to	Wisconsin Not to																			
		Wisconsin	Exceed Direct	Exceed Direct																			
		Groundwater	Contact Industrial	Contact Non-																			
Parameter	Units	RCLs, DF=2	RCLs	Industrial RCLs																			
Effective Date		12/01/2018	12/01/2018	12/01/2018																			
Exceedance Key		Bold	No Exceedances	No Exceedances																			
General Parameters																							
Moisture	%				24.1	26.4	23.0	27.2	26.6	27.3	27.3	26.4	27.7	23.1	36.3	27.7	23.9	24.7	33.9	35.5	25.4	26.2	24.8
Volatile Organic Compounds																							
1,2,4-Trimethylbenzene	mg/kg	1.3787 (1)	219	219	< 0.0133 U	< 0.0141 U	< 0.0131 U	< 0.0143 U	< 0.0142 U	< 0.0137 U	< 0.0143 U	< 0.0140 U	< 0.0142 U	< 0.0132 U	< 0.0189 U	< 0.0138 U	< 0.0137 U	< 0.0137 U	< 0.0174 U	< 0.0155 U	< 0.0139 U	< 0.0136 U	< 0.0134 U
1,3,5-Trimethylbenzene	mg/kg	1.3787 (1)	182	182	< 0.0106 U	< 0.0112 U	< 0.0104 U	< 0.0114 U	< 0.0113 U	< 0.0109 U	< 0.0114 U	< 0.0112 U	< 0.0113 U	< 0.0105 U	< 0.0150 U	< 0.0110 U	< 0.0109 U	< 0.0109 U	< 0.0138 U	< 0.0124 U	< 0.0111 U	< 0.0109 U	< 0.0107 U
Benzene	mg/kg	0.0051	7.07	1.6	0.0399	< 0.0040 U	< 0.0037 U	< 0.0040 U	< 0.0040 U	< 0.0039 U	< 0.0040 U	< 0.0039 U	< 0.0040 U	< 0.0037 U	< 0.0053 U	< 0.0039 U	< 0.0039 U	< 0.0039 U	< 0.0049 U	< 0.0044 U	< 0.0039 U	< 0.0038 U	< 0.0038 U
Ethyl benzene	mg/kg	1.57	35.4	8.02	< 0.0036 U	< 0.0038 U	< 0.0036 U	< 0.0039 U	< 0.0039 U	< 0.0037 U	< 0.0039 U	< 0.0038 U	< 0.0039 U	< 0.0036 U	< 0.0051 U	< 0.0038 U	< 0.0037 U	< 0.0037 U	< 0.0047 U	< 0.0042 U	< 0.0038 U	< 0.0037 U	< 0.0036 U
Methyl tertiary butyl ether (MTBE)	mg/kg	0.027	282	63.8	< 0.0079 U	< 0.0084 U	< 0.0078 U	< 0.0085 U	< 0.0084 U	< 0.0081 U	< 0.0085 U	< 0.0083 U	< 0.0085 U	< 0.0078 U	< 0.0112 U	< 0.0082 U	< 0.0081 U	< 0.0081 U	< 0.0103 U	< 0.0092 U	< 0.0083 U	< 0.0081 U	< 0.0080 U
Naphthalene	mg/kg	0.6582	24.1	5.52	0.166 J	< 0.0658 U	< 0.0613 U	< 0.0670 U	< 0.0663 U	< 0.0639 U	< 0.0668 U	< 0.0655 U	< 0.0665 U	< 0.0615 U	< 0.0884 U	< 0.0646 U	< 0.0639 U	< 0.0640 U	< 0.0812 U	< 0.0726 U	< 0.0652 U	< 0.0639 U	< 0.0628 U
Toluene	mg/kg	1.1072	818	818	0.0512 J	< 0.0172 U	< 0.0160 U	< 0.0175 U	< 0.0173 U	< 0.0167 U	< 0.0174 U	< 0.0171 U	< 0.0173 U	< 0.0160 U	< 0.0230 U	< 0.0168 U	< 0.0167 U	< 0.0167 U	< 0.0212 U	< 0.0189 U	< 0.0170 U	< 0.0167 U	< 0.0164 U
Xylene, total	mg/kg	3.96	260	260	< 0.0155 U	< 0.0163 U	< 0.0152 U	< 0.0166 U	< 0.0164 U	< 0.0158 U	< 0.0166 U	< 0.0162 U	< 0.0165 U	< 0.0153 U	< 0.0219 U	< 0.0160 U	< 0.0158 U	< 0.0159 U	< 0.0201 U	< 0.0180 U	< 0.0162 U	< 0.0158 U	< 0.0156 U
Total Petroleum Hydrocarbons																							
Diesel Range Organics, C10-C28	mg/kg				23.6	< 4.9 U	< 4.8 U	< 5.1 U	8.2 J	< 4.8 U	< 5.1 U	< 5.3 U	< 5.4 U	121 J	19.5 J	< 5.3 U	< 5.0 U	< 4.8 U	6.0 J	< 5.0 U	26.5	< 5.1 U	< 5.1 U
Barr Calculated Comparison - Industrial																							
Exceedance Count	no unit		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazard Index	no unit		≤ 1.0		0.00028	0.00010	0.000095	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.000096	0.00014	0.00010	0.00010	0.00010	0.00013	0.00011	0.00010	0.000099	0.000098
Cumulative Cancer Risk	no unit		≤ 1E-0.5		1.30E-08	3.40E-09	3.20E-09	3.50E-09	3.50E-09	3.30E-09	3.50E-09	3.40E-09	3.50E-09	3.20E-09	4.60E-09	3.40E-09	3.30E-09	3.30E-09	4.20E-09	3.80E-09	3.40E-09	3.30E-09	3.30E-09
Barr Calculated Comparison -Non-Industrial																							
Exceedance Count	no unit			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazard Index	no unit			≤ 1.0	0.0014	0.00050	0.00047	0.00051	0.00051	0.00049	0.00051	0.00050	0.00051	0.00047	0.00067	0.00049	0.00049	0.00049	0.00062	0.00055	0.00050	0.00049	0.00048
Cumulative Cancer Risk	no unit			≤ 1E-05	5.60E-08	1.50E-08	1.40E-08	1.50E-08	1.50E-08	1.50E-08	1.50E-08	1.50E-08	1.50E-08	1.40E-08	2.00E-08	1.50E-08	1.50E-08	1.50E-08	1.90E-08	1.70E-08	1.50E-08	1.50E-08	1.40E-08

⁽¹⁾ Representing the criteria for combined Trimethylbenzenes.J Estimated detected value. Either certain QC criteria were not met or the concentration is between the laboratory's detection and quanitation limits.

U The analyte was analyzed for, but was not detected.

Table A.2.a Soil Analytical Results Table (2020) Nemadji Substation Phase II Investigation Superior, WI

				Laastian	OD 40	05.40	27.00	00.04	OD 04	00.00	00.00	00.00	00.04	00.05	OD 00	00.00	00.00	00.00	00.00	00.00	20.00
				Location	SB-18	SB-19	SB-20	SB-21	SB-21	SB-22	SB-22	SB-23	SB-24	SB-25	SB-26	SB-26	SB-27	SB-27	SB-28	SB-29	SB-29
				Date	1/07/2020	1/07/2020	1/07/2020	1/06/2020	1/06/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020
				Depth	6 - 8 ft	6 - 8 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft
	Wisconsin Not to Wisconsin No																				
		Wisconsin	Exceed Direct	Exceed Direct																	
		Groundwater	Contact Industrial	Contact Non-																	
Parameter	Units	RCLs, DF=2	RCLs	Industrial RCLs																	
Effective Date		12/01/2018	12/01/2018	12/01/2018																	
Exceedance Key		Bold	No Exceedances	No Exceedances																	
General Parameters																					
Moisture	%				27.2	24.5	25.7	24.8	25.2	24.3	25.2	23.4	23.6	34.5	25.5	29.5	25.8	26.4	27.1	24.0	29.3
Volatile Organic Compounds																					
1,2,4-Trimethylbenzene	mg/kg	1.3787 (1)	219	219	< 0.0138 U	< 0.0138 U	< 0.0132 U	< 0.0129 U	< 0.0136 U	< 0.0130 U	< 0.0132 U	< 0.0133 U	< 0.0132 U	< 0.0162 U	< 0.0139 U	< 0.0138 U	< 0.0131 U	< 0.0133 U	< 0.0131 U	< 0.0128 U	< 0.0137 U
1,3,5-Trimethylbenzene	mg/kg	1.3787 (1)	182	182	< 0.0110 U	< 0.0110 U	< 0.0105 U	< 0.0103 U	< 0.0108 U	< 0.0104 U	< 0.0105 U	< 0.0106 U	< 0.0106 U	< 0.0129 U	< 0.0111 U	< 0.0110 U	< 0.0104 U	< 0.0106 U	< 0.0104 U	< 0.0102 U	< 0.0109 U
Benzene	mg/kg	0.0051	7.07	1.6	< 0.0039 U	< 0.0039 U	< 0.0037 U	< 0.0036 U	< 0.0038 U	< 0.0037 U	< 0.0037 U	< 0.0037 U	< 0.0037 U	< 0.0046 U	< 0.0039 U	< 0.0039 U	< 0.0037 U	< 0.0038 U	< 0.0037 U	< 0.0036 U	< 0.0039 U
Ethyl benzene	mg/kg	1.57	35.4	8.02	< 0.0037 U	< 0.0037 U	< 0.0036 U	< 0.0035 U	< 0.0037 U	< 0.0035 U	< 0.0036 U	< 0.0036 U	< 0.0036 U	< 0.0044 U	< 0.0038 U	< 0.0038 U	< 0.0036 U	< 0.0036 U	< 0.0036 U	< 0.0035 U	< 0.0037 U
Methyl tertiary butyl ether (MTBE)	mg/kg	0.027	282	63.8	< 0.0082 U	< 0.0082 U	< 0.0078 U	< 0.0077 U	< 0.0081 U	< 0.0077 U	< 0.0078 U	< 0.0079 U	< 0.0079 U	< 0.0097 U	< 0.0083 U	< 0.0082 U	< 0.0078 U	< 0.0079 U	< 0.0078 U	< 0.0076 U	< 0.0082 U
Naphthalene	mg/kg	0.6582	24.1	5.52	< 0.0644 U	< 0.0644 U	< 0.0617 U	< 0.0605 U	< 0.0636 U	< 0.0609 U	< 0.0617 U	< 0.0621 U	< 0.0620 U	< 0.0759 U	< 0.0649 U	< 0.0647 U	< 0.0613 U	< 0.0624 U	< 0.0612 U	< 0.0600 U	< 0.0641 U
Toluene	mg/kg	1.1072	818	818	< 0.0168 U	< 0.0168 U	< 0.0161 U	< 0.0158 U	< 0.0166 U	< 0.0159 U	< 0.0161 U	< 0.0162 U	< 0.0162 U	< 0.0198 U	< 0.0169 U	< 0.0169 U	< 0.0160 U	< 0.0163 U	< 0.0160 U	< 0.0156 U	< 0.0167 U
Xylene, total	mg/kg	3.96	260	260	< 0.0160 U	< 0.0160 U	< 0.0153 U	< 0.0150 U	< 0.0158 U	< 0.0151 U	< 0.0153 U	< 0.0154 U	< 0.0154 U	< 0.0188 U	< 0.0161 U	< 0.0160 U	< 0.0152 U	< 0.0155 U	< 0.0152 U	< 0.0149 U	< 0.0159 U
Total Petroleum Hydrocarbons																					
Diesel Range Organics, C10-C28	mg/kg				< 5.1 U	< 5.0 U	< 4.9 U	< 6.0 U	< 4.9 U	< 4.5 U	< 5.6 U	< 4.4 U	< 4.9 U	15.5 J	< 4.8 U	< 5.3 U	< 5.0 U	< 4.8 U	< 5.1 U	14.0 J	< 5.3 U
Barr Calculated Comparison - Industrial																					
Exceedance Count	no unit		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazard Index	no unit		≤ 1.0		0.00010	0.00010	0.000096	0.000094	0.000099	0.000095	0.000096	0.000097	0.000096	0.00012	0.00010	0.00010	0.000095	0.000097	0.000095	0.000093	0.00010
Cumulative Cancer Risk	no unit		≤ 1E-0.5		3.40E-09	3.40E-09	3.20E-09	3.10E-09	3.30E-09	3.20E-09	3.20E-09	3.20E-09	3.20E-09	4.00E-09	3.40E-09	3.40E-09	3.20E-09	3.30E-09	3.20E-09	3.10E-09	3.30E-09
Barr Calculated Comparison -Non-Industrial																					
Exceedance Count	no unit			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazard Index	no unit			≤ 1.0	0.00049	0.00049	0.00047	0.00046	0.00049	0.00047	0.00047	0.00047	0.00047	0.00058	0.00050	0.00049	0.00047	0.00048	0.00047	0.00046	0.00049
Cumulative Cancer Risk	no unit			≤ 1E-05	1.50E-08	1.50E-08	1.40E-08	1.40E-08	1.40E-08	1.40E-08	1.40E-08	1.40E-08	1.40E-08	1.70E-08	1.50E-08	1.50E-08	1.40E-08	1.40E-08	1.40E-08	1.40E-08	1.50E-08

Representing the criteria for combined Trimethylbenzenes.
 Estimated detected value. Either certain QC criteria were not met or the concentration is between the laboratory's detection and quanitation limits.

U The analyte was analyzed for, but was not detected.

Table A.2.b Soil Analytical Results Table (2018) Nemadji Substation Phase II Investigation Superior, WI

					Location	SB-1	SB-1	SB-2	SB-2	SB-3	SB-3	SB-4	SB-4	SB-5	SB-5
					Date	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/22/2018	6/22/2018	6/22/2018	6/22/2018
					Depth	2 - 3 ft	12 - 13 ft	0 - 1 ft	6 - 7 ft	0 - 2 ft	8 - 9 ft	0 - 2 ft	6 - 7 ft	0 - 1 ft	8 - 9 ft
		\\/iooonoin	Wisconsin Not to	Wisconsin Not to	WDND										
Parameter	Units	Wisconsin Groundwater	Exceed Direct	Exceed Direct	WDNR Background										
i didilietei	Units	RCLs, DF=2	Contact Industrial	Contact Non-	Threshold Values										
		NOES, DI Z	RCLs	Industrial RCLs											
Effective Date		12/01/2018	12/01/2018	12/01/2018	12/01/2018										
Exceedance Key		Bold	<u>Underlined</u>	Italics	Reference Only										
General Parameters															
Moisture	%					27.6	35.3	20.3	24.5	24.5	31.6	26.7	29.4	23.3	28.1
Metals															
Arsenic	mg/kg	0.584	<u>3</u>	0.677	8	<u>3.1</u>	<u>3.8</u>	<u>3.0</u>	<u>3.3</u>	<u>3.5</u>	2.8	<u>3.0</u>	<u>3.0</u>	<u>5.1 J</u>	<u>3.4</u>
Barium	mg/kg	164.8	100000	15300 71.1	364 1	245	193	145	150	174	176	191	160	287	173
Characteristics	mg/kg	0.752	985 100000 CR3	71.1 100000 CR3	•	< 0.075 U 49.6	< 0.082 U 42.9	< 0.065 U 37.0	< 0.070 U 39.5	< 0.069 U	0.11 J 42.6	< 0.071 U	0.097 J 39.4	0.56 J 1850	< 0.073 U 42.0
Chromium Lead	mg/kg	360000 27	800	400	44 52	10.5	9.5	7.6	8.1	41.7 9.0	7.8	48.6 9.1	7.7	88.2	8.4
	mg/kg	0.208	3.13	3.13	52	0.023 J	0.026 J	0.022 J	0.020 J	0.026 J	0.021 J	0.023 J	0.021 J	0.10	0.017 J
Mercury Selenium	mg/kg mg/kg	0.208	5840	391		0.023 J 0.56 J*	< 0.61 U	< 0.49 U	< 0.52 U	< 0.51 U	< 0.58 U	< 0.53 U	< 0.56 U	< 5.2 U	< 0.54 U
Silver	mg/kg	0.8491	5840	391		< 0.11 U	< 0.01 U	< 0.49 U	< 0.32 U	< 0.31 U	< 0.38 U	< 0.33 U	< 0.30 U	1.1 J	< 0.34 U
Semivolatile Organic Compounds	mg/kg	0.0731	0070	001		- 0.110	- 0.12 0	- 0.000 0	- 0.11 0	- 0.10 0	- 0.12 0	- 0.11 0	- 0.110		- 0.110
Acenaphthene	mg/kg		45200	3590		< 0.00056 U	< 0.00063 U	< 0.00051 LI	< 0.00054 U	< 0.0005411	< 0.00060 11	< 0.00056 11	< 0.0005811	0.0069	< 0.00057 U
Acenaphthylene	mg/kg		10200	0000			< 0.00076 U		< 0.00066 U						< 0.00069 U
Anthracene	mg/kg	196.9492	100000	17900			< 0.00072 U		< 0.00062 U				< 0.00066 U		< 0.00065 U
Benz(a)anthracene	mg/kg		20.8	1.14		< 0.0015 U			< 0.0014 U		< 0.0016 U	< 0.0015 U		0.0778	< 0.0015 U
Benzo(a)pyrene	mg/kg	0.47	2.11	0.115		< 0.00095 U	< 0.0011 U		< 0.00091 U		0.0012 J	< 0.00094 U	< 0.00097 U	0.128	< 0.00095 U
Benzo(b)fluoranthene	mg/kg	0.4781	21.1	1.15		0.0011 J	< 0.00057 U	< 0.00047 U	< 0.00049 U	< 0.00049 U	0.0022	< 0.00051 U	< 0.00053 U	0.162	< 0.00052 U
Benzo(g,h,i)perylene	mg/kg					< 0.00087 U	< 0.00097 U	< 0.00079 U	< 0.00084 U	< 0.00083 U	0.0023 J	< 0.00086 U	< 0.00090 U	0.116	< 0.00088 U
Benzo(k)fluoranthene	mg/kg		211	11.5		< 0.0012 U	< 0.0013 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	0.0022 J	< 0.0012 U	< 0.0012 U	0.0557	< 0.0012 U
Chrysene	mg/kg	0.1442	2110	115		< 0.0019 U	< 0.0021 U	< 0.0017 U	< 0.0018 U	< 0.0018 U	< 0.0020 U	< 0.0019 U	< 0.0019 U	0.0981	< 0.0019 U
Dibenz(a,h)anthracene	mg/kg		2.11	0.115		< 0.00064 U	< 0.00071 U	< 0.00058 U	< 0.00061 U	< 0.00061 U	0.0022 J	< 0.00063 U	< 0.00065 U	0.0325	< 0.00064 U
Fluoranthene	mg/kg	88.8778	30100	2390		0.0018 J	< 0.00066 U	< 0.00054 U	< 0.00057 U	< 0.00056 U	0.0019 J	< 0.00058 U	< 0.00061 U	0.0904	< 0.00059 U
Fluorene	mg/kg	14.8299	30100	2390		< 0.00043 U	< 0.00048 U	< 0.00039 U	< 0.00041 U	< 0.00041 U	< 0.00046 U	< 0.00043 U	< 0.00044 U	0.0025	< 0.00043 U
Indeno(1,2,3-cd)pyrene	mg/kg		21.1	1.15		< 0.00093 U			< 0.00089 U		0.0022 J	< 0.00091 U			< 0.00093 U
Naphthalene	mg/kg	0.6582	24.1	5.52		< 0.0011 U	< 0.0012 U	< 0.00097 U		< 0.0010 U	< 0.0011 U	< 0.0011 U	< 0.0011 U	0.0043	< 0.0011 U
Phenanthrene	mg/kg					< 0.0027 U	< 0.0030 U	< 0.0024 U	< 0.0025 U	< 0.0025 U	< 0.0028 U	< 0.0026 U	< 0.0027 U	0.0391	< 0.0027 U
Pyrene	mg/kg	54.5455	22600	1790		< 0.0021 U	< 0.0024 U	< 0.0019 U	< 0.0020 U	< 0.0020 U	< 0.0022 U	< 0.0021 U	< 0.0022 U	0.0752	< 0.0021 U
Volatile Organic Compounds															
1,1,1-Trichloroethane	mg/kg	0.1402	640	640		< 0.0250 U			< 0.0250 U		< 0.0250 U	< 0.0250 U		< 0.0250 U	
1,1,2,2-Tetrachloroethane	mg/kg	0.0002	3.6	0.81		< 0.0250 U		< 0.0250 U							
1,1,2-Trichloroethane	mg/kg	0.0032	7.01	1.59		< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U		< 0.0250 U	< 0.0250 U		< 0.0250 U	
1,1-Dichloroethane	mg/kg	0.4834	22.2	5.06		< 0.0250 U			< 0.0250 U		< 0.0250 U			< 0.0250 U	
1,1-Dichloroethylene	mg/kg	0.005	1190 2.87	320 0.652		< 0.0250 U < 0.0250 U	< 0.0250 U < 0.0250 U	< 0.0250 U < 0.0250 U	< 0.0250 U < 0.0250 U	< 0.0250 U < 0.0250 U	< 0.0250 U < 0.0250 U	< 0.0250 U < 0.0250 U		< 0.0250 U < 0.0250 U	
1,2-Dichloroethane	mg/kg	0.0028 0.0412	2340	156		< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U		< 0.0250 U	< 0.0250 U		< 0.0250 U	
1,2-Dichloroethylene, cis 1,2-Dichloroethylene, trans	mg/kg	0.0412	1850	1560		< 0.0250 U		< 0.0250 U							
1,2-Dichloropethylene, trans	mg/kg mg/kg	0.0626	15	3.4		< 0.0250 U		< 0.0250 U							
1,3-Dichloropropene, cis	mg/kg	0.0000	1210	1210		< 0.0250 U		< 0.0250 U							
1,3-Dichloropropene, cis	mg/kg		1510	1510		< 0.0250 U		< 0.0250 U							
2-Hexanone	mg/kg		1760	237		< 0.0520 U		< 0.0520 U		< 0.0520 U					
Acetone	mg/kg	3.6766	100000	63400		< 0.0320 U		< 0.0320 U							
Benzene	mg/kg	0.0051	7.07	1.6		< 0.0250 U		< 0.0250 U							
Bromodichloromethane	mg/kg	0.0003	1.83	0.418		< 0.0250 U		< 0.0250 U							
Bromoform	mg/kg	0.0023	113	25.4		< 0.0250 U		< 0.0250 U							
Bromomethane	mg/kg	0.0051	43	9.6		< 0.0699 U		< 0.0699 U							
Carbon disulfide	mg/kg	0.5919	738	738		< 0.0250 U		< 0.0250 U							
Carbon tetrachloride	mg/kg	0.0039	4.03	0.916		< 0.0250 U		< 0.0250 U		< 0.0250 U					
Chlorobenzene	mg/kg	0.1358	761	370		< 0.0250 U		< 0.0250 U							
Chlorodibromomethane	mg/kg	0.032	38.9	8.28		< 0.0250 U		< 0.0250 U							
Chloroethane	mg/kg	0.2266	2120	2120		< 0.0670 U 0 U	< 0.0670 U								
Chloroform	mg/kg	0.0033	1.98	0.454		< 0.0464 U 4 U	< 0.0464 U								
Chloromethane	mg/kg	0.0155	669	159		< 0.0250 U 0 U	< 0.0250 U								
Ethyl benzene	mg/kg	1.57	35.4	8.02		< 0.0250 U	< 0.025011	< 0.0250 U	< 0.0250 U						
	99	1.01	00.1	0.02		V 0.0230 O	₹ 0.0230 0	0.0200	10.0200 0	1 0.0200 0	10.0200 0	0.0200	V 0.0230 O	0.0200	

Table A.2.b Soil Analytical Results Table (2018) Nemadji Substation Phase II Investigation Superior, WI

					Location	SB-1	SB-1	SB-2	SB-2	SB-3	SB-3	SB-4	SB-4	SB-5	SB-5
					Date	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/22/2018	6/22/2018	6/22/2018	6/22/2018
					Depth	2 - 3 ft	12 - 13 ft	0 - 1 ft	6 - 7 ft	0 - 2 ft	8 - 9 ft	0 - 2 ft	6 - 7 ft	0 - 1 ft	8 - 9 ft
Parameter	Units	Wisconsin Groundwater RCLs, DF=2	Wisconsin Not to Exceed Direct Contact Industrial RCLs	Wisconsin Not to Exceed Direct Contact Non- Industrial RCLs	WDNR Background Threshold Values										
Effective Date		12/01/2018	12/01/2018	12/01/2018	12/01/2018										
Exceedance Key		Bold	<u>Underline</u>	Italics	Reference Only										
Methyl isobutyl ketone (MIBK)	mg/kg	0.2252	3360	3360		< 0.0411 U				< 0.0411 U	< 0.0411 U	< 0.0411 U	< 0.0411 U		
Methyl tertiary butyl ether (MTBE)	mg/kg	0.027	282	63.8		< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U		
Methylene chloride	mg/kg	0.0026	1150	61.8		< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U
Styrene	mg/kg	0.22	867	867		< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U
Tetrachloroethylene	mg/kg	0.0045	145	33		< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U
Toluene	mg/kg	1.1072	818	818		< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	0.0388 J	< 0.0250 U
Trichloroethylene (TCE)	mg/kg	0.0036	8.41	1.3		< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U
Vinyl chloride	mg/kg	0.0001	2.08	0.067		< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U
Xylene, m & p	mg/kg	3.96 XYL	260 XYL	260 XYL		< 0.0500 U	< 0.0500 U	< 0.0500 U	< 0.0500 U	< 0.0500 U	< 0.0500 U	< 0.0500 U	< 0.0500 U	< 0.0500 U	< 0.0500 U
Xylene, o	mg/kg	3.96 XYL	434	434		< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U	< 0.0250 U
Xylene, total (Barr Calculation)	mg/kg	3.96	260	260		ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Barr Calculated Comparison - Industrial ¹															
Exceedance Count	no unit		0			0	0	0	0	0	0	0	0	0	0
Hazard Index	no unit		≤ 1.0			0.0065	0.0066	0.0065	0.0065	0.0066	0.0065	0.0065	0.0065	0.12	0.0064
Cumulative Cancer Risk	no unit		≤ 1E-0.5			8.70E-08	8.70E-08	8.70E-08	8.70E-08	8.70E-08	8.80E-08	8.70E-08	8.70E-08	1.80E-07	8.70E-08
Barr Calculated Comparison - Non-Industrial ¹															
Exceedance Count	no unit			0		0	0	0	0	0	0	0	0	1	0
Hazard Index	no unit			≤ 1.0		0.031	0.031	0.03	0.03	0.031	0.031	0.031	0.03	0.29	0.03
Cumulative Cancer Risk	no unit			≤ 1E-05		7.20E-07	7.20E-07	7.20E-07	7.20E-07	7.20E-07	7.40E-07	7.20E-07	7.20E-07	2.40E-06	7.20E-07

¹ Comparision calculated using the reported value for Xylene, m & p in replace for "Xylenes" and the reported value for Chromium in replace of "Chromium(III), Insoluble Salts" in the RCL calculator

CR3 Value represents the criteria for Chromium(III).

ND Not detected.

XYL Value represents the criteria for Xylene, total (m-,o-,p- combined).

^{*} Estimated value, QA/QC criteria not met.

J Estimated detected value. Either certain QC criteria were not met or the concentration is between the laboratory's detection and quanitation limits.

U The analyte was analyzed for, but was not detected.

Table A.3 Residual Soil Contamination Table (2020) Nemadji Substation Phase II Investigation Superior, WI

				Location	SB-6	SB-8	SB-10	SB-11	SB-14	SB-16	SB-25	SB-29
				Date	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/07/2020	1/07/2020
				Depth	1.5 - 2 ft	2 - 4 ft	1 - 2 ft	2 - 4 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	2 - 4 ft
			Wisconsin Not to	Wisconsin Not to								
		Wisconsin	Exceed Direct	Exceed Direct								
		Groundwater	Contact Industrial	Contact Non-								
Parameter	Units	RCLs, DF=2	RCLs	Industrial RCLs								
Effective Date		06/01/2018	06/01/2018	06/01/2018								
Exceedance Key		Bold	No Exceedances	No Exceedances								
Volatile Organic Compounds												
Benzene	mg/kg	0.0051	7.07	1.6	0.0399	< 0.0040 U	< 0.0037 U	< 0.0053 U	< 0.0049 U	< 0.0039 U	< 0.0046 U	< 0.0036 U
Naphthalene	mg/kg	0.6582	24.1	5.52	0.166 J	< 0.0663 U	< 0.0615 U	< 0.0884 U	< 0.0812 U	< 0.0652 U	< 0.0759 U	< 0.0600 U
Toluene	mg/kg	1.1072	818	818	0.0512 J	< 0.0173 U	< 0.0160 U	< 0.0230 U	< 0.0212 U	< 0.0170 U	< 0.0198 U	< 0.0156 U
Total Petroleum Hydrocarbons												
Diesel Range Organics, C10-C28	mg/kg				23.6	8.2 J	121 J	19.5 J	6.0 J	26.5	15.5 J	14.0 J
Barr Calculated Comparison - Industrial												
Exceedance Count	no unit		0		0	0	0	0	0	0	0	0
Hazard Index	no unit		≤ 1.0		0.00028	0.00010	0.000096	0.00014	0.00013	0.00010	0.00012	0.000093
Cumulative Cancer Risk	no unit		≤ 1E-0.5		1.30E-08	3.50E-09	3.20E-09	4.60E-09	4.20E-09	3.40E-09	4.00E-09	3.10E-09
Barr Calculated Comparison -Non-Industrial												
Exceedance Count	no unit			0	0	0	0	0	0	0	0	0
Hazard Index	no unit			≤ 1.0	0.0014	0.00051	0.00047	0.00067	0.00062	0.00050	0.00058	0.00046
Cumulative Cancer Risk	no unit			≤ 1E-05	5.60E-08	1.50E-08	1.40E-08	2.00E-08	1.90E-08	1.50E-08	1.70E-08	1.40E-08

J Estimated detected value. Either certain QC criteria were not met or the concentration is between the laboratory's detection and quanitation limits.

DF Dilution Factor.

RCLs Residual Contaminant Levels.

U The analyte was analyzed for, but was not detected.

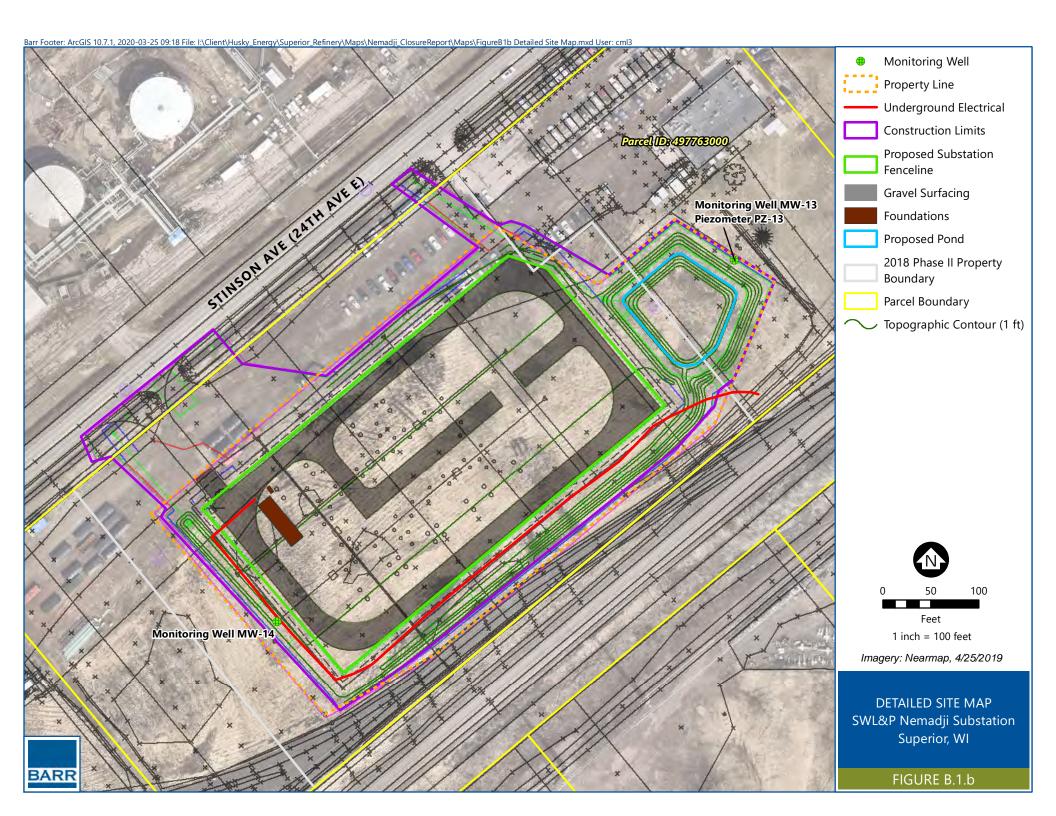
Table A.3.b Residual Soil Contamination Table (2018) nemadji Substation Phase II Investigation Superior, WI

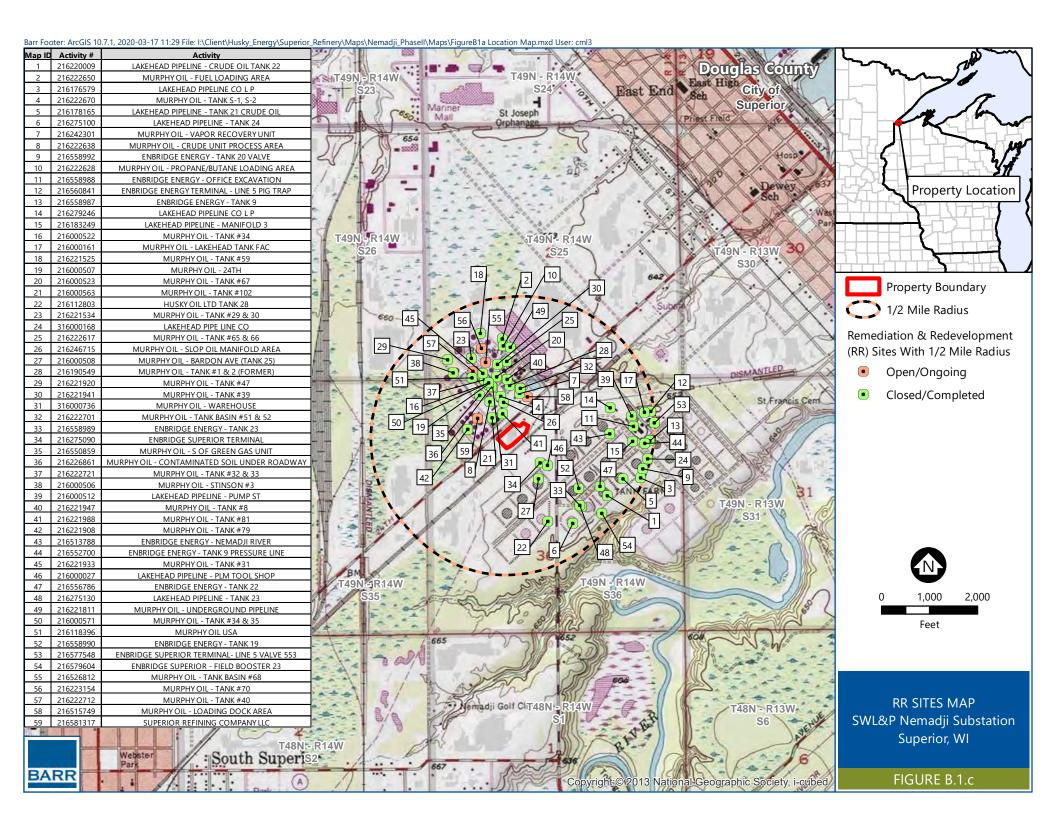
				•	superior,	VVI								
				Location	SB-1	SB-1	SB-2	SB-2	SB-3	SB-3	SB-4	SB-4	SB-5	SB-5
				Date	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/22/2018	6/22/2018	6/22/2018	6/22/2018
				Depth		12 - 13 ft	0 - 1 ft	6 - 7 ft	0 - 2 ft	8 - 9 ft	0 - 2 ft	6 - 7 ft	0 - 1 ft	8 - 9 ft
	1 1	Wisconsin Not	Wisconsin Not to	WDNR	2 - 3 10	12 - 13 10	0 - 110	0 - 7 10	0 - 2 10	0-310	0 - Z It	0 - 7 10	0 - 110	0-310
		to Exceed	Exceed Non-	Background										
Parameter	Units	Industrial RCLs	Industrial RCLs	Threshold Values										
Effective Date	Units	06/01/2018	06/01/2018	06/01/2018										
Exceedance Kev		Underlined	Italics	Reference Only										
General Parameters		Orideriiried	rianos	Reference Only										
Moisture	%				27.6	35.3	20.3	24.5	24.5	31.6	26.7	29.4	23.3	28.1
Metals	/0				21.0	33.3	20.3	24.5	24.5	31.0	20.7	25.4	23.3	20.1
Mercury	malka	3.13	3.13		0.023 j	0.026 j	0.022 j	0.020 j	0.026 j	0.021 j	0.023 j	0.021 j	0.10	0.017 j
Arsenic	mg/kg mg/kg	3.13	0.677	8	3.1	3.8	3.0	3.3	3.5	2.8	3.0	3.0	5.1 j	3.4
Barium	mg/kg	100000	15300	364	3. <i>1</i> 245	<u>3.8</u> 193	3.0 145	<u>3.3</u> 150	3.5 174	176	191	160	287	173
Cadmium	mg/kg	985	71.1	1						0.11 j		0.097 j	0.56 j	
Chromium	mg/kg	100000 CR3	100000 CR3	44	49.6	42.9	37.0	39.5	41.7	42.6	48.6	39.4	1850	42.0
Lead	mg/kg	800	400	52	10.5	9.5	7.6	8.1	9.0	7.8	9.1	7.7	88.2	8.4
Selenium	mg/kg	5840	391	52	0.56 j	9.0 	7.0		3.0	7.0	J. 1			
Silver	mg/kg	5840	391		0.50 j 								1.1 j	
Semivolatile Organic Compounds	ilig/kg	3040	331										1.1]	
Acenaphthene	ug/kg	45200000	3590000										6.9	
Acenaphthylene	ug/kg	43200000	3330000									-	3.4	
Anthracene	ug/kg	100000000	17900000										11.0	
Benz(a)anthracene	ug/kg	20800	1140									-	77.8	
Benzo(a)pyrene	ug/kg	2110	115							1.2 j		-	128	
Benzo(b)fluoranthene	ug/kg	21100	1150		1.1 i					2.2			162	
Benzo(g,h,i)perylene	ug/kg	21100	1100							2.3 j			116	
Benzo(k)fluoranthene	ug/kg	211000	11500							2.2 j			55.7	
Chrysene	ug/kg	2110000	115000										98.1	
Dibenz(a,h)anthracene	ug/kg	2110	115							2.2 j			32.5	
Fluoranthene	ug/kg	30100000	2390000		1.8 i					1.9 j			90.4	
Fluorene	ug/kg	30100000	2390000										2.5	
Indeno(1,2,3-cd)pyrene	ug/kg	21100	1150							2.2 j			94.4	
Naphthalene	ug/kg	24100	5520										4.3	
Phenanthrene	ug/kg												39.1	
Pyrene	ug/kg	22600000	1790000										75.2	
Volatile Organic Compounds **	3.3												-	
Toluene	ug/kg	818000	818000										38.8 j	
Barr Calculated Comparison - Non-Industria		0.000	0.0000										55.5]	
Exceedance Count	no unit	0	0		0	0	0	0	0	0	0	0	1	0
ZASSSGGSO GOGIN	. IO GITT	<u> </u>	<u> </u>				·	ŭ	Ŭ	Ŭ	, ,		-	Ŭ

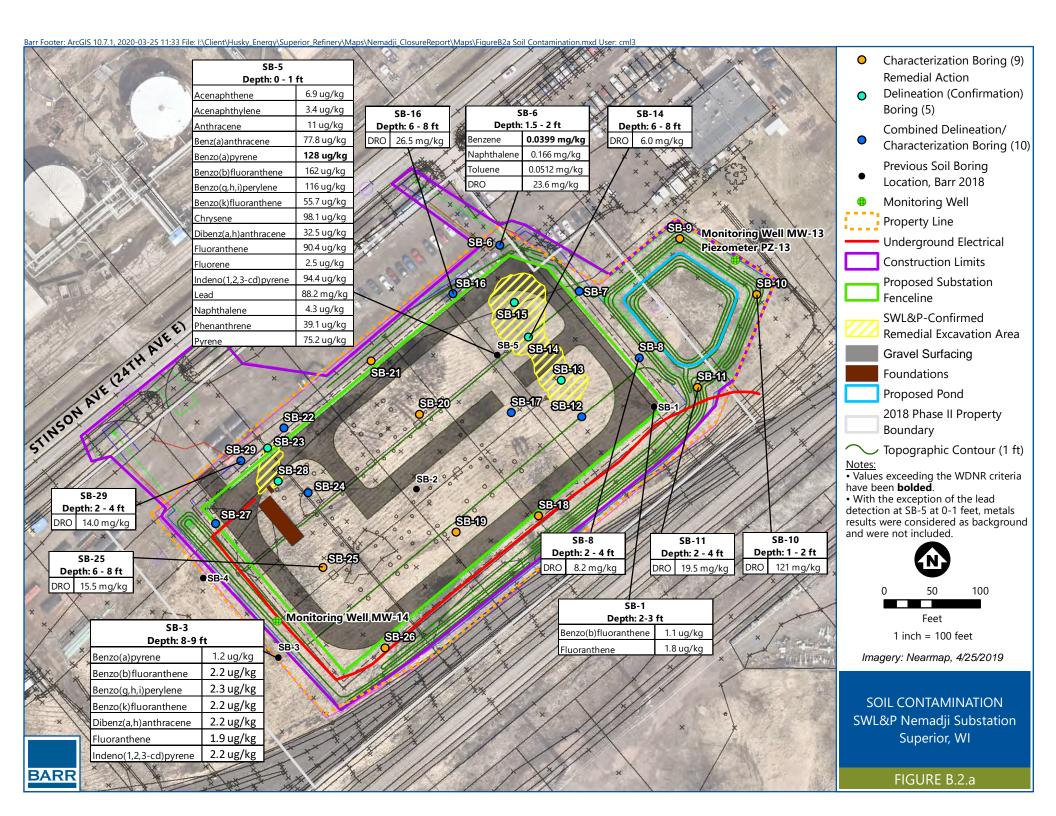
Note
** Non-detect VOC compounds reported on a wet weight basis per WIDNR

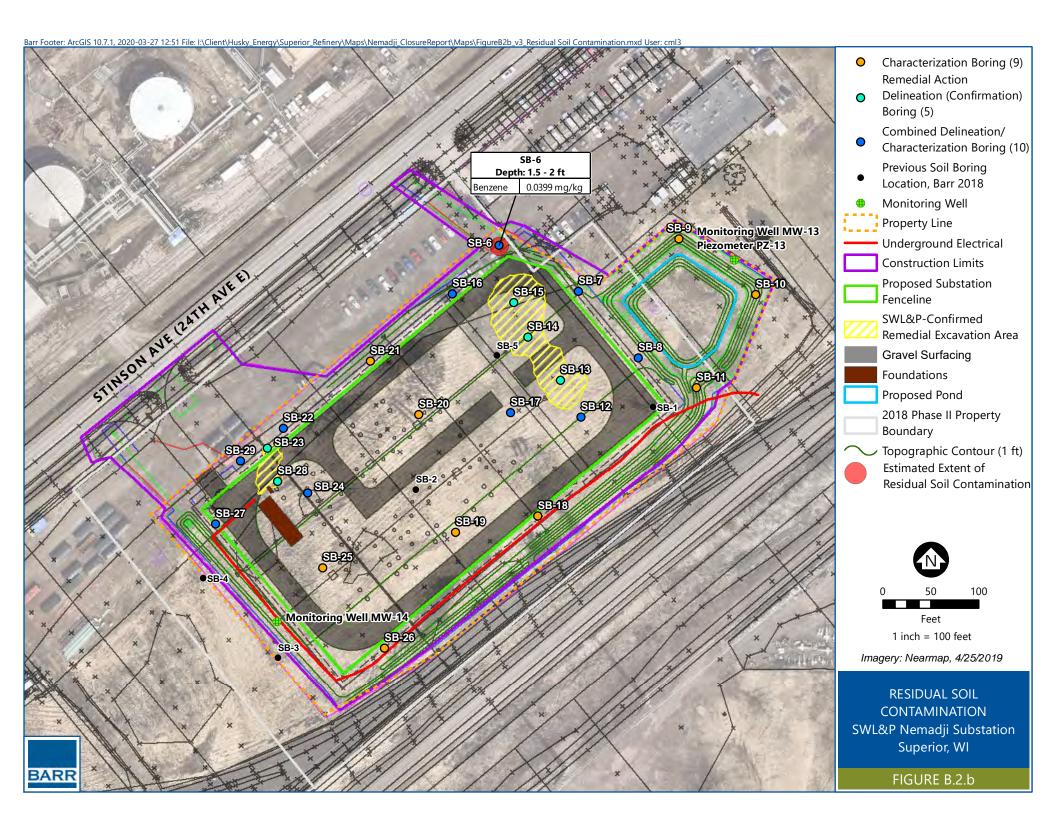
Attachment B – Maps, Figures, and Photos

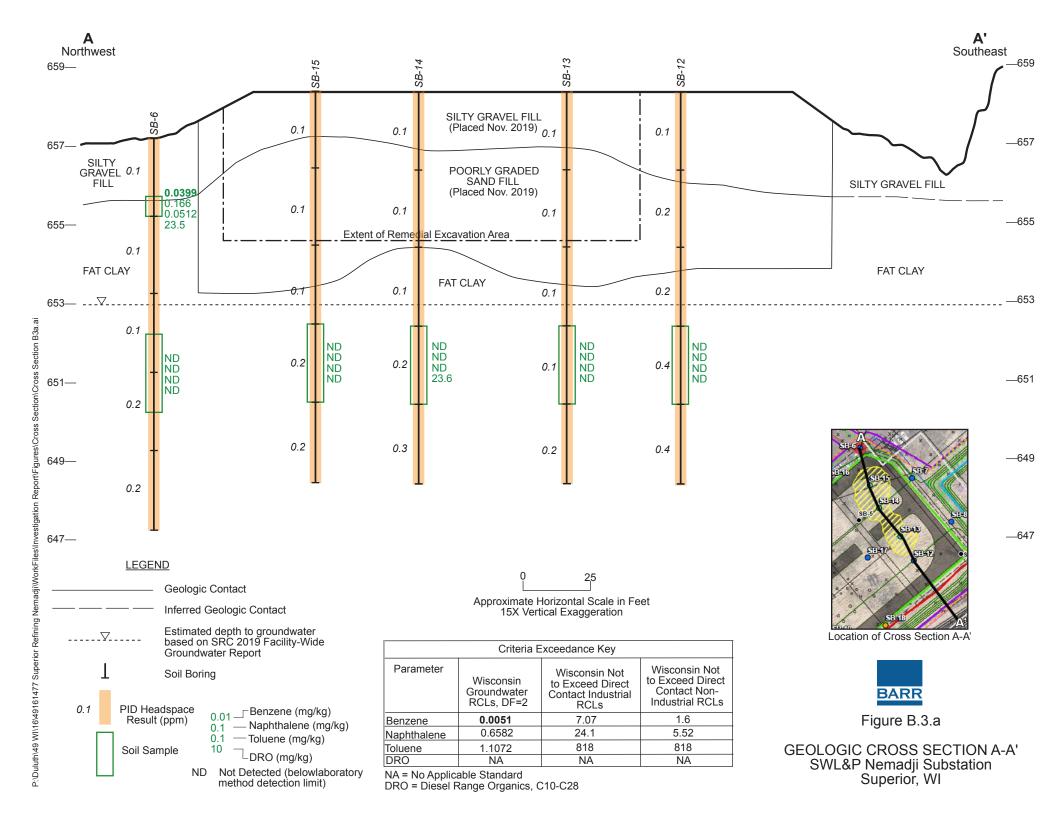
- **B.1** Location Maps
- **B.2** Soil Figures
- **B.3** Groundwater Figures
- B.4 Vapor Maps and Other Media (Not Applicable)
- **B.5** Structural Impediment Photos (Not Applicable)

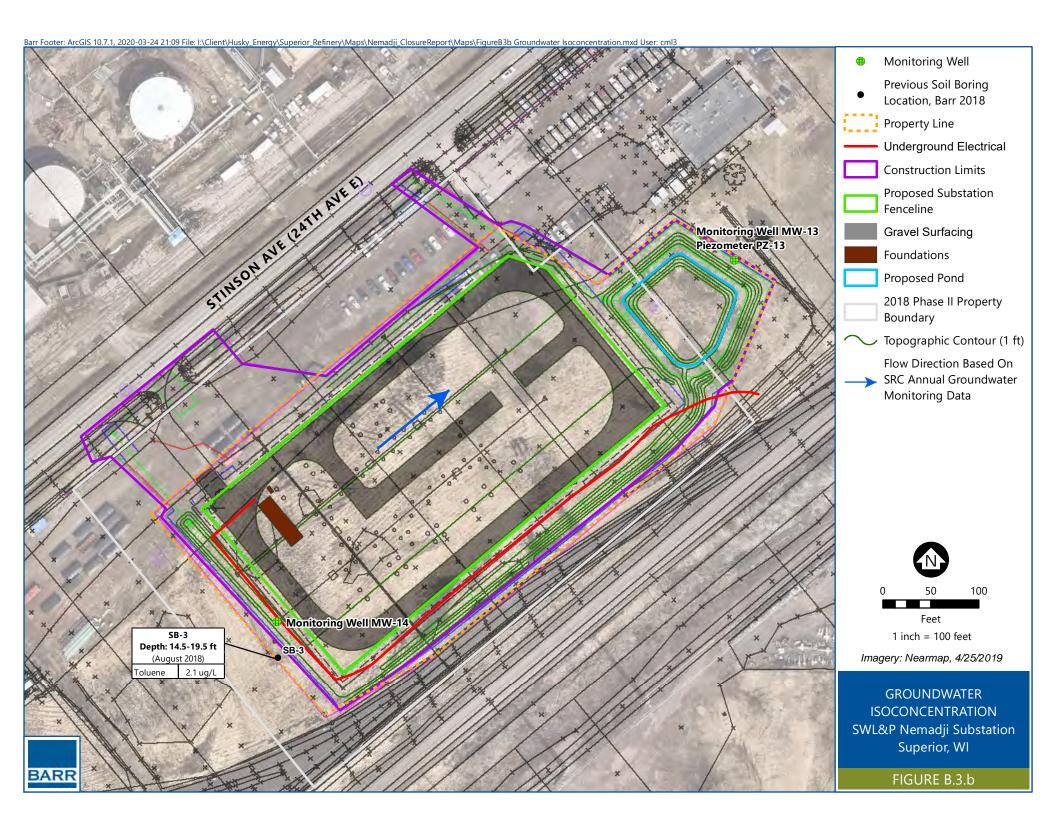












Attachment C - Documentation of Remedial Action

- C.1 Site Investigation Documentation
- C.2 Investigative Waste
- C.3 Description of the Methodology (Not Applicable)*
- C.4 Construction Documentation (Not Applicable)*
- C.5 Decommissioning of Remedial System (Not Applicable)*
- C.6 Other (Not Applicable)

^{*}Remedial action was not implemented at the site

C.1 – Site Investigation Documentation

SWL&P Nemadji Substation Limited Phase III Investigation Results

Technical Memorandum

To: John Sager, Wisconsin Department of Natural ResourcesFrom: Lynette Carney and Christina Sehrt, Barr Engineering Co.Subject: SWL&P Nemadji Substation Phase III Investigation Results

Date: March 26, 2020 **Project**: 49161477.00 **BRRTS No**.02-16-585474

c: Mark Darby, Superior Refining Company LLC

Barr Engineering Co. (Barr) was retained by Superior Refining Company LLC (SRC) to complete a Phase III Investigation of a property owned by SRC and leased to Superior Water, Light & Power (SWL&P) for the construction and operation of a new electrical substation (Nemadji Substation). The property is located at 2407 Stinson Ave, Superior, Wisconsin in the NW ¼ of Section 36, T49N, R14W (Property). The Property location is shown on Figure 1.

A Phase I Environmental Site Assessment and a Phase II Investigation were completed by Barr in 2018 to characterize soil and groundwater and to assess baseline conditions at the Property prior to leasing. Field screening and laboratory analytical results from five soil borings completed in 2018 did not identify soil or groundwater conditions that required further action prior to development of the site. The 2018 Phase II Investigation Report is included as Attachment A.

In November 2019, as part of the Nemadji Substation site development, SWL&P excavated the majority of the site to a depth of 3-4 feet for the placement of engineered fill. During earthwork activities, SWL&P encountered hydrocarbon contaminated soil in two separate locations (Figure 2). According to SWL&P, approximately 1,000 tons of hydrocarbon contaminated soil encountered within the extent of their construction footprint was segregated, characterized and transported off-site for disposal at Shamrock Landfill. Field screening was not performed and analytical confirmation samples were not collected from the excavation extent to document remaining site conditions.

Phase III Project Objectives

The objectives of this Phase III investigation are to evaluate the condition of remaining soils beneath and surrounding SWL&P's hydrocarbon contaminated soil excavations, to supplement the site characterization data collected during the 2018 investigation, and to document final site conditions at the Property under the requirements of NR 716.15.

This report summarizes the results, opinions, and conclusions of the Phase III Investigation. Descriptions of the Property background, investigation activities, sample locations and analytical results are summarized below. Additional background information is included in the 2018 Phase II Investigation Results Report (Attachment A).

To: John Sager, Wisconsin Department of Natural Resources
 From: Lynette Carney and Christina Sehrt, Barr Engineering Co.
 Subject: SWL&P Nemadji Substation Phase III Investigation Results

Date: March 26, 2020

Page: 2

General Information

Figure 1 provides a location map showing the SWL&P Nemadji Substation and the surrounding area using the USGS 7.5-minute topographic map.

Site Information: BRRTs Number: 02-16-585474

Facility Identification Numbers: 816009590

Superior Refining Company LLC

2407 Stinson Avenue Superior, Wisconsin

Douglas County, Wisconsin

NW 1/4 of Section 36, T49N, R14W

Latitude / Longitude: 46.68842 / -92.06988 (Site Center) WTM91 Coordinates: X: 361726, Y: 692621 (Site Center)

Responsible Party: Superior Refining Company LLC

Attn: Mark Darby, Environmental Manager

2407 Stinson Avenue Superior, WI 54880 Phone: (715) 398-8453

Email: mark.darby@huskyenergy.com

Environmental Consultant: Barr Engineering Co.

Attn: Lynette Carney, Project Manager 325 South Lake Avenue, Suite 700

Duluth, MN 55802 Phone: (218) 529-7141 Email: lcarney@barr.com

Physical Setting

The Property consists of approximately 5.18 acres located in an area between the operating Superior Refinery and a large pipeline terminal facility as shown on Figure 1. The Property is currently leased to SWL&P for construction of an electrical substation.

Topography of the Property is relatively flat, with a gentle slope down to the east. The property is underlain by clayey till and glaciolacustrine sediment planed by waves of proglacial Lake Duluth (Clayton, 1985). Based on facility-wide groundwater monitoring at the refinery, which includes groundwater monitoring wells located on and near the Property, shallow groundwater flow direction at the Property is to the northeast towards Newton Creek, ultimately discharging into Lake Superior approximately 1.7 miles northeast of the Property. Groundwater is typically encountered at less than 10 feet below ground surface (bgs) with estimated groundwater flow velocity of 0.4 cm/year (or 0.013 feet per year) (Gannett Fleming, 2014).

To: John Sager, Wisconsin Department of Natural Resources From: Lynette Carney and Christina Sehrt, Barr Engineering Co. Subject: SWL&P Nemadji Substation Phase III Investigation Results

Date: March 26, 2020

Page: 3

The Property is accessible via Stinson Avenue (24th Avenue East) and an approximately 80-foot-wide gravel parking lot/equipment laydown area is located along the northwest Property boundary. Historically the Property has been used as a storage/laydown area associated with the adjacent refinery. A warehouse was previously located on the Property and has since been demolished.

The current use of adjoining properties includes Superior Refinery to the north/northwest, unoccupied grassy/forested land and rail lines to the southwest, Superior Refinery laboratory building and grassy area to the east/northeast, and rail lines and a petroleum pipeline terminal facility to the south/southeast.

Investigation Activities

On December 19, 2019, Barr submitted a *Site Investigation Work Plan* (Work Plan) to the Wisconsin Department of Natural Resources (WDNR), which included rationale for boring placement, sampling and analysis, and additional investigation details. The Work Plan is provided in Attachment B.

The investigation approach was developed to define the extent of remaining contamination, if any, associated with the November 2019 excavation activities and to further characterize site conditions to obtain baseline information of the Property. A total of fifteen "remedial action delineation" borings were advanced to evaluate the effectiveness of the remedial excavation efforts performed by SWL&P. Nine additional "site characterization" borings were advanced across the site to further assess baseline conditions at the Property following completion of the remedial activities.

On January 6 and 7, 2020, Barr and its subcontractor, Twin Ports Testing (TPT), advanced a total of 24 direct-push borings (SB-6 through SB-29) to depths of 10 feet bgs at the locations shown on Figure 2. The boring locations were selected based on site features and previous 2018 Phase II boring locations, as summarized in the Work Plan. Photographs capturing site conditions during the Phase III Investigation are included in Attachment C.

One or two representative soil samples collected from each soil boring were submitted for laboratory analyses. Where possible, one sample was collected from 2-4 feet bgs to intersect remaining native soils below the Nemadji Substation construction fill and one from 6-8 feet bgs. Soil samples were field-screened for organic vapors using headspace sample screening procedures as per the Work Plan. Additional evidence of contamination such as staining, odor, discoloration, and sheen was documented in the field at each location. Soils were described according to ASTM D-2488, *Standard Practice for Description and Identification of Soils (Visual/Manual Method)*. Boring locations were surveyed using global positioning system (GPS) equipment. Soil boring logs are provided in Attachment D.

Soil borings SB-18 and SB-26 were offset 16 and 15 feet, respectively, from the original locations identified in the Work Plan to avoid drilling through unfrozen standing water contained by the berm at the Property's edge. The borings were offset perpendicular to the Property fence where the ground was confirmed to be solid.

To: John Sager, Wisconsin Department of Natural Resources From: Lynette Carney and Christina Sehrt, Barr Engineering Co. Subject: SWL&P Nemadji Substation Phase III Investigation Results

Date: March 26, 2020

Page: 4

Barr submitted soil samples to Pace Analytical Laboratories (PACE) in Minneapolis, Minnesota for analysis of the following:

- petroleum volatile organic compounds (PVOCs) and naphthalene by method EPA 8260B
- diesel range organic compounds (DRO) by method WI MOD DRO 8015D (C10-C28)

Soil analytical results were compared to WDNR generic residual contaminant level (RCL) criteria for the direct contact and groundwater pathways.

Phase III Investigation Results

Soil boring stratigraphy generally consisted of one to two feet of silty gravel and/or poorly graded sand fill material overlying fat clay. The fill materials encountered were placed during the site development for the Nemadji Substation. The native fat clay was typically of high plasticity, stiff consistency, moist, and red-brown in color. Headspace sample organic vapor screening in the field, including background, produced total headspace readings less than 2.5 parts per million (ppm) across the Property. Headspace readings for all samples can be found in Table 1. There was no staining, odor, discoloration, sheen or other indications of contamination observed in the field, except in soil borings SB-6 and SB-10.

Soil boring SB-6 is located north of the main remedial excavation area and had discoloration and a faint odor in the 1.5-2 foot interval. Soil boring SB-10 is located at the northeast edge of the Property and had slag-like material in the 0.6-2 foot interval. Borings were advanced eight feet past the deepest observed impact and soil samples were collect from the interval where potential impacts were observed or anticipated and from a lower interval beneath the potential impact zone.

Tables 2 and 3 summarize the soil samples collected, analyses performed, and analytical results. Table 2 presents the analytical results for samples with detections of compounds at concentrations equal to or greater than laboratory method detection limits (MDLs). Included for comparison are the generic RCLs developed by the WDNR according to the procedures in NR 720.10 and NR 720.12, Wis. Adm. Code for the groundwater pathway and direct contact pathway.

Table 3 presents all analytical results, including those results below the MDLs. Copies of the laboratory analytical reports are included in Attachment E. The following provides a summary of the soil analytical laboratory results.

PVOCs + Naphthalene

Benzene was detected in one soil sample from soil boring SB-6 (1.5-2 feet) at a concentration of 0.4 milligrams per kilogram (mg/kg) and is the only compound and the only sample that exceeded a WDNR groundwater RCL. Naphthalene and toluene were also detected in soil boring SB-6 (1.5-2 feet), but concentrations were below the laboratory practical quantitation limit (PQL). The direct contract RCL was not exceeded by any compounds.

To: John Sager, Wisconsin Department of Natural Resources
 From: Lynette Carney and Christina Sehrt, Barr Engineering Co.
 Subject: SWL&P Nemadji Substation Phase III Investigation Results

Date: March 26, 2020

Page: 5

DRO

DRO was detected in the following soil samples: SB-6 (1.5-2 feet), SB-8 (2-4 feet), SB-10 (1-2 feet), SB-11 (2-4 feet), SB-14 (6-8 feet), SB-16 (6-8 feet), SB-25 (6-8 feet), and SB-29 (2-4 feet). The only detections reported above the laboratory PQL were SB-6 (1.5-2 feet) with a concentration of 23.6 parts per million (ppm and SB-16 (6-8 feet) with a concentration of 26.5 ppm. A DRO concentration of 121 ppm was reported (but below the PQL) in sample SB-10 (1-2 feet). Although the WDNR does not have RCL criteria for DRO, these samples were collected as an additional screening tool and to support landfill soil characterization sampling requirements should additional soil remediation be required.

Cumulative

The combined PVOC + Naphthalene detections for each sample interval were also compared to the WDNR cumulative direct contract hazard index. No samples exceeded the Hazard Index or Cumulative Cancer Risk Sample standards.

Quality Assurance and Quality Control

The sample results were reviewed in accordance with Barr's standard operating procedures for organic data review. Sample results greater than the MDL and below the PQL are flagged with a "J" indicating estimated concentrations. The non-detect concentrations are presented as "<MDL" in the data tables. Sample SB-10 (1-2 feet) was analyzed at a 10 times dilution which yielded a J-flagged result at 121 mg/kg for DRO because the result was detected above the MDL and below the PQL. The remaining DRO and PVOC + Naphthalene samples analyzed during this soil investigation were not diluted. Samples SB-11 (2-4 feet), SB-10 (1-2 feet) and SB-6 (1.5-2 feet) had high boiling point hydrocarbons present in the sample.

The method, trip and field blank samples had no detections of target analytes above the laboratory reporting limits. The quality control samples (e.g. laboratory control sample, laboratory control sample duplicate, matrix spike, matric spike duplicate, surrogate spike, and laboratory duplicate samples) were within the laboratory established limits for accuracy and precision with the following notable exceptions. One laboratory control sample/laboratory control sample duplicate relative percent difference exceeded the laboratory acceptance limit for DRO; however, no results were qualified because the associated spike recoveries displayed acceptable accuracy.

The laboratory analytical data were evaluated for quality assurance/quality control purposes and were determined to be acceptable for the evaluation conducted for this Phase III Investigation. Qualifiers, as appropriate, were added to the data as indicated in the comprehensive data tables.

Phase III Investigation Conclusions

Based on the proposed land use, native soil types, groundwater flow rate, and result comparisons to the WDNR risk-based Industrial, Non-Industrial and Groundwater RCLs, the isolated low concentrations of compounds detected in site soil samples do not appear to present a risk to human health or the environment.

To: John Sager, Wisconsin Department of Natural Resources
 From: Lynette Carney and Christina Sehrt, Barr Engineering Co.
 Subject: SWL&P Nemadji Substation Phase III Investigation Results

Date: March 26, 2020

Page: 6

Recommendation

Additional investigation or remedial actions are not necessary to further delineate or remediate the soil impacts encountered by SWL&P. It is recommended that SRC submit a Case Closure Request for this Property for consideration by the WDNR Closure Committee.

Limitations

The scope of this Phase III Investigation was intended to evaluate the areas of contaminated soil identified during construction activities in 2019 and to further assess the Property for the presence of petroleum-related contaminants. Laboratory analysis were performed for those parameters which were identified as potential contaminants prior to conducting this investigation.

Attachments

Table 1 Headspace Screening Summary

Table 2 Soil Analytical Summary – Detected Values Only

Table 3 Soil Analytical Summary - All Results

Figure 1 Property Location Map

Figure 2 Soil Boring Locations

Attachment A 2018 Phase II Investigation Report (with sub-Attachments)

Attachment B 2019 Site Investigation Work Plan

Attachment C 2020 Phase III Investigation Representative Photographs

Attachment D 2020 Phase III Investigation Soil Boring Logs

Attachment E 2020 Phase III Investigation Soil Laboratory Analytical Reports

To: John Sager, Wisconsin Department of Natural Resources
 From: Lynette Carney and Christina Sehrt, Barr Engineering Co.
 Subject: SWL&P Nemadji Substation Phase III Investigation Results

Date: March 26, 2020

Page:

References

ASTM, 2009. *D-2488-09a, Standard Practice for Description and Identification of Soils* (*Visual/Manual Method*) ASTM International, West Conshohocken, PA; 2009.

Clayton, Lee, 1985. *Pleistocene Geology of the Superior Region, Wisconsin*, Wisconsin Geological and Natural History Survey Information Circular 46, Plate 1; 1985.

Gannett Fleming, 2014. Final Site Investigation and Remedial Action Plan, Calumet Superior LLC Refinery, Superior, Wisconsin, prepared for Calumet Superior LLC; April 30, 2014.

Tables

Table 1 Headspace Screening Summary (PID Headspace Readings) Nemadji Substation Phase III Investigation Superior, WI

Location Depth (feet)	SB-6	SB-7	SB-8	SB-9	SB-10	SB-11	SB-12	SB-13	SB-14	SB-15	SB-16	SB-17	SB-18	SB-19	SB-20	SB-21	SB-22	SB-23	SB-24	SB-25	SB-26	SB-27	SB-28	SB-29
0-2	0.1 ¹	0.4	0.1	0.3	0.6 ²	0.1	0.1	0.1	0.1	0.1	0.4	0.2	0.7	0.6	0.3	0.4	0.4	0.1	0.6	0.9	1.0	1.2	0.6	0.9
2-4	0.1	0.4	0.4	0.3	0.7	0.3	0.2	0.1	0.1	0.1	0.5	0.3	1.0	0.7	0.4	0.3	0.4	0.1	0.7	1.1	1.0	1.2	0.9	0.8
4-6	0.1	0.4	0.6	0.3	0.6	0.3	0.2	0.1	0.1	0.1	1.2	0.2	1.1	0.7	0.6	0.4	0.6	0.2	0.9	1.2	1.1	2.5	1.1	0.8
6-8	0.2	0.5	0.8	0.4	0.5	0.4	0.4	0.1	0.2	0.2	1.7	0.4	1.1	0.5	0.6	0.4	0.5	0.2	0.9	1.1	1.0	2.5	1.2	1.0
8-10	0.2	0.5	1.1	0.4	0.3	0.6	0.4	0.2	0.3	0.2	1.8	0.3	1.1	0.7	0.6	0.4	0.4	0.3	1.0	1.2	1.1	1.4	1.0	0.9
Completion Depth (feet)	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10

Soil borings were completed January 6-7, 2020.

Intervals are presented in depth of feet below ground surface. Relative differences in ground surface elevations are not represented. Ground surface elevations are included on individual boring logs in appendices. Headspace readings are presented in parts per million (ppm) and include background values that range from 0.0 to 0.4 ppm.

Field observations:

¹ Black discoloration, faint odor, trace wood chips and fibers.

² Gray, metallic, vesicular slag like material.

For additional detail regarding discoloration, odor, and sheen, see boring logs.

Table 2 Soil Analytical Data Results - Detections Only Nemadji Substation Phase III Investigation Superior, WI

				Location	SB-6	SB-8	SB-10	SB-11	SB-14	SB-16	SB-25	SB-29
				Date	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/07/2020	1/07/2020
				Depth	1.5 - 2 ft	2 - 4 ft	1 - 2 ft	2 - 4 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	2 - 4 ft
			Wisconsin Not to	Wisconsin Not to								
		Wisconsin	Exceed Direct	Exceed Direct								
		Groundwater	Contact Industrial	Contact Non-								
Parameter	Units	RCLs, DF=2	RCLs	Industrial RCLs								
Effective Date		06/01/2018	06/01/2018	06/01/2018								
Exceedance Key		Shade	No Exceedances	No Exceedances								
Volatile Organic Compounds												
Benzene	mg/kg	0.0051	7.07	1.6	0.0399	< 0.0040 U	< 0.0037 U	< 0.0053 U	< 0.0049 U	< 0.0039 U	< 0.0046 U	< 0.0036 U
Naphthalene	mg/kg	0.6582	24.1	5.52	0.166 J	< 0.0663 U	< 0.0615 U	< 0.0884 U	< 0.0812 U	< 0.0652 U	< 0.0759 U	< 0.0600 U
Toluene	mg/kg	1.1072	818	818	0.0512 J	< 0.0173 U	< 0.0160 U	< 0.0230 U	< 0.0212 U	< 0.0170 U	< 0.0198 U	< 0.0156 U
Total Petroleum Hydrocarbons												
Diesel Range Organics, C10-C28	mg/kg				23.6	8.2 J	121 J	19.5 J	6.0 J	26.5	15.5 J	14.0 J
Barr Calculated Comparison - Industrial												
Exceedance Count	no unit		0		0	0	0	0	0	0	0	0
Hazard Index	no unit		≤ 1.0		0.00028	0.00010	0.000096	0.00014	0.00013	0.00010	0.00012	0.000093
Cumulative Cancer Risk	no unit		≤ 1E-0.5		1.30E-08	3.50E-09	3.20E-09	4.60E-09	4.20E-09	3.40E-09	4.00E-09	3.10E-09
Barr Calculated Comparison -Non-Industrial												
Exceedance Count	no unit			0	0	0	0	0	0	0	0	0
Hazard Index	no unit			≤ 1.0	0.0014	0.00051	0.00047	0.00067	0.00062	0.00050	0.00058	0.00046
Cumulative Cancer Risk	no unit			≤ 1E-05	5.60E-08	1.50E-08	1.40E-08	2.00E-08	1.90E-08	1.50E-08	1.70E-08	1.40E-08

J Estimated detected value. Either certain QC criteria were not met or the concentration is between the laboratory's detection and quanitation limits.

DF Dilution Factor.

RCLs Residual Contaminant Levels.

U The analyte was analyzed for, but was not detected.

Table 3 Soil Analytical Data Results - All Results Nemadji Substation Phase III Investigation Superior, WI

				Location	SB-6	SB-6	SB-7	SB-7	SB-8	SB-8	SB-9	SB-10	SB-10	SB-10	SB-11	SB-11	SB-12	SB-13	SB-14	SB-15	SB-16	SB-17	SB-18
															-		-		_			-	
				Date	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/06/2020	1/07/2020	1/07/2020
				Depth	1.5 - 2 ft	5 - 6 ft	2 - 4 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	5 - 6 ft	1 - 2 ft	2 - 4 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	2 - 4 ft
			Wisconsin Not to	Wisconsin Not to																			
		Wisconsin	Exceed Direct	Exceed Direct																			
		Groundwater	Contact Industrial	Contact Non-																			
Parameter	Units	RCLs, DF=2	RCLs	Industrial RCLs																			
Effective Date		12/01/2018	12/01/2018	12/01/2018																			
Exceedance Key		Shade	No Exceedances	No Exceedances																			
General Parameters																							
Moisture	%				24.1	26.4	23.0	27.2	26.6	27.3	27.3	26.4	27.7	23.1	36.3	27.7	23.9	24.7	33.9	35.5	25.4	26.2	24.8
Volatile Organic Compounds																							
1,2,4-Trimethylbenzene	mg/kg	1.3787 (1)	219	219	< 0.0133 U	< 0.0141 U	< 0.0131 U	< 0.0143 U	< 0.0142 U	< 0.0137 U	< 0.0143 U	< 0.0140 U	< 0.0142 U	< 0.0132 U	< 0.0189 U	< 0.0138 U	< 0.0137 U	< 0.0137 U	< 0.0174 U	< 0.0155 U	< 0.0139 U	< 0.0136 U	< 0.0134 U
1,3,5-Trimethylbenzene	mg/kg	1.3787 (1)	182	182	< 0.0106 U	< 0.0112 U	< 0.0104 U	< 0.0114 U	< 0.0113 U	< 0.0109 U	< 0.0114 U	< 0.0112 U	< 0.0113 U	< 0.0105 U	< 0.0150 U	< 0.0110 U	< 0.0109 U	< 0.0109 U	< 0.0138 U	< 0.0124 U	< 0.0111 U	< 0.0109 U	< 0.0107 U
Benzene	mg/kg	0.0051	7.07	1.6	0.0399	< 0.0040 U	< 0.0037 U	< 0.0040 U	< 0.0040 U	< 0.0039 U	< 0.0040 U	< 0.0039 U	< 0.0040 U	< 0.0037 U	< 0.0053 U	< 0.0039 U	< 0.0039 U	< 0.0039 U	< 0.0049 U	< 0.0044 U	< 0.0039 U	< 0.0038 U	< 0.0038 U
Ethyl benzene	mg/kg	1.57	35.4	8.02	< 0.0036 U	< 0.0038 U	< 0.0036 U	< 0.0039 U	< 0.0039 U	< 0.0037 U	< 0.0039 U	< 0.0038 U	< 0.0039 U	< 0.0036 U	< 0.0051 U	< 0.0038 U	< 0.0037 U	< 0.0037 U	< 0.0047 U	< 0.0042 U	< 0.0038 U	< 0.0037 U	< 0.0036 U
Methyl tertiary butyl ether (MTBE)	mg/kg	0.027	282	63.8	< 0.0079 U	< 0.0084 U	< 0.0078 U	< 0.0085 U	< 0.0084 U	< 0.0081 U	< 0.0085 U	< 0.0083 U	< 0.0085 U	< 0.0078 U	< 0.0112 U	< 0.0082 U	< 0.0081 U	< 0.0081 U	< 0.0103 U	< 0.0092 U	< 0.0083 U	< 0.0081 U	< 0.0080 U
Naphthalene	mg/kg	0.6582	24.1	5.52	0.166 J	< 0.0658 U	< 0.0613 U	< 0.0670 U	< 0.0663 U	< 0.0639 U	< 0.0668 U	< 0.0655 U	< 0.0665 U	< 0.0615 U	< 0.0884 U	< 0.0646 U	< 0.0639 U	< 0.0640 U	< 0.0812 U	< 0.0726 U	< 0.0652 U	< 0.0639 U	< 0.0628 U
Toluene	mg/kg	1.1072	818	818	0.0512 J	< 0.0172 U	< 0.0160 U	< 0.0175 U	< 0.0173 U	< 0.0167 U	< 0.0174 U	< 0.0171 U	< 0.0173 U	< 0.0160 U	< 0.0230 U	< 0.0168 U	< 0.0167 U	< 0.0167 U	< 0.0212 U	< 0.0189 U	< 0.0170 U	< 0.0167 U	< 0.0164 U
Xylene, total	mg/kg	3.96	260	260	< 0.0155 U	< 0.0163 U	< 0.0152 U	< 0.0166 U	< 0.0164 U	< 0.0158 U	< 0.0166 U	< 0.0162 U	< 0.0165 U	< 0.0153 U	< 0.0219 U	< 0.0160 U	< 0.0158 U	< 0.0159 U	< 0.0201 U	< 0.0180 U	< 0.0162 U	< 0.0158 U	< 0.0156 U
Total Petroleum Hydrocarbons																							
Diesel Range Organics, C10-C28	mg/kg				23.6	< 4.9 U	< 4.8 U	< 5.1 U	8.2 J	< 4.8 U	< 5.1 U	< 5.3 U	< 5.4 U	121 J	19.5 J	< 5.3 U	< 5.0 U	< 4.8 U	6.0 J	< 5.0 U	26.5	< 5.1 U	< 5.1 U
Barr Calculated Comparison - Industrial																							
Exceedance Count	no unit		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazard Index	no unit		≤ 1.0		0.00028	0.00010	0.000095	0.00010	0.00010	0.00010	0.00010	0.00010	0.00010	0.000096	0.00014	0.00010	0.00010	0.00010	0.00013	0.00011	0.00010	0.000099	0.000098
Cumulative Cancer Risk	no unit		≤ 1E-0.5		1.30E-08	3.40E-09	3.20E-09	3.50E-09	3.50E-09	3.30E-09	3.50E-09	3.40E-09	3.50E-09	3.20E-09	4.60E-09	3.40E-09	3.30E-09	3.30E-09	4.20E-09	3.80E-09	3.40E-09	3.30E-09	3.30E-09
Barr Calculated Comparison -Non-Industrial																							
Exceedance Count	no unit			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazard Index	no unit			≤ 1.0	0.0014	0.00050	0.00047	0.00051	0.00051	0.00049	0.00051	0.00050	0.00051	0.00047	0.00067	0.00049	0.00049	0.00049	0.00062	0.00055	0.00050	0.00049	0.00048
Cumulative Cancer Risk	no unit			≤ 1E-05	5.60E-08	1.50E-08	1.40E-08	1.50E-08	1.50E-08	1.50E-08	1.50E-08	1.50E-08	1.50E-08	1.40E-08	2.00E-08	1.50E-08	1.50E-08	1.50E-08	1.90E-08	1.70E-08	1.50E-08	1.50E-08	1.40E-08

⁽¹⁾ Representing the criteria for combined Trimethylbenzenes.

 $[\]sf J$ Estimated detected value. Either certain QC criteria were not met or the concentration is between the laboratory's detection and quanitation limits.

U The analyte was analyzed for, but was not detected.

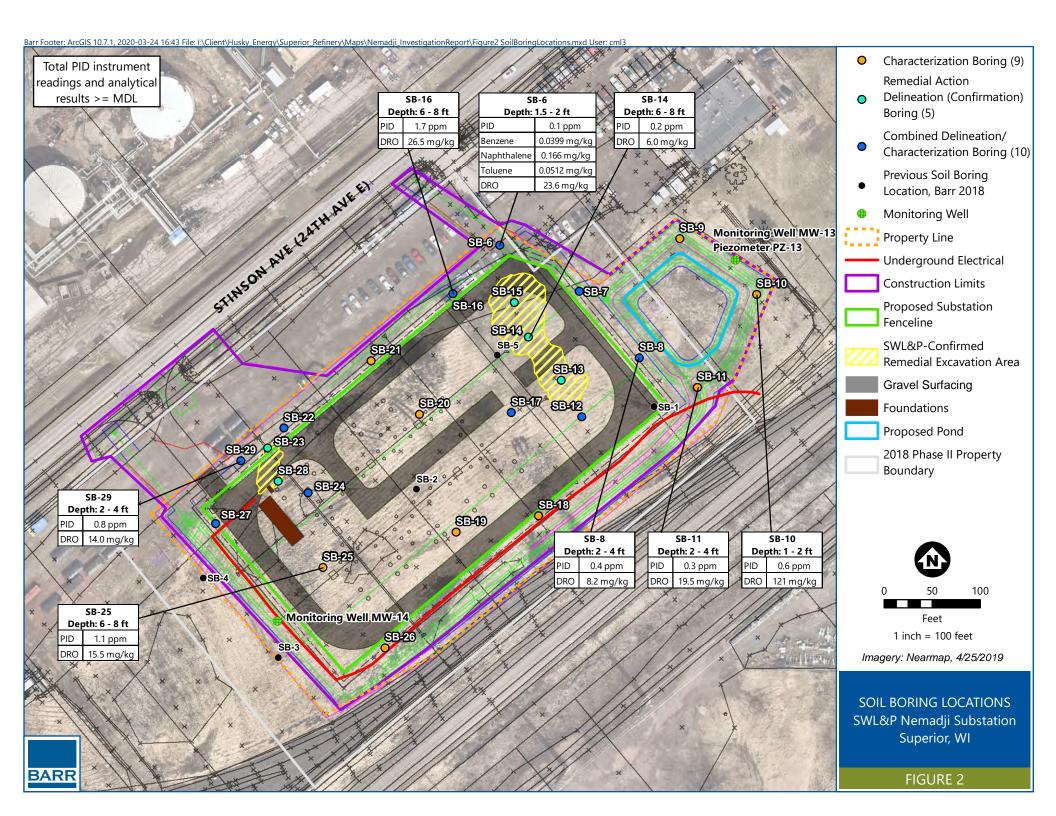
Table 3 Soil Analytical Data Results - All Results Nemadji Substation Phase II Investigation Superior, WI

				Location	SB-18	SB-19	SB-20	SB-21	SB-21	SB-22	SB-22	SB-23	SB-24	SB-25	SB-26	SB-26	SB-27	SB-27	SB-28	SB-29	SB-29
								-									-				1/07/2020
				Date	1/07/2020	1/07/2020	1/07/2020	1/06/2020	1/06/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	1/07/2020	
				Depth	6 - 8 ft	6 - 8 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft	6 - 8 ft	2 - 4 ft	6 - 8 ft
			Wisconsin Not to	Wisconsin Not to																	
		Wisconsin	Exceed Direct	Exceed Direct																	
		Groundwater	Contact Industrial	Contact Non-																	
Parameter	Units	RCLs, DF=2	RCLs	Industrial RCLs																	
Effective Date		12/01/2018	12/01/2018	12/01/2018																	
Exceedance Key		Shade	No Exceedances	No Exceedances																	
General Parameters																					
Moisture	%				27.2	24.5	25.7	24.8	25.2	24.3	25.2	23.4	23.6	34.5	25.5	29.5	25.8	26.4	27.1	24.0	29.3
Volatile Organic Compounds																					
1,2,4-Trimethylbenzene	mg/kg	1.3787 (1)	219	219	< 0.0138 U	< 0.0138 U	< 0.0132 U	< 0.0129 U	< 0.0136 U	< 0.0130 U	< 0.0132 U	< 0.0133 U	< 0.0132 U	< 0.0162 U	< 0.0139 U	< 0.0138 U	< 0.0131 U	< 0.0133 U	< 0.0131 U	< 0.0128 U	< 0.0137 U
1,3,5-Trimethylbenzene	mg/kg	1.3787 (1)	182	182	< 0.0110 U	< 0.0110 U	< 0.0105 U	< 0.0103 U	< 0.0108 U	< 0.0104 U	< 0.0105 U	< 0.0106 U	< 0.0106 U	< 0.0129 U	< 0.0111 U	< 0.0110 U	< 0.0104 U	< 0.0106 U	< 0.0104 U	< 0.0102 U	< 0.0109 U
Benzene	mg/kg	0.0051	7.07	1.6	< 0.0039 U	< 0.0039 U	< 0.0037 U	< 0.0036 U	< 0.0038 U	< 0.0037 U	< 0.0037 U	< 0.0037 U	< 0.0037 U	< 0.0046 U	< 0.0039 U	< 0.0039 U	< 0.0037 U	< 0.0038 U	< 0.0037 U	< 0.0036 U	< 0.0039 U
Ethyl benzene	mg/kg	1.57	35.4	8.02	< 0.0037 U	< 0.0037 U	< 0.0036 U	< 0.0035 U	< 0.0037 U	< 0.0035 U	< 0.0036 U	< 0.0036 U	< 0.0036 U	< 0.0044 U	< 0.0038 U	< 0.0038 U	< 0.0036 U	< 0.0036 U	< 0.0036 U	< 0.0035 U	< 0.0037 U
Methyl tertiary butyl ether (MTBE)	mg/kg	0.027	282	63.8	< 0.0082 U	< 0.0082 U	< 0.0078 U	< 0.0077 U	< 0.0081 U	< 0.0077 U	< 0.0078 U	< 0.0079 U	< 0.0079 U	< 0.0097 U	< 0.0083 U	< 0.0082 U	< 0.0078 U	< 0.0079 U	< 0.0078 U	< 0.0076 U	< 0.0082 U
Naphthalene	mg/kg	0.6582	24.1	5.52	< 0.0644 U	< 0.0644 U	< 0.0617 U	< 0.0605 U	< 0.0636 U	< 0.0609 U	< 0.0617 U	< 0.0621 U	< 0.0620 U	< 0.0759 U	< 0.0649 U	< 0.0647 U	< 0.0613 U	< 0.0624 U	< 0.0612 U	< 0.0600 U	< 0.0641 U
Toluene	mg/kg	1.1072	818	818	< 0.0168 U	< 0.0168 U	< 0.0161 U	< 0.0158 U	< 0.0166 U	< 0.0159 U	< 0.0161 U	< 0.0162 U	< 0.0162 U	< 0.0198 U	< 0.0169 U	< 0.0169 U	< 0.0160 U	< 0.0163 U	< 0.0160 U	< 0.0156 U	< 0.0167 U
Xylene, total	mg/kg	3.96	260	260	< 0.0160 U	< 0.0160 U	< 0.0153 U	< 0.0150 U	< 0.0158 U	< 0.0151 U	< 0.0153 U	< 0.0154 U	< 0.0154 U	< 0.0188 U	< 0.0161 U	< 0.0160 U	< 0.0152 U	< 0.0155 U	< 0.0152 U	< 0.0149 U	< 0.0159 U
Total Petroleum Hydrocarbons																					
Diesel Range Organics, C10-C28	mg/kg				< 5.1 U	< 5.0 U	< 4.9 U	< 6.0 U	< 4.9 U	< 4.5 U	< 5.6 U	< 4.4 U	< 4.9 U	15.5 J	< 4.8 U	< 5.3 U	< 5.0 U	< 4.8 U	< 5.1 U	14.0 J	< 5.3 U
Barr Calculated Comparison - Industrial																					
Exceedance Count	no unit		0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazard Index	no unit		≤ 1.0		0.00010	0.00010	0.000096	0.000094	0.000099	0.000095	0.000096	0.000097	0.000096	0.00012	0.00010	0.00010	0.000095	0.000097	0.000095	0.000093	0.00010
Cumulative Cancer Risk	no unit		≤ 1E-0.5		3.40E-09	3.40E-09	3.20E-09	3.10E-09	3.30E-09	3.20E-09	3.20E-09	3.20E-09	3.20E-09	4.00E-09	3.40E-09	3.40E-09	3.20E-09	3.30E-09	3.20E-09	3.10E-09	3.30E-09
Barr Calculated Comparison -Non-Industrial																					
Exceedance Count	no unit			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hazard Index	no unit			≤ 1.0	0.00049	0.00049	0.00047	0.00046	0.00049	0.00047	0.00047	0.00047	0.00047	0.00058	0.00050	0.00049	0.00047	0.00048	0.00047	0.00046	0.00049
Cumulative Cancer Risk	no unit			≤ 1E-05	1.50E-08	1.50E-08	1.40E-08	1.40E-08	1.40E-08	1.40E-08	1.40E-08	1.40E-08	1.40E-08	1.70E-08	1.50E-08	1.50E-08	1.40E-08	1.40E-08	1.40E-08	1.40E-08	1.50E-08

⁽¹⁾ Representing the criteria for combined Trimethylbenzenes.J Estimated detected value. Either certain QC criteria were not met or the concentration is between the laboratory's detection and quanitation limits.

U The analyte was analyzed for, but was not detected.

Figures



Attachment A

Limited Phase II Investigation Results - Future ALLETE Substation Site



Technical Memorandum

To: Mark Darby, Superior Refining Company, LLC (Husky Energy)
 From: Lynette Carney and Martin Bevis, Barr Engineering Co.
 Subject: Phase II Investigation Results – Future ALLETE Substation Site

Date: August 24, 2018 **Project:** 49161423.00

Project Objectives

Barr Engineering Co. (Barr) was retained by Superior Refining Company, LLC (a subsidiary of Husky Energy Inc.) to complete a Phase II investigation of a property owned by Husky Energy Inc. There is historical indication that the property was formerly used as a parking lot and equipment laydown area. Husky intends to lease the Property to ALLETE/Minnesota Power/Superior Water, Light and Power for construction of an electrical substation. The property is located in Section 36 of Township 49 North, Range 14 West in Superior, Douglas County, Wisconsin (Property). The Property location is shown on Figure 1.

In May 2018, Barr performed a Phase I Environmental Site Assessment (ESA) Report (Barr, 2018). No recognized environmental conditions (RECs) were identified, though the report included findings of nine potential sources of hazardous substances or petroleum products near the Property:

- 1. Adjacent Husky Refinery (North);
- 2. Adjacent Husky Refinery fire on April 26, 2018;
- 3. Adjacent Enbridge Energy Terminal site (South);
- 4. Adjoining Husky Refinery laboratory (East);
- 5. Adjoining and upgradient railroads (West and South);
- 6. A small amount of miscellaneous historical debris on the Property;
- 7. Existing electrical power pole transformers;
- 8. Surrounding industrial property use and equipment storage on Property; and
- 9. Various petroleum pipelines located adjacent to the Property.

The objectives of the Phase II investigation were to: characterize soil and groundwater to identify potential impacts and assess baseline conditions at the property prior to leasing.

Date: August 24, 2018

Page: 2

This report summarizes the results, opinions, and conclusions of the Phase II investigation. Descriptions of the Property background, investigation approach, sample locations and analytical results are summarized below. Additional information is included in the Phase I ESA Report (Barr, 2018).

Background Information

The Property consists of approximately 5.18 acres located in an area between the operating Husky Refinery and a large Enbridge pipeline terminal facility as shown on Figure 1. The Property will be leased to ALLETE/Minnesota Power/Superior Water, Light and Power for construction of an electrical substation. Much of the following Property information was summarized from information presented in Barr's Phase I ESA Report (Barr, 2018):

Topography of the Property is relatievly flat, with a gentle slope down to the east. The property is underlain by clayey till and glaciolacustrine sediment planed by waves of proglacial Lake Duluth (Clayton, 1985). Based on groundwater monitoring at the refinery, which includes groundwater monitoring wells located on and near the Property, shallow groundwater flow direction at the Property is to the northeast towards Newton Creek, ultimately discharging into Lake Superior approximately 1.7 miles northeast of the Property. The depth to shallow groundwater in MW-14, which is located on the Property, is typically less than two feet below the ground surface (Gannett Fleming, 2017). Husky's monitoring wells on and near the Property are shown on Figure 2.

No buildings are currently located on the Property. The Property is accessible via Stinson Avenue (24th Avenue East) and an approximately 80-foot-wide gravel parking lot/equipment laydown area is located along the northwest Property boundary. No drinking water or sanitary service is provided to the Property. Historically the Property has been used as a storage/laydown area associated with the adjacent refinery. A warehouse was previously located on the Property and has since been demolished.

The current use of adjoining properties includes Husky Refinery to the north/northwest, unoccupied grassy/forested land and rail lines to the southwest, Husky Refinery laboratory building and grassy area to the east/northeast, and rail lines and Enbridge petroleum pipeline terminal facility to the south/southeast.

Date: August 24, 2018

Page: 3

Investigation Approach and Summary of Activities

A Phase II Investigation was completed to assess for soil and groundwater impacts on the Property and to establish baseline environmental data. On June 22 and 23, 2018, Barr and its subcontractor, Twin Ports Testing, used a Geoprobe to advance five direct-push borings (SB-1 through SB-5) to depths of 20 feet below ground surface (bgs) at the locations shown on Figure 2. The borings locations were selected to provide representative coverage of the Property.

At each of the boring locations, one shallow soil sample was collected from depths between 0 and 3 feet bgs and one deeper sample was collected from intervals between 6 and 13 feet bgs. Soil samples were field-screened for organic vapors using headspace sample screening procedures described in our Standard Operating Procedures (included in Attachment A). Additional evidence of contamination such as staining, odor, discoloration, and sheen were evaluated and/or documented in the field. Soils were described according to ASTM D-2488, *Standard Practice for Description and Identification of Soils (Visual/Manual Method)*. Boring locations were surveyed using global positioning system (GPS) methods.

Temporary monitoring wells, with five-foot PVC well screens, were placed into three borings completed on June 21 (SB-1, SB-2, and SB-3). The wells were left in place over night to allow time for groundwater to equilibrate.

Barr submitted ten soil samples to Pace Analytical Laboratories in Minneapolis, MN. The soil samples were analyzed for the following compounds:

- Resource Conservation and Recovery Act (RCRA) list of 8 metals by methods 6010D and 7471B;
- polycyclic aromatic hydrocarbons (PAHs) by method 8270D; and
- volatile organic compounds (VOCs) by method 8260.

Due to poor recovery, only one groundwater sample (SB-3) was collected and submitted for analysis of VOCs by method 8260B and PAHs by method 8270D.

Results

Representative photographs of the boring locations and soil encountered at each location are included as Attachment B. Logs of each soil boring are included as Attachment C. Boring stratigraphy generally consisted of six inches or less of organic-rich topsoil overlying lean clay. The clay was typically of medium plasticity, stiff consistency, moist, red color, and glaciolacustrine origin. There was no staining, odor, discoloration, sheen or other indications of contamination observed in the field with the exception of SB-5, where the top six inches of soil

Date: August 24, 2018

Page: 4

was composed of 70% angular shiny black sand and gravel – apparent weathered bituminous pavement. Headspace sample organic vapor screening in the field produced headspace readings less than 0.6 parts per million (ppm) across the site, with the exception of the top six inches of SB-5 (described above), where headspace results were 1.2 ppm.

The day following temporary monitoring well installation, approximately 3.5 feet of water was found in SB-1; SB-2 was dry, and SB-3 contained approximately 11 feet of water. Because SB-1 and SB-3 were located in areas of the site with shallow perched water on the ground surface while SB-2 was located in a portion of the site with dry ground, it is possible that water encountered in soil borings SB-1 and SB-3 may have been influenced by perched surface water draining into the open boring holes overnight. Although a small about of water was measured in the SB-1 borehole, an insufficient amount of water remain for sampling after purging only one well volume. Therefore, a groundwater sample was only collected from SB-3.

Tables 1 and 2 summarize the soil samples collected, analyses performed, and analytical results. Table 1 presents the analytical results for detections only or compounds detected at concentrations equal to or greater than laboratory method detection limits (MDLs). Included for comparison are the Wisconsin Department of Natural Resources (WDNR) Remediation & Redevelopment Program Residual Contaminant Levels (RCLs) developed by the WDNR according to the procedures in NR 720.10 and NR 720.12, Wis. Adm. Code. Non-industrial and industrial RCLs are included for comparison.

Table 2 presents all of the analytical results, including those results below the MDLs. Table 3 presents all of the groundwater analytical results compared to enforcement standard (ES) and Preventative Action Limit (PAL) criteria in NR 140.10 Wis. Adm. Code. Copies of the laboratory analytical reports are included in Attachment D.

Soil Analytical Results

<u>Metals Results</u> - Five of the eight RCRA metals were detected in each of the soil samples (Table 1). Arsenic was the only metal detected above the industrial RCLs; and arsenic concentrations exceeded industrial RCLs consistently in all soil samples, except SB-3_8-9 ft., where the concentration was below industrial criteria. Mercury, barium, chromium, and lead were found at concentrations below non-industrial RCLs in each sample. Cadmium, selenium and silver were not found above laboratory quantitation limits in any of the samples.

Date: August 24, 2018

Page: 5

<u>PAHs</u> - Each of the PAHs were detected in SB-5_0-1 ft., but only the concentration of benzo(a)pyrene was in exceedance of non-industrial RCLs (Table 1). The only other detection of PAHs above laboratory quantitation limits was Benzo(b)fluoranthene in SB-3_8-9 ft.

<u>VOCs</u> - There were no VOCs detected above laboratory quantitation limits. Toluene was detected in SB-5_0-1 ft., but the concentration was below the quantitation limit.

<u>Cumulative</u> - The combined detections for each sample interval were also compared to the WDNR cumulative hazard index. No samples exceeded the Hazard Index or Cumulative Cancer Risk Sample standards. Sample SB-5 from 0-1 ft. was the only interval with any exceedances and had an Exceedance Count of one.

Groundwater Analytical Results

The only analyte detected in groundwater from SB-3 was toluene. This detection was below the WDNR NR 140 ES and PAL. Previous annual groundwater monitoring at wells MW-14 (located on the Property near SB-3) and MW-13/PZ-13 (located just northeast of Property) did not identify detectable concentrations of petroleum VOCs/naphthalene over the past 3 years (Gannett Fleming, 2016, 2017, 2018). As previously identified, it is possible that perched surface water observed at the time of sample collection may have migrated into SB-3.

Conclusions

Field screening at the five direct-push boring locations did not identify petroleum impacts or other concerns in soil. Soils generally consisted of lean, red, glaciolacustrine clay overlain by a few inches of organic topsoil.

Perched surface water is believed to have mixed with the groundwater encountered in SB-3. Only one VOC was detected in the groundwater sample from SB-3 (toluene), but the concentration was below the WDNR ES and PAL. This is consistent with the favorable groundwater monitoring results over the past three years from existing groundwater monitoring wells located on and near the subject Property and Refinery.

With the exception of arsenic, soil concentrations for RCRA metals and PAHs were below WDNR non-industrial RCLs. Arsenic was found at concentrations above the industrial RCLs in nine of the ten soil samples collected. However, given the documented baseline for arsenic in the Superior, Wisconsin area, the arsenic concentrations are believed to be naturally occurring and were universally below WDNR background threshold values (BTVs) as published and defined in their

Date: August 24, 2018

Page: 6

RCL Spreadsheet and Publication PUB-RR-890. The three other metals detected above laboratory quantitation limits in each of the soil samples (i.e., barium, chromium, and lead) were found at concentrations below the non-industrial RCLs and below the WDNR background threshold values, with the exception of the result from SB-5 0-1 ft., where asphalt/fill soils were encountered at the surface. Metals detected in soil at the Property are therefore unlikely to be the result of past property uses.

In addition to chromium and lead concentrations above WDNR background threshold values, results from SB-5 0-1 ft. included multiple low-level concentration of PAHs, including a concentration of benzo(a)pyrene in exceedance of non-industrial RCLs; and a trace concentration of toluene. This sample contained pieces of apparent weathered asphalt. The chromium, lead, PAHs, and toluene detected at SB-5_0-1 ft. likely derive from the apparent weathered asphalt contained in the sample, not the underlying soil. No other samples at the property exhibited similar elevated analyte concentrations, including other surface samples and the deeper sample collected from the same boring (SB-5_8-9). Therefore, compounds associated with the apparent weathered asphalt do not appear to have leached into underlying soil or to have been distributed across the site.

Trace concentrations of PAHs were detected in SB-1 from 2-3 ft. and SB-3 from 8-9 ft. A trace concentration of toluene in groundwater was detected in soil boring SB-3, which was screened from 14.5-19.5 ft. bgs. The other PAH and VOC concentrations detected were below the RCLs for soil and the ES and PAL for groundwater. Based on WDNR risk-based industrial and non-industrial RCLs, the isolated low concentrations do not present a risk for human health and the environment.

Limitations

The scope of this Phase II investigation was intended to investigate the potential for the presence of specific contaminants at representative locations. Laboratory analysis was performed for those parameters which were identified as potential contaminants prior to conducting this investigation.

Attachments

Table 1 Soil Analytical Summary – Detected Values Only

Table 2 Soil Analytical Summary - All Results

Table 3 Groundwater Analytical Summary

Date: August 24, 2018

Page: 7

Figure 1 Property Location Map Figure 2 Soil Boring Locations

Attachment A Standard Operating Procedures
Attachment B Representative Photographs

Attachment C Soil Boring Logs

Attachment D Soil and Groundwater Laboratory Analytical Reports

Date: August 24, 2018

Page: 8

References

- ASTM, 2009. *D-2488-09a, Standard Practice for Description and Identification of Soils* (*Visual/Manual Method*) ASTM International, West Conshohocken, PA; 2009.
- Barr, 2018. Phase I Environmental Site Assessment, Future ALLETE Substation Site, Superior Refining Company, LLC (Husky Energy), Superior, Wisconsin, prepared for Superior Refining Company, LLC; July 2018.
- Clayton, Lee, 1985. *Pleistocene Geology of the Superior Region, Wisconsin*, Wisconsin Geological and Natural History Survey Information Circular 46, Plate 1; 1985.
- Gannett Fleming, 2016. Facility-Wide Groundwater Monitoring Report for 2015, Calumet Superior LLC Refinery, Superior WI, prepared for Calumet Superior LLC; January 17, 2016.
- Gannett Fleming, 2017. Facility-Wide Groundwater Monitoring Report for 2016, Calumet Superior LLC Refinery, Superior WI, prepared for Calumet Superior LLC; January 10, 2017.
- Gannett Fleming, 2018. Facility-Wide Groundwater Monitoring Report for 2017, Superior Refining Company LLC, Superior WI, prepared for Superior Refining Company LLC; January 16, 2018.

Tables

Table 1 Soil Analytical Data Summary Detections Only Husky Energy Property- Future Substation Site Superior, WI

				Ju	perior, w	1								
				Location	SB-1	SB-1	SB-2	SB-2	SB-3	SB-3	SB-4	SB-4	SB-5	SB-5
				Date	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/22/2018	6/22/2018	6/22/2018	6/22/2018
				Depth	2 - 3 ft	12 - 13 ft	0 - 1 ft	6 - 7 ft	0 - 2 ft	8 - 9 ft	0 - 2 ft	6 - 7 ft	0 - 1 ft	8 - 9 ft
			Π	WDNR		12 10 11	0 110	0 0 0	0 270	0 011	0 210	0 110	0 0 11	0 0 11
		Wisconsin Not	Wisconsin Not to	Background										
		to Exceed	Exceed Non-	Threshold										
Parameter	Units	Industrial RCLs	Industrial RCLs	Values										
Effective Date		06/01/2018	06/01/2018	06/01/2018										
Exceedance Key		Bold	Underline	Reference Only										
General Parameters				ŕ										
Moisture	%				27.6	35.3	20.3	24.5	24.5	31.6	26.7	29.4	23.3	28.1
Metals														
Mercury	mg/kg	3.13	3.13		0.023 j	0.026 j	0.022 j	0.020 j	0.026 j	0.021 j	0.023 j	0.021 j	0.10	0.017 j
Arsenic	mg/kg	3	0.677	8	<u>3.1</u>	3.8	3.0	3.3	3.5	2.8	3.0	3.0	<u>5.1 j</u>	3.4
Barium	mg/kg	100000	15300	364	245	193	145	150	174	176	191	160	287	173
Cadmium	mg/kg	985	71.1	1	-					0.11 j		0.097 j	0.56 j	
Chromium	mg/kg	100000 CR3	100000 CR3	44	49.6	42.9	37.0	39.5	41.7	42.6	48.6	39.4	1850	42.0
Lead	mg/kg	800	400	52	10.5	9.5	7.6	8.1	9.0	7.8	9.1	7.7	88.2	8.4
Selenium	mg/kg	5840	391		0.56 j									
Silver	mg/kg	5840	391										1.1 j	
Semivolatile Organic Compounds														
Acenaphthene	ug/kg	45200000	3590000										6.9	
Acenaphthylene	ug/kg												3.4	
Anthracene	ug/kg	100000000	17900000										11.0	
Benz(a)anthracene	ug/kg	20800	1140										77.8	
Benzo(a)pyrene	ug/kg	2110	<u>115</u>							1.2 j			<u>128</u>	
Benzo(b)fluoranthene	ug/kg	21100	1150		1.1 j					2.2			162	
Benzo(g,h,i)perylene	ug/kg									2.3 j			116	
Benzo(k)fluoranthene	ug/kg	211000	11500							2.2 j			55.7	
Chrysene	ug/kg	2110000	115000		-								98.1	
Dibenz(a,h)anthracene	ug/kg	2110	115		-					2.2 j			32.5	
Fluoranthene	ug/kg	30100000	2390000		1.8 j					1.9 j			90.4	
Fluorene	ug/kg	30100000	2390000		-								2.5	
Indeno(1,2,3-cd)pyrene	ug/kg	21100	1150		-					2.2 j			94.4	
Naphthalene	ug/kg	24100	5520		-								4.3	
Phenanthrene	ug/kg												39.1	
Pyrene	ug/kg	22600000	1790000										75.2	
Volatile Organic Compounds **														
Toluene	ug/kg	818000	818000		-								38.8 j	
Barr Calculated Comparison - Non-Industrial														
Exceedance Count	no unit	0	<u>0</u>		0	0	0	0	0	0	0	0	<u>1</u>	0

Note

^{**} Non-detect VOC compounds reported on a wet weight basis per WIDNR requirements.

Table 2 Soil Analytical Data Summary Husky Energy Property- Future Substation Site Superior, WI

				Su	perior, W	1								
				Location	SB-1	SB-1	SB-2	SB-2	SB-3	SB-3	SB-4	SB-4	SB-5	SB-5
				Date	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/21/2018	6/22/2018	6/22/2018	6/22/2018	6/22/2018
				Depth	2 - 3 ft	12 - 13 ft	0 - 1 ft	6 - 7 ft	0 - 2 ft	8 - 9 ft	0 - 2 ft	6 - 7 ft	0 - 1 ft	8 - 9 ft
Parameter	Units	Wisconsin Not to Exceed Industrial RCLs	Wisconsin Not to Exceed Non- Industrial RCLs	WDNR Background Threshold Values										
Effective Date		06/01/2018	06/01/2018	06/01/2018										
Exceedance Key		Bold	<u>Underline</u>	Reference Only										
General Parameters														
Moisture	%				27.6	35.3	20.3	24.5	24.5	31.6	26.7	29.4	23.3	28.1
Metals														
Mercury	mg/kg	3.13	3.13		0.023 j	0.026 j	0.022 j	0.020 j	0.026 j	0.021 j	0.023 j	0.021 j	0.10	0.017 j
Arsenic	mg/kg	3	<u>0.677</u>	8	<u>3.1</u>	<u>3.8</u>	<u>3.0</u>	<u>3.3</u>	<u>3.5</u>	<u>2.8</u>	<u>3.0</u>	<u>3.0</u>	<u>5.1 j</u>	<u>3.4</u>
Barium	mg/kg	100000	15300	364	245	193	145	150	174	176	191	160	287	173
Cadmium	mg/kg	985	71.1	1	< 0.075	< 0.082	< 0.065	< 0.070	< 0.069	0.11 j	< 0.071	0.097 j	0.56 j	< 0.073
Chromium	mg/kg	100000 CR3	100000 CR3	44	49.6	42.9	37.0	39.5	41.7	42.6	48.6	39.4	1850	42.0
Lead	mg/kg	800	400	52	10.5	9.5	7.6	8.1	9.0	7.8	9.1	7.7	88.2	8.4
Selenium	mg/kg	5840	391		0.56 j*	< 0.61	< 0.49	< 0.52	< 0.51	< 0.58	< 0.53	< 0.56	< 5.2	< 0.54
Silver	mg/kg	5840	391		< 0.11	< 0.12	< 0.098	< 0.11	< 0.10	< 0.12	< 0.11	< 0.11	1.1 j	< 0.11
Semivolatile Organic Compounds														
Acenaphthene	ug/kg	45200000	3590000		< 0.56	< 0.63	< 0.51	< 0.54	< 0.54	< 0.60	< 0.56	< 0.58	6.9	< 0.57
Acenaphthylene	ug/kg				< 0.68	< 0.76	< 0.62	< 0.66	< 0.65	< 0.72	< 0.67	< 0.70	3.4	< 0.69
Anthracene	ug/kg	100000000	17900000		< 0.65	< 0.72	< 0.59	< 0.62	< 0.62	< 0.68	< 0.64	< 0.66	11.0	< 0.65
Benz(a)anthracene	ug/kg	20800	1140		< 1.5	< 1.7	< 1.4	< 1.4	< 1.4	< 1.6	< 1.5	< 1.5	77.8	< 1.5
Benzo(a)pyrene	ug/kg	2110	<u>115</u>		< 0.95	< 1.1	< 0.86	< 0.91	< 0.91	1.2 j	< 0.94	< 0.97	<u>128</u>	< 0.95
Benzo(b)fluoranthene	ug/kg	21100	1150		1.1 j	< 0.57	< 0.47	< 0.49	< 0.49	2.2	< 0.51	< 0.53	162	< 0.52
Benzo(g,h,i)perylene	ug/kg				< 0.87	< 0.97	< 0.79	< 0.84	< 0.83	2.3 j	< 0.86	< 0.90	116	< 0.88
Benzo(k)fluoranthene	ug/kg	211000	11500		< 1.2	< 1.3	< 1.1	< 1.1	< 1.1	2.2 j	< 1.2	< 1.2	55.7	< 1.2
Chrysene	ug/kg	2110000	115000		< 1.9	< 2.1	< 1.7	< 1.8	< 1.8	< 2.0	< 1.9	< 1.9	98.1	< 1.9
Dibenz(a,h)anthracene	ug/kg	2110	115		< 0.64	< 0.71	< 0.58	< 0.61	< 0.61	2.2 j	< 0.63	< 0.65	32.5	< 0.64
Fluoranthene	ug/kg	30100000	2390000		1.8 j	< 0.66	< 0.54	< 0.57	< 0.56	1.9 j	< 0.58	< 0.61	90.4	< 0.59
Fluorene	ug/kg	30100000	2390000		< 0.43	< 0.48	< 0.39	< 0.41	< 0.41	< 0.46	< 0.43	< 0.44	2.5	< 0.43
Indeno(1,2,3-cd)pyrene	ug/kg	21100	1150		< 0.93	< 1.0	< 0.84	< 0.89	< 0.88	2.2 j	< 0.91	< 0.95	94.4	< 0.93
Naphthalene	ug/kg	24100	5520		< 1.1	< 1.2	< 0.97	< 1.0	< 1.0	< 1.1	< 1.1	< 1.1	4.3	< 1.1
Phenanthrene	ug/kg				< 2.7	< 3.0	< 2.4	< 2.5	< 2.5	< 2.8	< 2.6	< 2.7	39.1	< 2.7
Pyrene	ug/kg	22600000	1790000		< 2.1	< 2.4	< 1.9	< 2.0	< 2.0	< 2.2	< 2.1	< 2.2	75.2	< 2.1

Table 2 Soil Analytical Data Summary Husky Energy Property- Future Substation Site Superior, WI

Location SB-1 SB-2 SB-3 SB-3 SB-4 SB-	B-5 SB-5
Date 6/21/2018 6/21/2018 6/21/2018 6/21/2018 6/21/2018 6/21/2018 6/22/2018 6/22/2018 6/22/2018 6/22/2018	/2018 6/22/2018
Depth 2-3 ft 12-13 ft 0-1 ft 6-7 ft 0-2 ft 8-9 ft 0-2 ft 6-7 ft 0	1 ft 8 - 9 ft
WDNB	
Wisconsin Not Wisconsin Not to Packground	
to Exceed Exceed Non- Threshold	
Parameter Units Units Industrial RCLs Industrial RCLs Values	
Effective Date 06/01/2018 06/01/2018 06/01/2018	
Exceedance Key Bold Underline Reference Only	
Volatile Organic Compounds **	
1,1,1-Trichloroethane ug/kg 640000 640000 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0	25.0 < 25.0
1,1,2,2-Tetrachloroethane ug/kg 3600 810 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 2	25.0 < 25.0
1,1,2-Trichloroethane ug/kg 7010 1590 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0	25.0 < 25.0
	25.0 < 25.0
	25.0 < 25.0
	25.0 < 25.0
	25.0 < 25.0
	25.0 < 25.0
	25.0 < 25.0
1,3-Dichloropropene, cis ug/kg 1210000 1210000 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <	25.0 < 25.0
1,3-Dichloropropene, trans	25.0 < 25.0
2-Hexanone ug/kg 1760000 237000 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.0 <52.	52.0 < 52.0
	77.8 < 77.8
	25.0 < 25.0
	25.0 < 25.0
Bromoform ug/kg 113000 25400 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <	25.0 < 25.0
Bromomethane ug/kg 43000 9600 <69.9 <69.9 <69.9 <69.9 <69.9 <69.9 <69.9 <69.9 <69.9 <69.9	69.9 < 69.9
Carbon disulfide	25.0 < 25.0
Carbon tetrachloride	25.0 < 25.0
Chlorobenzene ug/kg 761000 370000 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 2	25.0 < 25.0
Chlorodibromomethane ug/kg 38900 8280 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.	25.0 < 25.0
	67.0 < 67.0
Chloroform ug/kg 1980 454 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46.4 < 46	46.4 < 46.4
Chloromethane ug/kg 669000 159000 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <2	25.0 < 25.0
Ethyl benzene ug/kg 35400 8020 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0	25.0 < 25.0
Methyl ethyl ketone (2-butanone) ug/kg 28400000 28400000 < 107 < 107 < 107 < 107 < 107 < 107 < 107 < 107 < 107	107 < 107
Methyl isobutyl ketone (MIBK) ug/kg 3360000 3360000 <41.1 <41.1 <41.1 <41.1 <41.1 <41.1 <41.1 <41.1 <41.1	41.1 < 41.1
Methyl tertiary butyl ether (MTBE) ug/kg 282000 63800 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0	25.0 < 25.0
Methylene chloride ug/kg 1150000 61800 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.	25.0 < 25.0
Styrene ug/kg 867000 867000 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 < 25.0 <	25.0 < 25.0
	25.0 < 25.0
Toluene ug/kg 818000 818000 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <2	3.8 j < 25.0
Trichloroethylene (TCE) ug/kg 8410 1300 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <2	25.0 < 25.0
	25.0 < 25.0
Xylene, m & p	50.0 < 50.0
Xylene, o ug/kg 434000 434000 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0 <25.0	25.0 < 25.0
Xylene, total (Barr Calculation) ug/kg 260000 260000 ND ND ND ND ND ND ND ND ND	ND ND
Barr Calculated Comparison - Industrial	
Exceedance Count no unit 0 0 0 0 0 0 0 0	0 0
Hazard Index no unit ≤ 1.0 ≤ 1.0 0.0004 0.0003 0.0003 0.0004 0.0003 0.0003 0.0003 0.0003 0.0003	124 0.0011
Cumulative Cancer Risk no unit ≤ 1E-0.5 ≤ 1E-0.5 5.2E-11 0.0E+00 0.0E+00 0.0E+00 1.8E-09 0.0E+00 0.0E+00 9.	E-08 0.0E+00
Barr Calculated Comparison - Non-Industrial	
Exceedance Count no unit 0 0 0 0 0 0 0 0	<u>1</u> 0
	2342 0.0003
Cumulative Cancer Risk no unit ≤ 1E-0.5 ≤ 1E-0.5 9.6E-10 0.0E+00 0.0E+00 0.0E+00 3.4E-08 0.0E+00 0.0E+00 1.	E-06 0.0E+00

Note

^{**} Non-detect VOC compounds reported on a wet weight basis per WIDNR requirements.

Table 3 Groundwater Analytical Data Summary Husky Energy Property- Future Substation Site Superior, WI

			Location	SB-3
			Date	6/22/2018
			Depth	14.5 - 19.5 ft
			Sample Type	N
	_	Wissensin		N
		Wisconsin Groundwater Public	Wisconsin Groundwater	
		Health Enforcement	Preventive Action	
Parameter	Units	Standards	Limits	
Effective Date		07/01/2015	07/01/2015	
Exceedance Key		No Exceed	No Exceed	
Semivolatile Organic Compounds				
Acenaphthene	ug/l			< 0.0043
Acenaphthylene	ug/l			< 0.0063
Anthracene	ug/l	3000	600	< 0.0083
Benz(a)anthracene	ug/l			< 0.0053
Benzo(a)pyrene	ug/l	0.2	0.02	< 0.0054
Benzo(b)fluoranthene	ug/l	0.2	0.02	< 0.017
Benzo(g,h,i)perylene	ug/l			< 0.013
Benzo(k)fluoranthene	ug/l	2.2	2.22	< 0.014
Chrysene	ug/l	0.2	0.02	< 0.012
Dibenz(a,h)anthracene	ug/l	400	00	< 0.012
Fluoranthene	ug/l	400	80	< 0.025
Fluorene	ug/l	400	80	< 0.0080
Indeno(1,2,3-cd)pyrene	ug/l	100	10	< 0.018
Naphthalene Phenanthrene	ug/l ug/l	100	10	< 0.0092 < 0.014
Pyrene	ug/l	250	50	< 0.014
Volatile Organic Compounds	ug/i	250	30	V 0.020
1,1,1,2-Tetrachloroethane	ug/l	70	7	< 0.20
1,1,1-Trichloroethane	ug/l	200	40	< 0.14
1.1.2.2-Tetrachloroethane	ug/l	0.2	0.02	< 0.17
1,1,2-Trichloroethane	ug/l	5	0.5	< 0.18
1,1-Dichloroethane	ug/l	850	85	< 0.17
1,1-Dichloroethylene	ug/l	7	0.7	< 0.16
1,1-Dichloropropene	ug/l			< 0.20
1,2,3-Trichlorobenzene	ug/l			< 0.21
1,2,3-Trichloropropane	ug/l	60	12	< 0.26
1,2,4-Trichlorobenzene	ug/l	70	14	< 0.20
1,2,4-Trimethylbenzene	ug/l	480 c	96 c	< 0.20
1,2-Dibromo-3-chloropropane (DBCP)	ug/l	0.2	0.02	< 1.7
1,2-Dibromoethane (EDB)	ug/l	0.05	0.005	< 0.24
1,2-Dichlorobenzene	ug/l	600	60	< 0.14
1,2-Dichloroethane	ug/l	5	0.5	< 0.22
1,2-Dichloroethylene, cis	ug/l	70	7	< 0.15
1,2-Dichloroethylene, trans	ug/l	100	20	< 0.12
1,2-Dichloropropane	ug/l	5	0.5	< 0.16
1,3,5-Trimethylbenzene	ug/l	480 c	96 c	< 0.12
1,3-Dichloropenana	ug/l	600	120	< 0.16
1,3-Dichloropropane 1,3-Dichloropropene, cis	ug/l	0.4	0.04	< 0.070 < 0.20
1,3-Dichloropropene, cis 1,3-Dichloropropene, trans	ug/l ug/l	0.4	0.04	< 0.20
1,4-Dichlorobenzene	ug/l	75	15	< 0.17
2,2-Dichloropropane	ug/l	10	10	< 0.17
Acetone	ug/l	9000	1800	< 9.2
Allyl chloride	ug/l	5500	1300	< 0.29
Benzene	ug/l	5	0.5	< 0.10
Bromobenzene	ug/l	, , ,	5.5	< 0.21
Bromochloromethane	ug/l			< 0.27
Bromodichloromethane	ug/l	0.6	0.06	< 0.22
Bromoform	ug/l	4.4	0.44	< 0.80

Table 3 Groundwater Analytical Data Summary Husky Energy Property- Future Substation Site Superior, WI

			Location	SB-3
			Date	6/22/2018
			Depth	14.5 - 19.5 ft
			Sample Type	N
	Τ	Wisconsin	Wisconsin	
		Groundwater Public	Groundwater	
		Health Enforcement	Preventive Action	
Parameter	Units	Standards	Limits	
Effective Date		07/01/2015	07/01/2015	
Exceedance Key		No Exceed	No Exceed	
Bromomethane	ug/l	10	1	< 1.8
Butylbenzene	ug/l			< 0.24
Butylbenzene, sec	ug/l			< 0.15
Butylbenzene, tert	ug/l			< 0.15
Carbon tetrachloride	ug/l	5	0.5	< 0.19
Chlorobenzene	ug/l	100	20	< 0.17
Chlorodibromomethane	ug/l	60	6	< 0.12
Chloroethane	ug/l	400	80	< 0.49
Chloroform	ug/l	6	0.6	< 0.45
Chloromethane	ug/l	30	3	< 0.16
Chlorotoluene, o	ug/l			< 0.16
Chlorotoluene, p	ug/l			< 0.13
Cumene (isopropyl benzene)	ug/l			< 0.18
Cymene p- (toluene isopropyl p-)	ug/l			< 0.15
Dibromomethane (methylene bromide)	ug/l			< 0.16
Dichlorodifluoromethane (Freon-12)	ug/l	1000	200	< 0.23
Dichlorofluoromethane (Freon-21)	ug/l	7000		< 0.14
Ethyl benzene	ug/l	700	140	< 0.14
Ethyl ether	ug/l	1000	100	< 0.095
Hexachlorobutadiene	ug/l			< 0.31
Methyl ethyl ketone (2-butanone)	ug/l	4000	800	< 0.99
Methyl isobutyl ketone (MIBK)	ug/l	500	50	< 0.42
Methyl tertiary butyl ether (MTBE)	ug/l	60	12	< 0.16
Methylene chloride	ug/l	5	0.5	< 0.98
Naphthalene	ug/l	100	10	< 0.48
Propylbenzene	ug/l			< 0.10
Styrene	ug/l	100	10	< 0.19
Tetrachloroethylene	ug/l	5	0.5	< 0.17
Tetrahydrofuran	ug/l	50	10	< 2.2
Toluene	ug/l	800	160	2.1
Trichloroethylene (TCE)	ug/l	5	0.5	< 0.15
Trichlorofluoromethane (Freon-11)	ug/l	3490	698	< 0.23
Trichlorotrifluoroethane (Freon 113)	ug/l			< 0.22
Vinyl chloride	ug/l	0.2	0.02	< 0.092
Xylene, total	ug/l	2000 (4)	400 (4)	< 0.31

Data Footnotes and Qualifiers

Barr Standard Footnotes and Qualifiers

	Not analyzed/Not available.
j	Estimated detected value. The reported value is less than the stated laboratory quantitation limit but greater than the laboratory method detection limit.
*	Estimated value, QA/QC criteria not met.
**	Non-detect VOC compounds reported on a wet weight basis per WIDNR requirements.

Wisconsin RCLs

CR3	Value represents the criteria for Chromium(III)
XYL	Value represents the criteria for Xylene, total (m-,o-,p- combined).

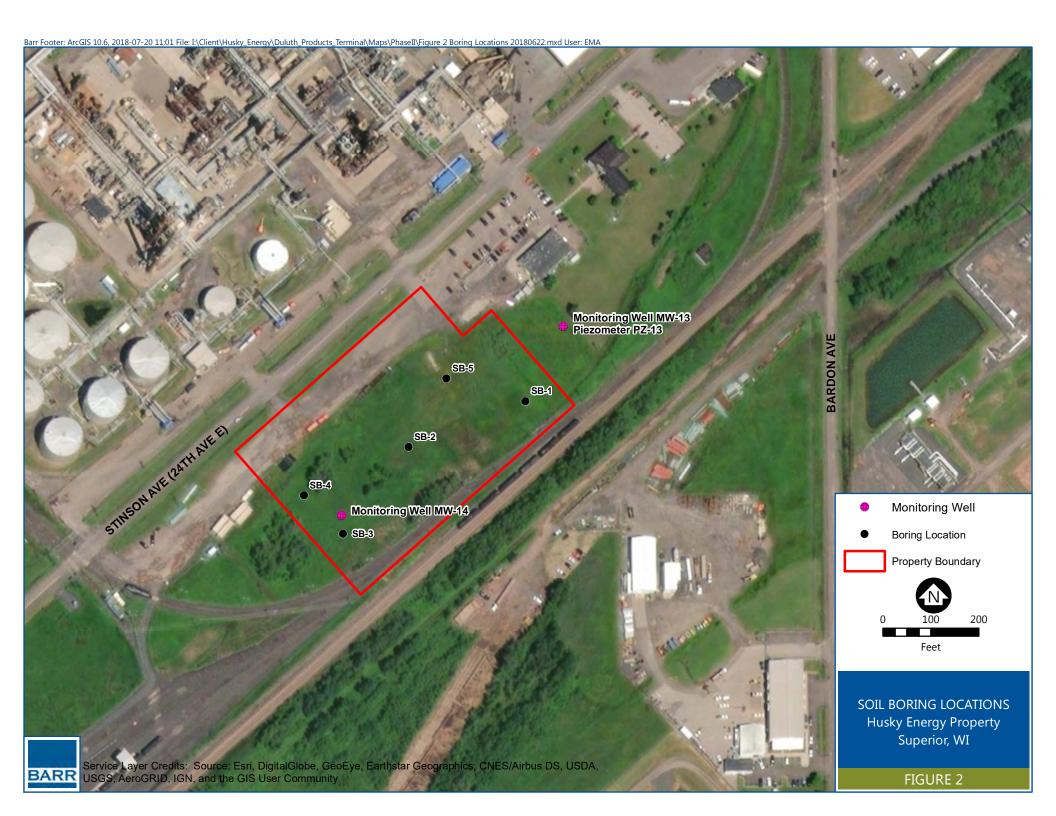
Wisconsin Groundwater Public Health Enforcement Standards

(4)	Xylene includes meta-, ortho-, and para-xylene combined.
С	Value represents the criteria for Trimethylbenzes (1,2,4- and 1,3,5- combined).

Wisconsin Preventive Action Limits

(4)	Xylene includes meta-, ortho-, and para-xylene combined.
С	Value represents the criteria for Trimethylbenzes (1,2,4- and 1,3,5- combined).

Figures



Attachments

Attachment A

Standard Operating Procedures

Collection of Groundwater Samples
Collection of Soil Samples
Decontamination of Sampling Equipment
Field Screening of Soil Samples



Standard Operating Procedure

Collection of Groundwater Samples from a Temporary or Permanent Monitoring Well (Includes Well Purging and Stabilization)

Revision 1

April 5, 2016

Approved By:

	K	m channers	n_		
Kim Johanness	sen / V			04/05/16	
Print	Technical Reviewer	Signature		Date	_
 Terri Olson	2	eni a ll	Son	04/05/16	
Print	QA Manager	Signature		Date	_
D : (1) 6	201 1 (1.1 COD 1:11 (I			
Review of the SC	OP has been performed and	the SOP still reflect	is current prac	ctice.	
Initials:		Date:			
Initials:		Date:			
_				_	
Initials:		Date:		_	
Initials:		Date:			

Revision Date: 04/05/16

Collection of Groundwater Samples from a Monitoring Well (Includes Well Purging and Stabilization)

1.0 Scope and Applicability

The purpose of this Standard Operating Procedure (SOP) is to describe the methods used for monitoring well purging, stabilization, and sampling (excluding residential/water supply systems). The SOP also provides details regarding the calculation of purge volumes and measurement of groundwater stabilization criteria and identifies the common container, preservative, and holding times for typical groundwater sample analyses.

The recommended procedures in this SOP should be followed unless conditions make it impractical or inappropriate to do so. Modifications should be noted in the applicable documentation and communicated to appropriate personnel. Significant changes may result in a revision or newly created SOP.

2.0 Limitations

- Sample collection methods can vary by project. If not specified in the project scope of work and/or documentation (e.g., Work Plan, Sampling Analysis Plan (SAP), or Quality Assurance Project Plan (QAPP)), consult with the appropriate regulatory agency for guidance.
- Collection of groundwater samples from residential/water supply systems are not discussed within this SOP.
- Dedicated sampling equipment and/or decontamination of sampling equipment is required to prevent cross-contamination.
- Low-flow sampling methods are not discussed within this SOP.
- Sample collection using 'clean hands/dirty hands' methods is not discussed within this SOP.

3.0 Responsibilities

Equipment Technicians are responsible to maintain equipment in working order and aid in troubleshooting equipment issues.

The role of the Project Health and Safety Team Leader is to oversee all aspects of on-site safety activities.

The Project Manager, in conjunction with the client, develops the site specific scope of work (e.g., Work Plan, SAP, etc.).

Experienced Field Technician(s) are responsible for the measurement of well pumping rates, calculation of well purge volume, field screening procedures, field equipment and calibration, proper sample identification, collection of samples, quality control procedures, and documentation.

Project staff are responsible for ordering sample containers prior to the sampling event.

4.0 Safety

Barr staff is responsible for conducting all aspects of the job safely. When applicable, refer to the appropriate Project Health and Safety Plan (PHASP) to understand the hazards associated with suspected

Revision Date: 04/05/16

contamination, symptoms of exposure, methods to minimize exposure, personal protection equipment (PPE), and personal air monitoring required when using this SOP. Minimum protection of two pair of chemical resistant gloves (e.g., nitrile) and safety glasses with side shields should be worn to prevent sample contact with the skin and eyes. When sampling waters contaminated with corrosive materials, emergency eye flushing facilities should be available.

5.0 Equipment, Reagents, and Supplies

- Water quality meter (e.g., YSI, or equivalent)
- Polyethylene bailer and rope
- Sample tubing and fittings
- Turbidimeter (optional)
- Coolers
- Ice
- Chemical resistant gloves (e.g., nitrile)
- Custody seal, if applicable
- Calculator
- Locks/keys

- Pump (peristaltic or submersible), power source, and appropriate drive tubing
- Cord reel (optional)
- Graduated measuring container
- Plastic bags
- Waterproof ink pen or pencil
- Clock or stopwatch
- Sample containers (method specific)
- Sample labels
- Chain-of-custody (COC)

6.0 Procedure

This section describes the procedure(s) for calibrating field equipment, measuring pumping rates, calculating purge volumes, well purging, measuring well stabilization, and the sampling, handling, and delivery of groundwater samples. Best practices include setting up the purging, stabilization, and sampling equipment in an upwind direction from any potential source of contamination.

This SOP describes the groundwater collection from a bore hole, temporary well, or permanent monitoring well. Typically, a direct-push (Geoprobe® or equivalent) will be used to create the bore hole or temporary well by advancing the direct-push sampler to the desired sampling interval (sampling depth). When the sampling depth is reached, small diameter extension rods are inserted through the steel probe rods to hold the groundwater sampler screen in place while the rods and screen sheath are retracted, exposing the screen. The groundwater sampler screen can typically be exposed up to 41 inches, but can be exposed a shorter length depending on project requirements. Alternately, a small diameter PVC well screen and riser pipe may be installed in the bore hole for use as a temporary well. Polyethylene (or project specified) tubing is placed into the bore hole or temporary well, and a peristaltic pump (or equivalent) or project specified pump is used to draw water samples to the surface for collection. Well stabilization is not always necessary for temporary well s but if required by the project, see Section 6.2.6 of this SOP.

After each borehole or temporary well is constructed, the probe rods are decontaminated by the drilling contractor in accordance with project requirements. The polyethylene (or project specified) tubing is discarded after each sample is collected and new tubing is used for the collection of the next sample. The

Revision Date: 04/05/16

borehole and temporary well locations will be permanently sealed following applicable state and local regulations.

6.1 Calibration

The water quality meter and turbidimeter will be calibrated as per the applicable Barr SOP. The meters will undergo calibration checks, at a minimum, before and after sampling. The calibration check will be documented on a calibration form (as appropriate) and/or in the field notebook. Any significant issues found during the calibration check will be noted in the field notebook and the Equipment Technicians will be notified.

6.2 Purging/Well Stabilization/Sampling

Prior to sampling, purging of the monitoring well is performed to remove stagnant water from within the well and to stabilize the well to allow for representative groundwater sample collection. The term 'purge volume' refers to the amount of water removed from a well before groundwater sample collection occurs.

Purging well volumes and stabilizing to remove stagnant water from a temporary well may not be necessary due to the short time frame between well installation and sampling. Purging and well stabilization procedure for temporary wells may vary by project or by well. Recommended practice is to purge a temporary well until the water clears, if possible, prior to sampling; however, purging prior to sampling may not be possible at all if water is limited (as it might be in a perched water zone), or water recharge is slow (as it would be in a clayey or silty water bearing zone).

6.2.1 Purge Volume

The volume of standing water in the well is calculated to determine the purge volume that needs to be removed from the well. The water level must be measured in order to determine the volume (see applicable Barr SOP). Calculation of the purge volume is addressed in Section 6.3, Data Reduction/Calculation of this SOP and Table 1. If a well is pumped dry, this constitutes an adequate purge and the well can be sampled following recovery. Refer to project documentation for volumes required to be purged.

6.2.2 Bailer Purging

A bailer can be used for slowly recovering wells with minimal water volume and a depth to groundwater greater than 25 feet. A new disposable polyethylene bailer with a check valve can be attached to a cord reel or a downrigger and support assembly. Polyethylene bailers can be hauled using stainless steel wire or new nylon line (rope).

- Put on gloves for skin protection and to prevent sample contamination.
- Secure the bailer and lower slowly into the water column until the bailer is submerged. Avoid
 rapid movements of the bailer to minimize turbidity. A cord reel can be used to aid in the
 lowering of the bailer.
- Raise the bailer and empty the water collected from the bailer into a graduated measuring container.
- Sampling may begin once desired volume is purged and the well has stabilized (see Section 6.2.6, Well Stabilization of this SOP).

6.2.3 Peristaltic Pump Purging

A peristaltic pump is used when the water level is within suction lift (e.g., within about 25 feet of the ground surface but may be less at higher altitudes). It usually is a low-volume suction pump with low pumping rates suitable for sampling shallow, small-diameter wells.

- Put on gloves for skin protection and to prevent sample contamination.
- Lower tubing into the well water (1 to 2 feet below surface) and cut to the desired length.
- Connect the well tubing to the drive tubing entering the pump.
- Connect the drive tubing exiting the pump to the short section of tubing entering the flow-through cell or graduated measuring container.
- Turn on pump and set the speed at the desired rate of flow.
- Sampling may begin once desired volume is purged and the well has stabilized (see Section 6.2.6, Well Stabilization of this SOP).

6.2.4 Submersible Pump Purging

A submersible pump is used when the water level is greater than the suction lift associated with a peristaltic pump. It is commonly used in conjunction with a control box to achieve the desired pumping rate (low to high). Variable rate submersible pumps are available to fit inside 2 inch or larger wells.

6.2.4.1 1.5-inch Submersible Pump

This is a type of submersible pump that can be used in 2-inch or larger diameter wells. It can purge water from depths down to 200 feet or greater, depending on pump model and manufacturer.

- Put on gloves for skin protection and to prevent sample contamination.
- Attach appropriate diameter tubing to pump intake, lower pump, and secure at desired depth.
- Cut off tubing, allowing additional tubing length for discharge.
- Plug the pump into the controller. Pump will begin pumping using the variable speed controller. There are a variety of speed controllers available, typically designed for a specific pump.
- Attach the controller to the power supply.
- Turn on the controller and dial the speed control to the desired flow rate. The controller can slow the purge rate down to the optimum rate.
 - Note: If the submersible pump is not running, turn off the pump and then disconnect from the power supply. Check connections and try again.
- Attach the flow-through cell for the water quality meter.
 - Note: If water is considerably turbid after initial pump start-up, the flow-through cell may be connected after purge water has cleared visually.
- Sampling may begin once desired volume is purged and the well has stabilized (see Section 6.2.6, Well Stabilization of this SOP).

6.2.4.2 3 or 4-inch Submersible Pump

This pump may be used to purge water samples from any depth.

• Put on gloves for skin protection and to prevent sample contamination.

- Attach purging hose to the pipe connected on the top of the submersible pump.
- Lower the submersible pump slowly into the well until it is completely submersed into the water and secure at desired depth.
- Connect the pump to the generator with an extension cord.
- Turn switch to start the generator, put choke on, pull recoil rope, and let generator idle until it is running smoothly
- Turn on power (which is located on the front of the generator).
 - Note: Submersible pump should be running; if not, turn off the generator and check connections.
- Adjust flow rate to desired rate with the valve and measure the flow rate with the graduated measuring container.
- Attach the flow-through cell for the water quality meter.
 - Note: If water is considerably turbid after initial pump start-up, the flow-through cell may be connected after purge water has cleared visually.
- Sampling may begin once desired volume is purged and the well has stabilized (see Section 6.2.6, Well Stabilization of this SOP).

6.2.5 Well Purging with In-place Plumbing

In-place plumbing consists of dedicated, submersible pumps that are permanently installed in a well.

- Put on gloves for skin protection and to prevent sample contamination.
- Turn switch to start the generator, put choke on, pull recoil rope, and let generator idle until it is running smooth.
- Connect the pump to the generator with an extension cord.
- Connect the pipe, elbow, and valve to the discharge pipe of the submersible pump (located at the top of the well) and turn on the generator.
 - *Note: If the pump does not start, check the connection from the generator to the pump.*
- When water flows from discharge of the pump, adjust the flow according to desired flow rate and measure the flow rate with the graduated measuring container.
- Attach the flow-through cell for the water quality meter.
 - Note: If water is considerably turbid after initial pump start-up, the flow-through cell may be connected after purge water has cleared visually.
- Sampling may begin once desired volume is purged and the well has stabilized (see Section 6.2.6, Well Stabilization of this SOP).
 - Note: Each dedicated pump has its own pipe, elbow, and valve. These pieces are left at each well.

6.2.6 Well Stabilization

Well stabilization is typically conducted to help verify that the groundwater sample is representative of aquifer conditions. A well is considered 'stabilized' after the well purge volume has been met and the groundwater (or well) stabilization parameter measurements are within acceptable limits for three consecutive readings. Well stabilization parameters may vary by project or regulatory agency but at a minimum typically include pH, temperature, and specific conductance (temperature corrected electrical conductivity). Dissolved oxygen (DO) and oxidation-reduction potential (ORP) may also be used as stabilization parameters.

The procedure to stabilize a well includes recording well stabilization parameter measurements collected with the water quality meter at the beginning of the well purging process and after subsequently purged well volumes. A well volume is measured as the volume of water present inside a well screen and/or casing (i.e., from the base of the well to the water level measurement) and is defined in the footnotes of Table 1. Groundwater aliquots used for stabilization parameter measurements are typically collected by either directing the purge water discharge line through a flow-through cell or by pouring groundwater from a bailer into a container holding the water quality meter probe (depending on the purging method used).

Documentation of the well stabilization process typically includes recording pertinent information such as the pump type, pumping rate, volume pumped, and well stabilization measurements on the field log data sheets or field notebook. If only the minimum parameters are used for stabilization, the DO and ORP should still be measured and recorded as they may be needed to interpret other chemical parameter results. Turbidity is measured with a standalone turbidimeter but is typically not used as a stabilization parameter. A qualitative determination of turbidity may also be noted (e.g. clear, cloudy, very cloudy, etc.).

The well may be sampled after three consecutive measurements (typically one well volume per measurement), collected at the intervals described above, are within specific project criteria or the criteria presented in Section 7.2, Measurement Criteria of this SOP.

If field parameters do not stabilize after five well volumes have been purged, then the field technician will verify that the probes and related equipment are functioning properly and that operator error is not an issue. They will also re-evaluate whether or not water is being withdrawn from the appropriate depth to effectively evacuate the well. If all the checks produce no new insight, a decision will need to be made by the project team on whether to collect samples for laboratory analysis. When samples are collected, it will be clearly documented that stabilization was not achieved; at a minimum, this fact will be reported on the field log data sheets and in the Field Sampling Report.

If the well was purged dry, it shall be allowed to recharge and the samples should then be collected. If there is insufficient sample volume for the analyses being sampled, the project team will need to decide if sampling should be carried out or if a reduced prioritized list of analyses should be collected.

6.2.7 Sampling

The project team will determine the order for sampling the wells but general guidelines are below:

- Where water quality data are available, the least contaminated wells would be sampled first, proceeding to increasingly contaminated wells.
- Where the distribution of contaminants is not known, wells considered to be up gradient from likely sources of contamination would be sampled first and downgradient wells closest to the suspected contamination would be last.
- Make certain to keep records of the order in which wells were sampled.

Similar to purging, sampling requires the use of pumps or bailers. It may be appropriate to use a different device to sample than that which was used to purge. The most common example of this is the use of a pump to purge and a bailer to sample. There are several factors to take into consideration when choosing

a sampling device. The experience of the project team will be used to determine which is appropriate and care should be taken when reviewing the advantages or disadvantages of any one device.

To prevent the possible loss of some volatile organic compounds (VOCs), samples for volatile parameters should be collected first with as little agitation and disturbance as possible, then proceed in order towards the least volatile parameter as listed in Barr's 'Water Sampling Guidelines' form. The 40 mL vials used to collect the VOC samples should be checked for air bubbles. Air bubbles may be caused by insufficient meniscus when sealing the vial, degassing after sample collection or during sample shipment, or reaction between the sample and preservative (HCl). If air bubbles > 6 mm (pea-sized) are observed during sampling, discard the vial and recollect the sample using a new vial. If air bubbles are believed to be due to the sample reacting with the preservative, the sample should be collected in an unpreserved vial if possible.

Put on new sampling gloves at each sampling site to reduce the risk of sample cross-contamination and exposure to skin. Never reuse old gloves.

Prepare sampling containers by filling out the label, using an indelible permanent pen, with the following information at a minimum:

- Sample ID
- Date and time of sample collection
- Preservative
- Sample analysis (if required by the lab)

When filling the containers, do not insert the tubing into the containers and do not overfill preserved containers. When all samples are containerized, place the filled sample containers in a sampling cooler with ice, turn off any equipment, disassemble the sampling apparatus, dispose of all one-time use (disposable) equipment, and decontaminate reusable equipment per Barr's SOP 'Decontamination of Sampling Equipment'.

6.2.7.1 Bailer Sampling

After the well has been purged and stabilized, secure the bailer and slowly lower into the top of the water column making certain not to stir up the water with the bailer, which could result in volatizing the samples. Keep the bailer in the top portion of the water column when collecting the sample.

When the bailer is filled, slowly raise the bailer out of the well. A clean tarp may be used to cover the ground to minimize the contact of the rope with the ground. Fill containers in the order listed in Barr's 'Water Sampling Guidelines' form.

6.2.7.2 Peristaltic / Submersible Pump Sampling

After the well has been purged and stabilized, disconnect the tubing exiting the pump from the flow-through cell, if used and fill containers as listed in Barr's 'Water Sampling Guidelines' form.

6.2.7.3 Check Valve Sampling

Sampling temporary wells through tubing with a check valve may be conducted following a drilling subcontractor's procedure.

6.2.8 Preservation

Container volume, type, and preservative are important considerations in sample collection. Container volume must be adequate to meet laboratory requirements for quality control, split samples, or repeat analyses. The container type varies with the analysis required. Typically, the analytical laboratory will preserve the container before shipment. Preservation and shelf life vary; contact the laboratory to determine if an on-hand container is still useful. Barr's 'Water Sampling Guidelines' form lists the parameter, container type, container volume, and preservative for many of the most common parameters collected.

6.2.9 Handling

The samples will be bubble wrapped or bagged after collection, stored in a sample cooler, and packed on double bagged wet ice. Samples will be kept cold (\leq 6 °C, but not frozen), until receipt at the laboratory (where applicable).

Note: Samples may need to be stored indoors in winter to prevent freezing.

6.2.10 Shipment/Delivery

Once the cooler is packed to prevent breaking of bottles, the proper chain-of-custody (COC) documentation is signed and placed inside a plastic bag then added to the cooler.

All samples will be kept secured to prevent tampering. If sample coolers are left in a vehicle or field office for temporary storage, the area will be locked and secured.

Custody seals may be present, but at a minimum, the coolers must be taped shut to prevent the lid from opening during shipment.

The coolers must be delivered to the laboratory via hand or overnight delivery courier, if possible, in accordance with all Federal, State and Local transportation regulations and Barr's SOP 'Domestic Transport of Samples to the Laboratory'.

6.3 Data Reduction/Calculations

Table 1 provides the volume of water (per foot or meter of depth) based on the diameter of the casing or hole. The following are two examples of calculations used in Table 1:

Volume of Standing Water (V), cubic feet

$$V = (\pi)(r^2)(h)$$

Where: $\pi = 3.1416$

r = Well radius (ft)

h = Total well depth (ft) – depth to static water (ft) = Water column height (ft)

Note: For the table calculations, 'h' is equal to one foot.

Well Volume (WV), gallons

$$WV = (V)(7.48)$$

Where: V = Volume of standing water, cubic feet

7.48 = Cubic foot to US Gallons conversion factor

Calculate the volume of water to be purged using the equation below:

VP = (WV)(NWV)

Where: VP = Volume of water to be purged

WV = Well volume in gallons

NMV = Number of well volumes to be purged per project requirements

6.4 Disposal

Waste generated by this process will be disposed of in accordance with Federal, State and Local regulations and Barr's SOP 'Investigative Derived Waste'. Where reasonably feasible, technological changes have been implemented to minimize the potential for environmental pollution.

7.0 Quality Control and Quality Assurance (QA/QC)

The QC activities described below allow the self-verification of the quality and consistency of the work.

7.1 QA/QC Samples

QA/QC samples are defined in Barr's SOP 'Collection of Quality Control Samples'. The sampling frequency should be performed at the frequency noted in the project scope of work and/or documentation (e.g., Work Plan, SAP, or QAPP).

7.2 Well Stabilization Criteria

Well stabilization criteria to be used if there are no project specific criteria:

- pH ± 0.1 standard units
- Temperature ± 0.5 °C
- Specific conductance ± 5%
- Optional Criteria:
 - ORP ± 10 mV
 - Dissolved oxygen ± 10% (> 0.5 mg/L)

Note: Three consecutive readings ≤ 0.5 mg/L can be considered stabilized.

o Turbidity ± 10% (> 5 Nephelometric Turbidity Units (NTU))

Note: Three consecutive readings \leq 5 NTU can be considered stabilized.

8.0 Records

The field technician will document the pumping flow rate, well volume, time purged, volume purged, water level, total well depth and stabilization test measurements on the field log data sheet and/or field notebook. They will also document the type and number of bottles on the chain-of-custody record, as appropriate. The analysis for each container and the laboratory used will be documented on the chain-of-custody record. Refer to Barr's SOP 'Documentation on a Chain-of-Custody (COC)' for further information.

Examples of common field documentation are available in Barr's "Compendium of Field Documentation". Field documentation specific to this SOP are listed below:

• Chain-of-custody (COC)

- Sample label
- Custody seal (if applicable)
- Water Level Data Sheet
- Field Log Data Sheet
- Field Log Cover Sheet
- Field Sampling Report
- Water Sampling Guidelines (includes sampling order, container, preservation, and holding time)

The field documents and COCs are provided to a Barr Data Management Administrator for storage on the internal Barr network.

Additional records information can be found in Barr's "Records Management System Manual".

Other Barr SOP subjects referenced within this SOP: water level measurement, water quality meter, turbidimeter, collection of QC samples, decontamination of sampling equipment, and documentation on a COC.

9.0 References

Environmental Protection Agency. Title 40 of the Code of Federal Regulations, Part 136.3.

Environmental Protection Agency, EPA/540/P-91/007. 1999. Compendium of ERT Groundwater Sampling Procedures.

Minnesota Pollution Control Agency, Water Quality Division. 2006. Sampling Procedures for Groundwater Monitoring Wells.

Table 1

Volume of Water in Casing or Hole

Diameter of Casing or Hole (In)	Gallons per Foot of Depth (WV)	Cubic Feet per Foot of Depth (V)	Liters per Meter of Depth	Cubic Meters per Meter of Depth
1	0.041	0.0055	0.509	0.509 x 10 ⁻³
1½	0.092	0.0123	1.142	1.142 x 10 ⁻³
2	0.163	0.0218	2.024	2.024 x 10 ⁻³
2½	0.255	0.0341	3.167	3.167 x 10 ⁻³
3	0.367	0.0491	4.558	4.558 x 10 ⁻³
3½	0.500	0.0668	6.209	6.209 x 10 ⁻³
4	0.653	0.0873	8.110	8.110 x 10 ⁻³
41/2	0.826	0.1104	10.26	10.26 x 10 ⁻³
5	1.020	0.1364	12.67	12.67 x 10 ⁻³
5½	1.234	0.1650	15.33	15.33 x 10 ⁻³
6	1.469	0.1963	18.24	18.24 x 10 ⁻³
7	2.000	0.2673	24.84	24.84 x 10 ⁻³
8	2.611	0.3491	32.43	32.43 x 10 ⁻³
9	3.305	0.4418	41.04	42.04 x 10 ⁻³
10	4.080	0.5454	50.67	50.67 x 10 ⁻³
11	4.937	0.6600	61.31	61.31 x 10 ⁻³
12	5.875	0.7854	72.96	72.96 x 10 ⁻³
14	8.000	1.069	99.35	99.35 x 10 ⁻³
16	10.44	1.396	129.65	129.65 x 10 ⁻³
18	13.22	1.767	164.18	164.18 x 10 ⁻³
20	16.32	2.182	202.68	202.68 x 10 ⁻³
22	19.75	2.640	245.28	245.28 x 10 ⁻³
24	23.50	3.142	291.85	291.85 x 10 ⁻³
26	27.58	3.687	342.52	342.52 x 10 ⁻³
28	32.00	4.276	397.41	397.41 x 10 ⁻³
30	36.72	4.909	456.02	456.02 x 10 ⁻³
32	41.78	5.585	518.87	518.87 x 10 ⁻³
34	47.16	6.305	585.68	585.68 x 10 ⁻³
36	52.88	7.069	656.72	656.72 x 10 ⁻³

¹ gallon = 3.7854 liters

¹ liter = 0.26417 gallons

¹ meter = 3.281 feet

¹ gallon water weighs 8.33 lbs. = 3.785 kilograms

¹ liter water weighs 1 kilogram = 2.205 lbs.

¹ gallon per foot of depth = 12.419 liters per foot of depth

¹ gallon per meter of depth = 12.419×10^{-3} cubic meters per meter of depth



Standard Operating Procedure Collection of Soil Samples

Revision 8

February 23, 2016

Approved By:

	ν	TO TOUR	40	
Kevin McGilp		The state of the	<u>/</u>	02/23/16
Print Tech	nnical Reviewer	Signature		Date
Terri Olson	2	eni a. Al	Son	02/23/16
	A Manager		<u> </u>	Date
Review of the SOP has	been performed and	I the SOP still reflects	current pract	tice.
Traitiala		Data		
Initials:		Date:		_
Initials:		Date:		
Initials:		Date:		
		·		
Initials:		Date:		

Collection of Soil Samples

1.0 Scope and Applicability

The purpose of this Standard Operating Procedure (SOP) is to describe the collection of a representative soil sample using a variety of methods (including compositing of discrete samples) and equipment depending on the depth and type of sample required. This procedure applies to the collection of soil samples for volatiles (VOC), semivolatiles (SVOC), metals, and inorganics analyses. It also identifies the container, preservative, and weight required for each analysis type.

The recommended procedures in this SOP should be followed unless conditions make it impractical or inappropriate to do so. Modifications should be noted in the applicable documentation and communicated to appropriate personnel. Significant changes may result in a revision or newly created SOP.

2.0 Limitations

- Sample collection methods can vary by project. If not specified in the project scope of work and/or documentation (e.g., Work Plan, Sampling Analysis Plan (SAP), or Quality Assurance Project Plan (QAPP)), consult with the appropriate regulatory agency for guidance.
- Inadequate homogenization of the samples, where applicable, can result in non-representative samples and results.
- Decontamination of sampling equipment is required to prevent cross-contamination.
- Contact the local utilities hotline prior to digging to have utilities identified at sampling locations.

3.0 Responsibilities

Equipment Technicians are responsible to maintain equipment in working order and aid in troubleshooting equipment issues.

The role of the Project Health and Safety Team Leader is to oversee all aspects of on-site safety activities.

The Project Manager, in conjunction with the client, develops the site specific scope of work (e.g., Work Plan, SAP, etc.).

Experienced Field Technicians are responsible for the proper sample identification, collection of samples, field screening procedures, field equipment and calibration, quality control procedures, and documentation.

Project staff are responsible for ordering sample containers prior to the sampling event.

4.0 Safety

Barr staff is responsible for conducting all aspects of the job safely. When applicable, refer to the appropriate Project Health and Safety Plan (PHASP) to understand the hazards associated with suspected contamination, symptoms of exposure, methods to minimize exposure, personal protection equipment (PPE), and personal air monitoring required when using this SOP. Minimum protection of two pair of chemical resistant gloves (e.g., nitrile) and safety glasses with side shields should be worn to prevent

sample contact with the skin and eyes. When sampling soils contaminated with corrosive materials, emergency eye flushing facilities should be available.

Some of the sample containers may require the use of preservatives. Consult the applicable Safety Data Sheet to review hazards and appropriate PPE to minimize exposure.

5.0 Equipment, Reagents, and Supplies

- Sampling devices/tools
- Stainless steel mixing bowl and spoon
- Sample containers (method specific)
- Balance
- Coolers
- Plastic bags
- Non-phosphorus containing detergent (e.g., Liquinox[™])

- Chemical resistant gloves (e.g., nitrile)
- Paper towels/laboratory tissues
- Chain-of-custody (COC)
- Sample label
- Custody seal, if applicable
- Waterproof ink pen or pencil
- Ice

6.0 Procedure

This section describes the procedure(s) for the sampling, handling, and delivery of soil samples.

6.1 Calibration

No specific calibration procedures are required for the actual sampling equipment; however, the calibration of the balance should be verified prior to use. Refer to the applicable Barr SOP.

6.2 Sampling

General considerations to be taken into account when planning and conducting sampling operations are the required sample weight, sample holding times, sample handling, and special precautions for trace contaminant sampling.

To prevent sample cross-contamination, the soil sampling equipment is carefully cleaned before initially sampling and after working at each sampling point per Barr's SOP 'Decontamination of Sampling Equipment'. A new, clean outer pair of disposable gloves will be worn for each sample location and sample containers are placed in separate plastic bags after collecting, preserving and tagging. Sample collection activities will proceed progressively from the least contaminated area to the most contaminated area (when known).

Depending on the project work to be done, soil samples will be collected for analysis by either a drilling apparatus (equipped with a split spoon or core barrel sampler), hand excavation (hand auger, trowel, or shovel), or direct-push (Geoprobe®) technology

• If a drilling apparatus was used, retrieve the split spoon or core barrel sampler from the desired sampling interval and open. If a liner (sleeve) is present and will not be sampled in the field, wrap the ends of the liner with heavy-duty aluminum foil, taking care to not pierce the foil. Tape the foil to the brass liner with duct tape to seal. Cover the ends of the liner with plastic caps or duct tape to fully protect the foil and package for shipment to the laboratory. If a liner is being sampled in the field, open the liner to sample the soil.

- If hand excavating, dig with a trowel or shovel to the desired sampling interval and expose a fresh soil surface to sample. Collect a large sample on a shovel and bring it to the surface or collect the sample directly from the fresh soil surface. The hand excavation technique may be done from the bucket of a backhoe also.
- If direct-push (Geoprobe®) technology is used, soils are typically sampled following the subcontractor's soil sampling procedures. This method generally utilizes a direct-push soil boring rig, steel drive rods and a 2-inch outside diameter (O.D.) soil core sampler with a dedicated 1.75-inch inside diameter (I.D) removable acetate plastic sampler liner. The probe rods and sampling unit are driven to the desired sampling depth by the static weight of the carrier vehicle and hydraulic hammer percussion. Two, four, or five-foot sample cores are typically collected. The assembly is brought to the surface and the soil sample is exposed by cutting open the sampler liner.

In most investigations, the soil samples are field screened for moisture, odor, oil sheen, discoloration and the presence of organic soil vapors and classified in accordance with ASTM D-2488, Standard Practice for Description and Identification of Soils (Visual-Manual Procedure). Refer to Barr's SOP 'Screening Soil Samples'.

The form 'Soil Sampling Guidelines' lists the analyses (in order of collection) and describes the weight of sample, preservation, container, and holding time for the most common sampling media (information can vary depending on the laboratory used). The container size, type, preservative, and holding time are important considerations in sample collection. Sample and container size must be adequate to meet laboratory requirements for quality control, split samples, or repeat analyses. The container type varies with the analysis required. Typically, the analytical laboratory will preserve the container before shipment, where applicable. Preservation and shelf life vary; contact the laboratory to determine if an on-hand container is still useful.

Both discrete and composite samples can be used for environmental investigations. A discrete sample is a sample that originated from a specific area at a specific time. The sample may be transferred directly from the sampler or sampling location to the sample container.

A composite sample is a collection of multiple temporary or discrete samples of the same medium that are combined, thoroughly homogenized, and treated as a single sample. Composite samples are valuable in characterizing a large area or volume of soil.

NOTE: Samples collected for analysis of volatile organic compounds (VOC) should not be homogenized or composited, due to aeration of the sample during mixing which may result in loss of VOC.

6.2.1 Volatile Organic Compounds (VOC)

If VOC or similar analyses (e.g., GRO, TPH as Gasoline) are being analyzed, these samples should be collected as soon as possible after the soil is removed from the ground from a representative area of the most undisturbed soil possible. Please refer to Barr's SOP 'Screening Soil Samples'. It is important to note that there are different containers and sampling media available for collecting a soil sample for VOC. Typically, the VOC sample is collected at a 1:1 weight ratio with a preservative. A coring device, such as a Terra Core® or En Core® sampler, is the first choice for sampling. After VOC samples are collected, mix the remaining soil from the sampling locations/intervals prior to filling the rest of the sample containers.

Note: Analytical samples should not be collected from polyethylene bags sometimes used for field screening purposes.

6.2.1.1 Terra Core® Sampler

The Terra Core[®] Sampler is a single use device that is typically supplied with a 40 mL VOA vial containing preservative (e.g., methanol) and an unpreserved container for % moisture/% solids determination. To use the Terra Core[®], make certain the plunger is aligned with, and seated in, the handle. Push the Terra Core[®] into freshly exposed soil until the sample chamber is filled. Depending on the Terra Core[®] sampler size, a filled chamber will deliver approximately 5 or 10 g of soil. If a 1:1 ratio of soil to preservative is needed, verify the correct size sampler is being used.

Wipe the outside of the sampler, check that the soil plug is flush with the mouth of the sampler, and remove any excess soil. Rotate the plunger 90° until it is aligned with the slots in the body. Extrude the sample into the appropriate container by pushing the plunger down. To provide a good sealing surface, wipe the container lip and screw threads to remove soil and immediately screw on the lid. If preservative is present in the container, swirl to immerse the sample. Record the sample ID on the container and package for shipment to the laboratory.

6.2.1.2 En Core® Sampler

The disposable En Core® sampler is a single use device that is pushed into the soil using a reusable En Core® T-handle. Two, 5 g samplers are typically supplied with an unpreserved container for % moisture/% solids determination. Hold the En Core® coring body and push plunger down until the small O-ring rests against the tabs so the plunger moves freely.

Depress the locking lever on the T-handle. Place coring body plunger end first into the open end of the T-Handle, aligning the slots on the coring body with the locking pins in the T-Handle. Twist coring body clockwise to lock pins in slots. Make certain that the sampler is locked in place.

Turn T-handle with T-up and coring body down. This will position the plunger bottom flush with bottom of coring body. Using T-handle, push sampler into soil until coring body is completely full. When full the small O-ring will be centered in the T-handle viewing hole. Remove excess soil from the coring body exterior.

Cap the coring body while it is still on the T-handle by pushing and twisting the cap over the bottom until grooves on locking arms seat over ridge on coring body. Remove the coring body from the T-handle and lock plunger by rotating extended plunger rod fully counterclockwise until wings rest firmly against tabs.

Attach the accompanying label and package for shipment to the laboratory.

6.2.1.3 Other

If no coring device is available, an estimate of the amount of soil needed to provide the desired weight can be determined. Place an extra laboratory container, disposable weigh boat, paper towel, or laboratory tissue on a balance pan. Using a stainless steel spoon, add the desired weight (10 g or 25 g) of a representative soil sample on the balance. Once the amount has been established, discard the soil used in the estimation and collect the sample as per form 'Soil Sampling Guidelines'.

If allowed by applicable regulations for VOC sample collection, the VOC aliquot may be weighed directly into the sample container by placing the pre-weighed sample container on the balance, taring the balance, then adding the appropriate amount of soil to the container to reach the desired aliquot weight. This should be done quickly to reduce the possible loss of VOCs.

6.2.2 Compositing Discrete Samples

Discrete samples, to be used for compositing, are stored at \leq 6 °C until each individual sample is obtained. A minimum volume of soil obtained during discrete sampling will be dependent on the final analytical requirements for the composite sample; however, a minimum weight of eight ounces should be sufficient for analysis of semivolatiles (SVOC), PCBs, pesticides, and metals.

After discrete samples have been obtained, record the locations to be included in a final composited sample in the field documentation. Appropriate laboratory containers should be labeled with this final sample identifier and the date of collection.

Retrieve the samples selected for compositing from storage. One container from each discrete sample location should remain in storage in case individual sample confirmations are necessary. Empty the entire contents of each container into a stainless steel mixing bowl, removing any large debris or rocks, and mix thoroughly.

6.2.3 Diesel Range Organics (DRO) / SVOC / General Chemistry / Metals

Using either a composited sample or a homogenized, discrete sample, fill the remaining containers in the order listed on form 'Soil Sampling Guidelines'. Unless aliquot weights are listed, pack the soil into the sample jars leaving no headspace. If allowed by applicable regulations, the WIDRO sample may be weighed directly into the sample container by placing the pre-weighed sample container on the field balance, taring the field balance, then adding the appropriate amount of soil to the container to reach the desired sample weight (~25 g).

Wipe the container lip and screw threads to remove soil and provide a good sealing surface, and immediately screw on the lid.

6.2.4 Handling

After collection, all samples should be handled as few times as possible. Samplers should use extreme care to ensure that samples are not contaminated. Immediately after samples are collected, they are bubble wrap or bagged and placed in a cooler containing bagged ice. Samples will be kept cold (\leq 6 °C, but not frozen) until receipt at the laboratory, where they are to be stored in a refrigerated area.

Keep samples secure to prevent tampering. If sample coolers are left in a vehicle or field office for temporary storage, the area will be locked and secured.

6.2.5 Shipment/Delivery

Once the cooler is packed to prevent breaking of containers, the proper COC documentation is relinquished by the sampler, placed into a plastic bag, and included in the cooler. Custody seals may be used, and the coolers should be taped shut if not hand delivered.

The coolers must be delivered to the laboratory via hand or overnight delivery courier in accordance with all Federal, State and Local transportation regulations and Barr's SOP 'Domestic Transport of Samples to the Laboratory'.

Note: Samples may have to be stored indoors in winter to prevent freezing.

6.3 Data Reduction/Calculations

No data reduction or calculations are associated with this procedure.

6.4 Disposal

Waste generated by this process will be disposed of in accordance with Federal, State and Local regulations and Barr's SOP 'Investigative Derived Waste'. Where reasonably feasible, technological changes have been implemented to minimize the potential for environmental pollution.

7.0 Quality Control and Quality Assurance (QA/QC)

The QC activities described below allow the self-verification of the quality and consistency of the work.

7.1 QA/QC Samples

QA/QC samples are defined in Barr's SOP 'Collection of Quality Control Samples'. The sampling frequency should be performed as written in the project scope of work and/or documentation (e.g., Work Plan, SAP, or QAPP).

7.2 Measurement Criteria

No specific criteria apply to the implementation of this SOP.

8.0 Records

The field technician will document the soil sampling event in a project dedicated field logbook or on field log data sheets. The analysis for each container, the number of bottles, and the laboratory used will be documented on the chain-of-custody record. Refer to Barr's SOP 'Documentation on a Chain-of-Custody (COC)' for further information.

Examples of common field documentation are available in Barr's "Compendium of Field Documentation". Field documentation specific to this SOP are listed below:

- Field Sampling Report
- Field Log Data Sheet
- COC
- Sample label
- Custody seal (if applicable)
- Soil Sampling Guidelines (includes sampling order, container, preservation, and holding time)

Field documentation and COC are provided to a Barr Data Management Administrator for storage on the internal Barr network.

Additional records information can be found in Barr's "Records Management System Manual."

Other Barr SOP subjects referenced within this SOP: screening soil samples, balance calibration, collection of QC samples, decontamination of sampling equipment, investigative derived waste, domestic transport of samples, and documentation on a COC.

9.0 References

USEPA Environmental Response Team. 2000. SOP for Soil Sampling.



Standard Operating Procedure Decontamination of Sampling Equipment

Revision 1

March 15, 2018

Approved By:

	//	Jhn W. Jo	with	
John W. Juntilla	/			03/15/18
Print	Technical Reviewer	Signature		Date
Terri Olson	J	eni a.	llson	03/15/18
			7000	
Print	QA Manager	Signature		Date
Review of the SC	DP has been performed and	d the SOP still re	flects current pra	ctice.
	·		·	
Initials:		Date:		_
Initials:		Date:		_
Initials:		Date:		
Initials:		Date:		

Decontamination of Sampling Equipment

1.0 Scope and Applicability

The purpose of this Standard Operating Procedure (SOP) is to define the process used for decontaminating environmental sampling-related equipment including pumps, meters, and materials coming into contact with actual sampling equipment or with sampling personnel. This procedure is applicable to all personnel who are collecting samples and/or decontaminating sampling and field equipment.

The recommended procedures in this SOP should be followed unless conditions make it impractical or inappropriate to do so. Modifications should be noted in the applicable documentation and communicated to appropriate personnel. Significant changes may result in a revision or newly created SOP.

2.0 Limitations

• Equipment used once and discarded such as bailers, protective gear, and filtration devices are not part of this SOP.

3.0 Responsibilities

The equipment technician is responsible for ensuring field equipment has been thoroughly decontaminated and prepared for use out in the field. The field technician(s) are responsible for decontamination in the field at each individual sampling point and for ensuring adherence to any investigative derived waste (IDW) project-specific requirements set forth in a QAPP or SAP (if applicable).

The role of the Field Safety Representative is to oversee on-site safety activities.

4.0 Safety

Barr staff is responsible for implementing aspects of the job safely. Where available, refer to the appropriate Project Health and Safety Plan (PHASP) to determine the proper personal protection equipment (PPE) required when using this SOP. Barr staff is responsible for conducting all aspects of the job safely. When applicable, refer to the appropriate Project Health and Safety Plan (PHASP) to understand the hazards associated with suspected contamination, symptoms of exposure, methods to minimize exposure, personal protection equipment (PPE), and personal air monitoring required when using this SOP. Minimum protection of one pair of chemical resistant gloves (e.g., nitrile) and safety glasses with side shields should be worn to prevent sample contact with the skin and eyes. When sampling soils contaminated with corrosive materials, emergency eye flushing facilities should be available.

Some of the sample containers may require the use of preservatives. Consult the applicable Safety Data Sheet to review hazards and appropriate PPE to minimize exposure.

5.0 Equipment, Reagents, and Supplies

- Non-phosphorus detergent (e.g., LiquinoxTM)
- Scrub brush made of inert materials
- Oven
- Bucket
- Tap water

- Analyte-free water (e.g., distilled or deionized (DI) water, or equivalent)
- Kimwipes[®], or equivalent
- Chemical resistant gloves (e.g., nitrile)
- Spray bottle
- Organic solvent (e.g. methanol)

6.0 Procedure

This section describes the procedure(s) for the decontamination of equipment used to sample water, soil, or air.

6.1 Calibration

Calibration is not applicable to this SOP.

6.2 Operation

Decontamination of sampling equipment will be performed before sampling and after working at each sampling point, if applicable.

6.2.1 Water Sampling Equipment

Equipment that does not contact sample water or the inside of the well should be rinsed with analyte-free water and inspected for remaining particles or surface film. If these are noted, repeat cleaning and rinse procedures.

Equipment that contacts sample water or the inside of the well should be cleaned (inside and outside where possible) with a non-phosphorus detergent solution applied with a spray bottle and/or scrub brush (if needed). Rinse with analyte-free water and containerize with other IDW if required by the SAP or QAPP and inspect for remaining particles or surface film. If these are noted, repeat cleaning and rinse procedures. Shake off remaining water and allow to air dry.

The internal surfaces of pumps and tubing that cannot be adequately cleaned by the above methods alone will also be cleaned by first circulating a non-phosphorus detergent solution through them followed by circulating analyte-free water. Special care will be exercised to ensure that the "rinse" fluids will be circulated in sufficient quantities to completely flush out contaminants and detergents.

When transporting or storing equipment after cleaning, the equipment will be stored in a manner that minimizes the potential for contamination.

6.2.2 Soil/Sediment Sampling Equipment

A variety of samplers (split-barrel, split-barrel with brass liners, piston sampler, backhoe, hand-auger, or shovel) may be used to retrieve soil from sampling locations. The soil sample will either be sealed within the sampler (e.g., collecting volatile samples) or the soil sample will be transferred to laboratory-supplied containers depending on the analysis to be conducted on the soil sample. The equipment required to transfer the soil from the sampler to the laboratory-supplied sample containers includes: stainless-steel

spoons or scoops and the appropriate personal protective equipment necessary for collection and handling of soil samples as described in the PHASP.

All soil sampling equipment, including split-barrels, stainless-steel spoons and scoops, will be carefully cleaned before and during sampling with a tap water and non-phosphorus detergent solution, using a brush if necessary to remove particulate matter and films. The equipment is then rinsed three times with tap water and/or three times with analyte-free water. Inspect equipment and repeat procedure if any residual soil or visible contaminants are present. Dry sampler with a Kimwipes[®]. Organic solvents (e.g., methanol) may be used to aid with desorbing organic material but should be kept to a minimum and must be collected and containerized if used.

At the completion of the work day, the samplers should be decontaminated following the procedure above and stored in a manner that minimizes the potential for contamination.

6.2.3 Air Sampling Equipment

For non-laboratory manifold equipment, methanol soak manifold components for a minimum of two hours. Remove from the methanol bath and place in an oven pre-heated to 90 °C and continue to heat manifold components for at least 3 hours or until interior and exterior surface inspections of the manifold components indicate that they are free of liquid methanol.

6.2.4 Handling

All equipment will be handled in a manner that minimizes cross-contamination between points. After cleaning, the equipment will be visibly inspected to detect any residues or other substances that may exist after normal cleaning. If inspection reveals that decontamination was insufficient, the decontamination procedures will be repeated.

6.3 Data Reduction/Calculations

No data reduction or calculations are associated with this procedure.

6.4 Disposal

IDW generated by this process will be disposed of in accordance with Federal, State and Local regulations and/or as required by project-specific SAP or Work Plan. Where reasonably feasible, technological changes have been implemented to minimize the potential for environmental pollution.

7.0 Quality Control and Quality Assurance (QA/QC)

The QC activities described below allow the self-verification of the quality and consistency of the work.

7.1 QA/QC Samples

Decontamination procedures may be monitored through the use of an equipment blank which consists of analyte-free water processed through non-disposable or non-dedicated aqueous or solid sampling equipment after equipment decontamination and before field sample collection. The equipment blank is analyzed for the same parameters as the samples at a project specific frequency (e.g., one per twenty samples).

7.2 Measurement Criteria

Equipment blank results should be below the laboratory's method detection limit or reporting limit (depending on the data quality objectives).

8.0 Records

When required, the field technician(s) will document the field equipment decontamination procedures in a project dedicated field logbook or on field log data sheets.

Examples of common field documentation are available in Barr's "Compendium of Field Documentation". Field documentation is listed in the applicable sample collection SOP.

Field documentation and COC are provided to a Barr Data Management Administrator for storage on the internal Barr network.

Additional records information can be found in Barr's "Records Management System Manual."

Other Barr SOP subjects referenced within this SOP: collection of samples and investigative derived waste.

9.0 References

ASTM. 2015. Standard Practice for Decontamination of Field Equipment Used at Waste Sites.



Standard Operating Procedure Field Screening Soil Samples

Revision 7

April 27, 2017

Approved By:

	9	Ihr W. Jenetet	
 John W. Juntill	a		04/27/1
Print	Technical Reviewer	Signature	Date
Terri A. Olson	<u>Ö</u>	Peni A. Alson	<u>04/27/1</u>
Print	QA Manager	Signature	Date
Review of the SOI	P has been performed and	the SOP still reflects curre	ent practice.
Initials:		Date:	
Initials:		Date:	
Initials:		Date:	
Initials:		Date:	

Field Screening of Soil Samples

1.0 Scope and Applicability

The purpose of this Standard Operating Procedure (SOP) is to describe the procedure for properly screening soil or sediment samples in the field. This procedure applies to all field technicians responsible for field screening soil or sediment samples.

The recommended procedures in this SOP should be followed unless conditions make it impractical or inappropriate to do so. Modifications should be noted in the applicable documentation and communicated to appropriate personnel. Significant changes may result in a revision or newly created SOP.

2.0 Limitations

- Screening techniques can vary by project. If not specified in the project scope of work and/or documentation (e.g., Work Plan, Sampling Analysis Plan (SAP), or Quality Assurance Project Plan (QAPP)), consult with the appropriate regulatory agency for guidance, if applicable.
- Interferences on the test can be caused by any contaminant that can cause an oil sheen on water. The samples will be carefully observed for characteristic appearance or odors which may indicate a possible contaminant other than coal tar or petroleum substances.
- Sunlight and low temperatures may interfere with headspace development.
- Water and soil particles may interfere with PID and FID measurements.
- Decontamination of screening equipment is required to prevent cross-contamination.
- Contact the local utilities hotline prior to digging to have utilities identified at sampling locations.

3.0 Responsibilities

Equipment Technicians are responsible to maintain equipment in working order and aid in troubleshooting equipment issues.

The role of the Project Health and Safety Team Leader is to oversee all aspects of on-site safety activities.

The Project Manager, in conjunction with the client, develops the site specific scope of work (e.g., Work Plan, SAP, etc.).

Experienced Field Technicians are responsible for the proper sample identification, field screening procedures, field equipment and calibration, quality control procedures, and documentation.

4.0 Safety

Barr staff is responsible for conducting all aspects of the job safely. When applicable, refer to the appropriate Project Health and Safety Plan (PHASP) to understand the hazards associated with suspected contamination, symptoms of exposure, methods to minimize exposure, personal protection equipment (PPE), and personal air monitoring required when using this SOP. Minimum protection of two pair of chemical resistant gloves (e.g., nitrile) and safety glasses with side shields should be worn to prevent sample contact with the skin and eyes. When screening soils contaminated with corrosive materials, emergency eye flushing facilities should be available.

Consult the applicable Safety Data Sheet to review hazards and appropriate PPE to minimize exposure.

5.0 Equipment, Reagents, and Supplies

- Photoionization detector (PID)
- Flame ionization detector (FID)
- Squirt bottle with tap water
- Waterproof ink pen or pencil

- Chemical resistant gloves (e.g., nitrile)
- Stainless steel spoon
- Polyethylene bags

6.0 Procedure

The field screening techniques for soils are as follows: visual examination, odor, headspace organic vapor screening, and oil sheen. The results of these four screening procedures may be used to screen soil samples for possible contamination.

6.1 Calibration

The PID or FID shall be calibrated or checked against a known concentration of a calibration gas standard prior to collection of field measurements. Calibration of the PID or FID shall follow the recommended procedures as described in the manufacturer's operation manual or as per the applicable Barr SOP.

Regular calibration checks (bump tests) are expected to be performed by the field technician a minimum of once per day of use in the field. It is recommended that bump tests be conducted around mid-day and at the end of the day. More frequent bump testing may be completed if warranted by field conditions. The bump testing results should be recorded in the field log book or field log data sheets.

If problems occur during calibration, during bump tests, or if the unit will not stay calibrated, the field technician should document the issue in the field notes then contact the equipment technician or project manager for assistance.

6.2 Screening Techniques

The field screening techniques for soils are as follows: visual examination, odor, headspace organic vapor screening, and oil sheen. The results of these four screening procedures may be used to screen soil samples for possible contamination. To prevent sample cross-contamination, the screening equipment is carefully cleaned before and after working with each sample per Barr's SOP 'Decontamination of Sampling Equipment'.

6.2.1 Visual Examination

A visual examination of the soil sample will include noting any discoloration of the soil or visible oiliness or tar.

6.2.2 Odor

The field technician will note odor only if noticed incidentally while handling the soil sample. Field technicians will not unduly expose themselves to sample odors. Odor will be described as trace, light, moderate, or strong, and appropriate description of the type of odor, if evident.

6.2.3 Headspace Organic Vapor Screening

The polyethylene bag headspace method recommended by the Minnesota Pollution Control Agency will be used in the field to screen soils suspected to contain volatile organic compounds. The screening method is intended to be used in conjunction with other "real time" observations.

The following equipment is required to conduct headspace organic vapor screening: PID or FID, polyethylene bag, log book or record sheet, and appropriate PPE. Soil samples collected from a split-barrel sampler or a direct-push (i.e., Geoprobe) sample liner will be collected immediately after opening the barrel or liner. If the sample is collected from an excavation wall, soil pile, or backhoe bucket, it will be collected from a freshly exposed surface.

- Half-fill the bag with the sample to be analyzed using a stainless-steel spoon or a gloved hand
 and immediately seal it. Agitate the bag for 15 seconds and manually break up any soil clumps
 within the bag.
- Allow headspace development for approximately 10 minutes. The sample should be kept in a shaded area out of direct sunlight. Ambient temperatures during headspace development should be recorded. When ambient temperatures are below 50°F, headspace development should be conducted inside a heated vehicle or building. After completing the headspace development, agitate the bag for an additional 15 seconds.
- Quickly puncture the bag with the sampling probe of the PID or FID at a point about one-half of the headspace depth. Exercise care to avoid uptake of water droplets or soil particles.
- Record the highest PID or FID meter response as the headspace concentration. The maximum response will likely occur between 0 to 5 seconds.
- When using a FID, it may be necessary to correct for methane. In this case, take a reading first with the carbon filter, then without. This will require two duplicate bag samples. The second reading less the first is the headspace adjusted for methane. Adjusted readings less than zero are considered zero. Methane correction is not necessary if a PID is used.

6.2.4 Oil Sheen Test

The oil sheen or hydrocarbon test is a method used to immediately determine the approximate magnitude of coal tar or petroleum contamination in soil by observation of the sample in the field. The test is useful in soils which do not have a high binding capacity with petroleum compounds or polycyclic aromatic hydrocarbons (PAHs) (i.e., petroleum compounds or PAHs are free on the surface of the soil particles and can be released by a stream of water).

The equipment required to conduct the oil sheen test includes: a stainless-steel spoon, a squirt bottle filled with tap water, a log book or field log data sheet, and the appropriate personal protective equipment necessary for collection and handling of soil samples as described in the Project Health and Safety Plan.

The procedure for conducting the oil sheen test consists of obtaining approximately 50 grams (about 30 cc) of representative soil with the spoon and then directing a stream of water onto the soil in the spoon with the squirt bottle until the soil is saturated and water begins to collect around the soil. The amount of oil sheen present on the water is determined by observation and the results of the test are reported as a magnitude of oil sheen observed: none, trace, light, moderate, heavy or rainbow. The test results, sample location, and observations of the sample's appearance and odor are recorded in the log book or field log data sheet.

The specific soil types at the area of investigation should be accounted for when performing the oil sheen test. The best results are obtained in silts, sands, and/or gravels with low organic content. The results obtained from clay soils may appear deceptively low. Typical descriptions of each test result are provided in the table below.

Oil Sheen Test Result	Description
None	No sheen detected.
Trace	Possible or faint oil sheen observed (may not continue to generate sheen as additional water is added).
Light	Obvious sheen that may not cover entire water surface
Moderate	Definite oil sheen that covers entire surface, but "rainbow colors" not distinguishable.
Heavy	Definite oil film or product that does not display rainbow colors.
Rainbow	Definite oil sheen, film or product that displays rainbow colors.

6.3 Data Reduction/Calculations

No data reduction or calculations are associated with this procedure.

6.4 Disposal

Waste generated by this process will be disposed of in accordance with Federal, State and Local regulations and Barr's SOP 'Investigative Derived Waste'. Where reasonably feasible, technological changes have been implemented to minimize the potential for environmental pollution.

7.0 Quality Control and Quality Assurance (QA/QC)

Field background readings are measured for the headspace organic vapor screening. PID and FID readings should be duplicated every 20 field samples.

8.0 Records

The field technician(s) will document the field screening activities and measurements in a project dedicated field logbook or on field log data sheets.

Examples of common field documentation are available in Barr's "Compendium of Field Documentation". Field documentation specific to this SOP are listed below:

- Field Sampling Report
- Field Log Data Sheet

Field documentation are provided to a Barr Data Management Administrator for storage on the internal Barr network.

Additional records information can be found in Barr's "Records Management System Manual."

Other Barr SOP subjects referenced within this SOP: PID and FID equipment, decontamination of sampling equipment, and investigative derived waste.

9.0 References

PID and FID operation manuals.

Attachment B

Representative Photographs



Photo 1: Setting up at SB-1.



Photo 2: Typical soil boring recovery. Pictured is recovery from SB-4, 0-5 feet bgs. Thin layer of organic topsoil visible on right (top) end of sample sleeve. Soil below is stiff glaciolacustrine lean clay.



Photo 3: Advancing sampler at SB-4.



Photo 4: Attempting to sample the temporary monitoring well at SB-1.

Attachment C Soil Boring Logs

LOG OF BORING SB-1 Barr Engineering Company 325 South Lake Avenue, Suite 700 Duluth, MN 55802 BARR Telephone: 218-529-8200 SHEET 1 OF 1 Husky/MNPower Phase II 49161423.00 200 6/21/2018 Project: Surface Elevation: Superior, WI Project No.: **Drilling Method: Direct Push** UTM 15T N:5170970.147m, Location: Sampling Method: Macro-Core Coordinates: E:571189.0276m NAD 83 Datum: Completion Depth: 20.0 ft Elevation, feet BARR TEMPLATE.GD1 Sample Type & Recovery Graphic Log feet Sample No. U WELL OR PIEZOMETER **ENVIRONMENTAL** S C S Depth, LITHOLOGIC DESCRIPTION CONSTRUCTION DATA **DETAIL** OL ORGANIC SOIL (OL): brown; moist; medium stiff; with 20% grass fibers and trace medium to coarse-grained angular sand and fine WIN16I49161423 SUPERIOR REFINING CO ENV ASSISWORKFILESIPHASE II INVESTIGATIONIBORING LOGSIHUSKY MNPOWER LIM PH II.GPJ BARRLIBRARY.GLB ENVIRO LOG gravel PID:0.3 D/O/S:N/ N/ N LEAN CLAY (CL): Red-brown; moist; medium stiff; medium to high plasticity; no dilatancy; glacialacustrine deposit; with trace medium to coarse-grained angular sand and fine gravel. SB-1_2-3 ft collected for VOCs, RCRA 8 metals and PAHs. **PID:**0.3 D/O/S:N/ N/ N PID:0.8 D/O/S:N/ N/ N CL Temporary Monitoring **PID:**0.6 D/O/S:N/ N/ N 10 **PID:**0.5 D/O/S:N/ N/ N SB-1 12-13 ft collected for VOCs, RCRA 8 metals and PAHs. FAT CLAY (CH): Red-brown; moist; soft; high plasticity; no dilatancy; glacialacustrine deposit; with trace medium to coarse-grained **PID:**0.5 angular sand and fine gravel. D/O/S:N/ N/ N Screened 14.5-19.5 ft 15 bgs -Water at 16.7 ft bgs on 6/22/18, one day after **PID:**0.4 D/O/S:N/ N/ N installation. Likely surface water draining into boring. Very soft, 15-20 ft. Well produced approximately 250 mL **PID:**0.2 and purged dry before D/O/S:N/ N/ N sample could be collected. 20 End of boring 20.0 feet Target depth reached.

Date Boring Started: Date Boring Completed: Logged By:

6/21/18 2:00 pm 6/22/18 11:05 am

Drilling Contractor: Twin Ports Testing Drill Rig: Geoprobe 7822DT

Remarks: Boring advanced in SE corner of property. Ground surface was hummocky, covered with recently chipped brush, vegetated with marsh grass, and submerged with approximately 2 inches of standing water.

PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines Additional data may have been collected in the field which is not included on this log.

LOG OF BORING SB-2

SHEET 1 OF 1

Surface Elevation: 6/21/2018 Drilling Method: Direct Push

Sampling Method: Macro-Core

20.0 ft Completion Depth:

Datun	1.					Completion Depth: 20.0 ft			
Depth, feet	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	USCS	Graphic Log	LITHOLOGIC DESCRIPTION	I	L OR PIEZOMETER CONSTRUCTION DETAIL	Elevation, feet
	X		PID :0.1 D/O/S:N/ N/ N	-OL/		ORGANIC SOIL WITH GRAVEL (OL): dark brown; moist; soft; with \$0% angular basalt fine gravel. LEAN CLAY (CL): brown; moist; stiff; medium to high plasticity; no dilatancy; glacialacustrine deposit; with trace angular medium to coarse-grained sand and fine gravel. SB-2_0-1 ft collected for VOCs, RCRA 8 metals and PAHs. Red-brown below 5 ft bgs.			
5 —			PID :0.2 D/O/S: N/ N/ N						
_			PID :0.2 D/O/S: N/ N/ N			With 1-2mm long planar gray mottles, 5-7 ft bgs. SB-2_6-7 ft collected for VOCs, RCRA 8 metals and PAHs.		-Temporary Monitoring Well	
10-			PID :0.3 D/O/S: N/ N/ N	CL					
_			PID :0.4 D/O/S: N/ N/ N						
15-			PID :0.4 D/O/S: N/ N/ N						
_			PID:0.4 D/O/S:N/ N/ N					-Screened at 14-19' -Well was dry on 6/22/18, one day after installation.	
20-			PID:0.4 D/O/S:N/ N/ N						
						End of boring 20.0 feet Target depth reached.			
	Boring					Remarks: Boring advanced in center of property. Ground	l d surface v	vas dry, flat, and grass-cove	ered.
Logge Drilling Drill R	g Con	tractor	MAB Twin Ports Te Geoprobe 78:			PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Co Additional data may have been collected in the field which is not included on this lo		= Gravel/Sand/Fines	

Barr Engineering Company 325 South Lake Avenue, Suite 700 Duluth, MN 55802 BARR Duluth, MN 55802 Telephone: 218-529-8200

LOG OF BORING SB-3

SHEET 1 OF 1

Husky/MNPower Phase II 49161423.00 200 Project: Surface Elevation: 657.3 ft Project No.: Direct Push Drilling Method: Location: UTM 15T N:5170886.079m, Sampling Method: Macro-Core

Coordinates: E:571073.1286m NAD 83

					Completion Depth: 20.0 ft		
Depth, feet Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	USCS	Graphic Log	LITHOLOGIC DESCRIPTION	L OR PIEZOMETER CONSTRUCTION DETAIL	Elevation, feet
		PID: 0.1 D/O/S: N/ N/ N	-OL		ORGANIC SOIL (OL): dark brown; moist; soft; with 20% grass fibers. LEAN CLAY (CL): red-brown; moist; stiff; medium to high plasticity; no dilatancy; glacialacustrine deposit; with trace angular medium to coarse-grained sand and fine gravel. SB-3_0-2 ft collected for VOCs, RCRA 8 metals and PAHs.		655-
5 —		PID: 0.1 D/O/S: N/ N/ N					_
-		PID: 0.1 D/O/S: N/ N/ N			With trace faint 1mm-long brown-gray mottling, 5-10' bgs.	-Temporary Monitoring Well	650-
10		PID: 0.2 D/O/S: N/ N/ N	CL		SB-3_8-9 ft collected for VOCs, RCRA 8 metals and PAHs.		_
-		PID: 0.2 D/O/S: N/ N/ N			Medium soft consistency from 9-13.5 ft bgs. Trace weathered fine gravel from 10-15 ft bgs.		645-
15		PID: 0.2 D/O/S: N/ N/ N			Soft consistency below 13.5 ft bgs.		_
-		PID: 0.2 D/O/S: N/ N/ N				-Screened at 14.5-19.5' -Water at 9.5 ft bgs on	640-
20		PID: 0.2 D/O/S: N/ N/ N			End of boring 20.0 feet Target depth reached.	6/22/18, one day after installation. Likely surface water draining into boring. -SB-3_14.5-19.5 (groundwater) collected for VOCs and PAHs	_

6/22/18 11:30 am MAB

Date Boring Completed:

State Boring Completed:

Logged By:
Drilling Contractor:

Drill Rig: Twin Ports Testing Geoprobe 7822DT

PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines Additional data may have been collected in the field which is not included on this log.

Barr Engineering Company 325 South Lake Avenue, Suite 700 Duluth, MN 55802 BARR Dullutn, IVIN 53002 Telephone: 218-529-8200

LOG OF BORING SB-4

SHEET 1 OF 1

Husky/MNPower Phase II 49161423.00 200 Project: Project No.: Superior, WI Drilling Method:

Location: UTM 15T N:5170910.454m, Coordinates: E:571048.3472m NAD 83

Surface Elevation: 657.4 ft Direct Push

Sampling Method: Macro-Core

Datum:					Completion Depth: 20.0 ft	
Depth, feet Sample Type & Recovery	Sample No.		USCS	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation, feet
0	PID:0 D/O/S:N/		√OL,	107/	ORGANIC SOIL (OL): dark brown; moist; soft; with 30% grass fibers. LEAN CLAY (CL): red-brown; moist; stiff; medium plasticity; no dilatancy; glacialacustrine deposit; with trace angular medium to coarse-grained sand and fine gravel. SB-4_0-2 ft collected for VOCs, RCRA 8 metals and PAHs.	
-	PID:0 D/O/S:N/					655
5	PID:0 D/O/S:N/				SB-4_6-7 ft collected for VOCs, RCRA 8 metals and PAHs.	650
10	PID:0 D/O/S:N/				1/2-inch diameter very weathered basalt clast at 8.5 ft bgs.	
-	PID:0 D/O/S:N/		CL			64
15	PID:0 D/O/S:N/					
-	PID:0 D/O/S:N/	l.0 N/ N				64
20-	PID:0 D/O/S:N/	.0 N/ N			End of boring 20.0 feet	

Date Boring Started.

Date Boring Completed:

Logged By:
Drilling Contractor:
Drill Rig:

6/22/18 9:00 am

Twin Ports Testing Geoprobe 7822DT with recently chipped brush, vegetated with marsh grass, and covered in approximately 2 inches of standing water.

PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines Additional data may have been collected in the field which is not included on this log.

Barr Engineering Company 325 South Lake Avenue, Suite 700 Duluth, MN 55802 BARR Telephone: 218-529-8200 Husky/MNPower Phase II 49161423.00 Project: Project No.: Location: Superior, WI Coordinates: UTM 15T N:5170984.65m, E:571138.864m

LOG OF BORING SB-5

SHEET 1 OF 1

657.6 ft Surface Elevation: Drilling Method: Direct Push Sampling Method: Macro-Core

Datu	ım:		NAD 83			Completion Depth: 20.0 ft	
Depth, feet	Sample Type & Recovery	Sample No.	ENVIRONMENTAL DATA	USCS	Graphic Log	LITHOLOGIC DESCRIPTION	Elevation, feet
	_		PID:1.2 D/O/S:Black/ N/ N	SM		FILL; SILTY SAND WITH GRAVEL (SM): black; moist; 70% shiny black angular fine to coarse-grained ¬sand and fine gravel; apparent weathered asphalt pavement with topsoil. §B-5_0-1 ft collected for VOCs, RCRA 8 metals and PAHs. LEAN CLAY (CL): red-brown; moist; stiff; medium plasticity; no dilatancy; glacialacustrine deposit; with trace medium to coarse-grained angular sand and fine gravel.	
J BAKKLIBKAKY.GL	-		PID:N/A D/O/S:N/ N/ N			Insufficent recovery for headspace reading.	655 - - -
	-		PID:0.4 D/O/S:N/ N/ N				-
LOGS/HOSAT MINT			PID:0.5 D/O/S:N/ N/ N			SB-5_8-9 ft collected for VOCs, RCRA 8 metals and PAHs. With trace 1-2mm-long, planar gray mottles from 5-15 ft bgs.	650-
IIGAIION/BORING	- -		PID:0.3 D/O/S:N/ N/ N	CL		With trace 1-2mm-rong, planar gray motites from 5-15 to bgs.	- 645-
	- -		PID:0.3 D/O/S:N/ N/ N				-
ENV Abblowodrn	_ _		PID:0.3 D/O/S:N/ N/ N				640-
20-	-		PID:1.2 D/O/S:Black/ N/ N PID:N/A D/O/S:N/ N/ N PID:0.4 D/O/S:N/ N/ N PID:0.5 D/O/S:N/ N/ N PID:0.3 D/O/S:N/ N/ N PID:0.3 D/O/S:N/ N/ N			End of boring 20.0 feet Target depth reached.	_
Date	Boring	g Start	red: 6/22/18 9:30 and the second seco			Remarks: Boring advanced in NE corner of property. Ground surface was dry, level, and cove with grass and gravel.	ered

Additional data may have been collected in the field which is not included on this log.

PID = Headspace; D/O/S = Discoloration/Odor/Sheen; FID/MC = FID/Methane Corrected; G/S/F = Gravel/Sand/Fines

Date Boring Completed:

Drilling Contractor:

Logged By:

Drill Rig:

6/22/18 9:55 am

Twin Ports Testing

Geoprobe 7822DT

Attachment D

Soil and Groundwater Laboratory Analytical Reports





July 03, 2018

Jim Taraldsen Barr Engineering Company 325 S Lake Ave Duluth, MN 55802

RE: Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Dear Jim Taraldsen:

Enclosed are the analytical results for sample(s) received by the laboratory on June 22, 2018. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Amanda Albrecht amanda.albrecht@pacelabs.com

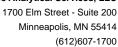
amanda & albeecht

(612)607-6382 Project Manager

Enclosures

cc: BarrDM, Barr Engineering







CERTIFICATIONS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Minnesota Certification IDs

1700 Elm Street SE, Suite 200, Minneapolis, MN 55414-

2485

A2LA Certification #: 2926.01 Alabama Certification #: 40770

Alaska Contaminated Sites Certification #: 17-009

Alaska DW Certification #: MN00064 Arizona Certification #: AZ0014 Arkansas Certification #: 88-0680 California Certification #: 2929 CNMI Saipan Certification #:MP0003 Colorado Certification #: MN00064 Connecticut Certification #: PH-0256

EPA Region 8+Wyoming DW Certification #: via MN 027-

053-137

Florida Certification #: E87605
Georgia Certification #: 959
Guam EPA Certification #: MN00064
Hawaii Certification #: MN00064
Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064

Massachusetts Certification #: M-MN064

Michigan Certification #: 9909

Minnesota Certification #: 027-053-137
Mississippi Certification #: MN00064
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647
North Carolina DW Certification #: 27700

North Carolina BW Certification #: 530 North Dakota Certification #: R-036 Ohio DW Certification #: 41244 Ohio VAP Certification #: CL101 Oklahoma Certification #: 9507

Oregon NwTPH Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #: T4003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DW Certification #: 9952 C
West Virginia DEP Certification #: 382
Wisconsin Certification #: 999407970

Green Bay Certification IDs

Maryland Certification #: 322

1241 Bellevue Street, Green Bay, WI 54302 Florida/NELAP Certification #: E87948

Illinois Certification #: 200050 Kentucky UST Certification #: 82 Louisiana Certification #: 04168 Minnesota Certification #: 055-999-334 New York Certification #: 12064 North Dakota Certification #: R-150 Virginia VELAP ID: 460263

South Carolina Certification #: 83006001 Texas Certification #: T104704529-14-1 Wisconsin Certification #: 405132750 Wisconsin DATCP Certification #: 105-444 USDA Soil Permit #: P330-16-00157 Federal Fish & Wildlife Permit #: LE51774A-0



SAMPLE SUMMARY

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10436863001	SB-1_2-3	Solid	06/21/18 14:05	06/22/18 20:00
10436863002	SB-1_12-13	Solid	06/21/18 14:30	06/22/18 20:00
10436863003	SB-2_0-1	Solid	06/21/18 15:15	06/22/18 20:00
10436863004	SB-2_6-7	Solid	06/21/18 15:30	06/22/18 20:00
10436863005	SB-3_0-2	Solid	06/21/18 16:20	06/22/18 20:00
10436863006	SB-3_8-9	Solid	06/21/18 16:35	06/22/18 20:00
10436863007	SB-4_0-2	Solid	06/22/18 08:40	06/22/18 20:00
10436863008	SB-4_6-7	Solid	06/22/18 08:55	06/22/18 20:00
10436863009	SB-5_0-1	Solid	06/22/18 09:35	06/22/18 20:00
10436863010	SB-5_8-9	Solid	06/22/18 09:50	06/22/18 20:00
10436863011	SB-3_14.5-19.5	Water	06/22/18 11:20	06/22/18 20:00
10436863012	Trip Blank	Water	06/21/18 00:00	06/22/18 20:00
10436863013	MeOH Trip Blank	Solid	06/21/18 00:00	06/22/18 20:00



SAMPLE ANALYTE COUNT

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10436863001	SB-1_2-3	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
0436863002	SB-1_12-13	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
0436863003	SB-2_0-1	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
0436863004	SB-2_6-7	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
0436863005	SB-3_0-2	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
0436863006	SB-3_8-9	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
0436863007	SB-4_0-2	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
10436863008	SB-4_6-7	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



SAMPLE ANALYTE COUNT

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
10436863009	SB-5_0-1	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
10436863010	SB-5_8-9	EPA 6010D	DM	7	PASI-M
		EPA 7471B	LMW	1	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260	SMT	39	PASI-G
10436863011	SB-3_14.5-19.5	EPA 8270D by SIM	STB	18	PASI-M
		EPA 8260B	DS2	70	PASI-M
10436863012	Trip Blank	EPA 8260B	DS2	70	PASI-M
10436863013	MeOH Trip Blank	EPA 8260	SMT	39	PASI-G



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-1_2-3 Lab ID: 10436863001 Collected: 06/21/18 14:05 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EPA	A 6010D Prepa	aration Met	hod: E	PA 3050			
Arsenic	3.1	mg/kg	1.6	0.48	1	06/26/18 04:58	06/27/18 06:54	7440-38-2	M1
Barium	245	mg/kg	4.2	1.3	5	06/26/18 04:58	06/27/18 15:29	7440-39-3	M1
Cadmium	< 0.075	mg/kg	0.25	0.075	1	06/26/18 04:58	06/27/18 06:54	7440-43-9	
Chromium	49.6	mg/kg	5.1	1.5	5	06/26/18 04:58	06/27/18 15:29	7440-47-3	
Lead	10.5	mg/kg	5.3	1.6	5	06/26/18 04:58	06/27/18 15:29		
Selenium	0.56J	mg/kg	1.9	0.56	1	06/26/18 04:58	06/27/18 06:54		M1
Silver	<0.11	mg/kg	0.38	0.11	1	06/26/18 04:58	06/27/18 06:54		M1
7471B Mercury	Analytical	Method: EPA	A 7471B Prepa	aration Met	hod: E	PA 7471B			
Mercury	0.023J	mg/kg	0.033	0.0098	1	06/25/18 07:21	06/28/18 17:46	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	27.6	%	0.10	0.10	1		06/27/18 16:25		
8270D MSSV PAH by SIM	Analytical	Method: EPA	A 8270D by SII	M Preparat	ion Me	ethod: EPA 3550			
Acenaphthene	<0.56	ug/kg	1.9	0.56	1	06/25/18 06:31	06/26/18 18:00	83-32-9	
Acenaphthylene	<0.68	ug/kg	2.3	0.68	1	06/25/18 06:31	06/26/18 18:00		
Anthracene	<0.65	ug/kg	2.2	0.65	1	06/25/18 06:31	06/26/18 18:00		
Benzo(a)anthracene	<1.5	ug/kg	5.0	1.5	1	06/25/18 06:31	06/26/18 18:00		
Benzo(a)pyrene	<0.95	ug/kg	3.2	0.95	1	06/25/18 06:31	06/26/18 18:00		
Benzo(b)fluoranthene	1.1J	ug/kg	1.7	0.52	1	06/25/18 06:31	06/26/18 18:00		
Benzo(g,h,i)perylene	<0.87	ug/kg ug/kg	2.9	0.87	1	06/25/18 06:31	06/26/18 18:00		
Benzo(k)fluoranthene	<1.2	ug/kg ug/kg	3.9	1.2	1	06/25/18 06:31	06/26/18 18:00		
Chrysene	<1.9	ug/kg ug/kg	6.3	1.9	1	06/25/18 06:31	06/26/18 18:00		
Dibenz(a,h)anthracene	<0.64	ug/kg ug/kg	2.1	0.64	1	06/25/18 06:31	06/26/18 18:00		
Fluoranthene	1.8J	ug/kg ug/kg	2.0	0.59	1	06/25/18 06:31	06/26/18 18:00		
Fluorene	<0.43	ug/kg ug/kg	1.4	0.43	1	06/25/18 06:31	06/26/18 18:00		
Indeno(1,2,3-cd)pyrene	<0.43	ug/kg ug/kg	3.1	0.43	1	06/25/18 06:31	06/26/18 18:00		
Naphthalene	<1.1	ug/kg ug/kg	3.5	1.1	1	06/25/18 06:31	06/26/18 18:00		
Phenanthrene	<1.1 <2.7		3.3 8.8	2.7	1	06/25/18 06:31	06/26/18 18:00		
	<2.1 <2.1	ug/kg	7.0	2.1	1	06/25/18 06:31	06/26/18 18:00		
Pyrene Surrogates	<2.1	ug/kg	7.0	2.1	ı	00/23/10 00.31	00/20/10 10.00	129-00-0	
2-Fluorobiphenyl (S)	58	%.	42-125		1	06/25/18 06:31	06/26/18 18:00	321-60-8	
p-Terphenyl-d14 (S)	75	%.	57-125		1	06/25/18 06:31	06/26/18 18:00		
8260 MSV Med Level Normal List			4 8260 Prepar	ation Meth			00/20/10 10:00		
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	71-55-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02		W
1,1,2-Trichloroethane	<25.0	ug/kg ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02		W
1,1-Dichloroethane	<25.0	ug/kg ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02		W
1,1-Dichloroethene	<25.0	ug/kg ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02		W
1,2-Dichloroethane	<25.0	ug/kg ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02		W
1,2-Dichloropropane	<25.0	ug/kg ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02		W
2-Butanone (MEK)	<107	ug/kg ug/kg	250	107	1	06/28/18 11:30	06/28/18 18:02		W
2-Hexanone	<52.0	ug/kg ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 18:02		W
2 HOXAHOHO	~JZ.U	ug/kg	250	32.0	ı	00/20/10 11.30	00/20/10 10:02	00 i = 10=0	v v



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-1_2-3 Lab ID: 10436863001 Collected: 06/21/18 14:05 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepai	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 18:02	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 18:02	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 18:02	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 18:02	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 18:02	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 18:02	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:02	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	107	%	57-148		1	06/28/18 11:30	06/28/18 18:02		
Toluene-d8 (S)	95	%	58-142		1	06/28/18 11:30	06/28/18 18:02		
4-Bromofluorobenzene (S)	81	%	48-130		1	06/28/18 11:30	06/28/18 18:02	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-1_12-13 Lab ID: 10436863002 Collected: 06/21/18 14:30 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EPA	A 6010D Prepa	aration Met	hod: E	PA 3050			
Arsenic	3.8	mg/kg	1.8	0.53	1	06/26/18 04:58	06/27/18 07:02	7440-38-2	
Barium	193	mg/kg	0.92	0.28	1	06/26/18 04:58	06/27/18 07:02	7440-39-3	
Cadmium	< 0.082	mg/kg	0.27	0.082	1	06/26/18 04:58	06/27/18 07:02	7440-43-9	
Chromium	42.9	mg/kg	1.1	0.34	1	06/26/18 04:58	06/27/18 07:02	7440-47-3	
Lead	9.5	mg/kg	1.2	0.35	1	06/26/18 04:58	06/27/18 07:02	7439-92-1	
Selenium	<0.61	mg/kg	2.0	0.61	1	06/26/18 04:58	06/27/18 07:02	7782-49-2	
Silver	<0.12	mg/kg	0.41	0.12	1	06/26/18 04:58	06/27/18 07:02	7440-22-4	
7471B Mercury	Analytical	Method: EPA	A 7471B Prepa	aration Met	hod: E	PA 7471B			
Mercury	0.026J	mg/kg	0.039	0.012	1	06/25/18 07:21	06/28/18 17:52	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974						
Percent Moisture	35.3	%	0.10	0.10	1		06/27/18 16:26		
8270D MSSV PAH by SIM	Analytical	Method: EPA	A 8270D by SII	M Prepara	tion Me	thod: EPA 3550			
Acenaphthene	<0.63	ug/kg	2.1	0.63	1	06/25/18 06:31	06/26/18 18:23	83-32-9	
Acenaphthylene	<0.76	ug/kg	2.5	0.76	1	06/25/18 06:31	06/26/18 18:23	208-96-8	
Anthracene	<0.72	ug/kg	2.4	0.72	1	06/25/18 06:31	06/26/18 18:23	120-12-7	
Benzo(a)anthracene	<1.7	ug/kg	5.5	1.7	1	06/25/18 06:31	06/26/18 18:23	56-55-3	
Benzo(a)pyrene	<1.1	ug/kg	3.5	1.1	1	06/25/18 06:31	06/26/18 18:23	50-32-8	
Benzo(b)fluoranthene	<0.57	ug/kg	1.9	0.57	1	06/25/18 06:31	06/26/18 18:23	205-99-2	
Benzo(g,h,i)perylene	<0.97	ug/kg	3.2	0.97	1	06/25/18 06:31	06/26/18 18:23	191-24-2	
Benzo(k)fluoranthene	<1.3	ug/kg	4.3	1.3	1	06/25/18 06:31	06/26/18 18:23	207-08-9	
Chrysene	<2.1	ug/kg	7.0	2.1	1	06/25/18 06:31	06/26/18 18:23	218-01-9	
Dibenz(a,h)anthracene	<0.71	ug/kg	2.4	0.71	1	06/25/18 06:31	06/26/18 18:23	53-70-3	
Fluoranthene	<0.66	ug/kg	2.2	0.66	1	06/25/18 06:31	06/26/18 18:23	206-44-0	
Fluorene	<0.48	ug/kg	1.6	0.48	1	06/25/18 06:31	06/26/18 18:23	86-73-7	
Indeno(1,2,3-cd)pyrene	<1.0	ug/kg	3.4	1.0	1	06/25/18 06:31	06/26/18 18:23	193-39-5	
Naphthalene	<1.2	ug/kg	4.0	1.2	1	06/25/18 06:31	06/26/18 18:23	91-20-3	
Phenanthrene	<3.0	ug/kg	9.8	3.0	1	06/25/18 06:31	06/26/18 18:23	85-01-8	
Pyrene	<2.4	ug/kg	7.8	2.4	1	06/25/18 06:31	06/26/18 18:23	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	60	%.	42-125		1	06/25/18 06:31	06/26/18 18:23	321-60-8	
p-Terphenyl-d14 (S)	78	%.	57-125		1	06/25/18 06:31	06/26/18 18:23	1718-51-0	
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepar	ation Meth	od: EP	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	71-55-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	79-34-5	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	79-00-5	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	75-34-3	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	75-35-4	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	107-06-2	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25		W
2-Butanone (MEK)	<107	ug/kg	250	107	1	06/28/18 11:30	06/28/18 18:25	78-93-3	W
2-Hexanone	<52.0	ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 18:25	591-78-6	W



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-1_12-13 Lab ID: 10436863002 Collected: 06/21/18 14:30 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepai	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 18:25	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 18:25	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 18:25	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 18:25	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 18:25	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 18:25	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:25	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	110	%	57-148		1	06/28/18 11:30	06/28/18 18:25	1868-53-7	
Toluene-d8 (S)	94	%	58-142		1	06/28/18 11:30	06/28/18 18:25	2037-26-5	
4-Bromofluorobenzene (S)	80	%	48-130		1	06/28/18 11:30	06/28/18 18:25	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-2_0-1 Lab ID: 10436863003 Collected: 06/21/18 15:15 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EP/	A 6010D Prep	aration Met	hod: E	PA 3050			
Arsenic	3.0	mg/kg	1.4	0.42	1	06/26/18 04:58	06/27/18 07:04	7440-38-2	
Barium	145	mg/kg	0.73	0.22	1	06/26/18 04:58	06/27/18 07:04	7440-39-3	
Cadmium	< 0.065	mg/kg	0.22	0.065	1	06/26/18 04:58	06/27/18 07:04	7440-43-9	
Chromium	37.0	mg/kg	0.89	0.27	1	06/26/18 04:58	06/27/18 07:04	7440-47-3	
Lead	7.6	mg/kg	0.93	0.28	1	06/26/18 04:58	06/27/18 07:04	7439-92-1	
Selenium	< 0.49	mg/kg	1.6	0.49	1	06/26/18 04:58	06/27/18 07:04	7782-49-2	
Silver	<0.098	mg/kg	0.33	0.098	1	06/26/18 04:58	06/27/18 07:04	7440-22-4	
7471B Mercury	Analytical	Method: EPA	A 7471B Prepa	aration Met	hod: E	PA 7471B			
Mercury	0.022J	mg/kg	0.028	0.0084	1	06/25/18 07:21	06/28/18 17:54	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974						
Percent Moisture	20.3	%	0.10	0.10	1		06/27/18 16:26		
8270D MSSV PAH by SIM	Analytical	Method: EP/	A 8270D by SII	M Prepara	tion Me	ethod: EPA 3550			
Acenaphthene	<0.51	ug/kg	1.7	0.51	1	06/25/18 06:31	06/26/18 18:46	83-32-9	
Acenaphthylene	<0.62	ug/kg	2.1	0.62	1	06/25/18 06:31	06/26/18 18:46	208-96-8	
Anthracene	<0.59	ug/kg	2.0	0.59	1	06/25/18 06:31	06/26/18 18:46	120-12-7	
Benzo(a)anthracene	<1.4	ug/kg	4.5	1.4	1	06/25/18 06:31	06/26/18 18:46	56-55-3	
Benzo(a)pyrene	<0.86	ug/kg	2.9	0.86	1	06/25/18 06:31	06/26/18 18:46	50-32-8	
Benzo(b)fluoranthene	<0.47	ug/kg	1.6	0.47	1	06/25/18 06:31	06/26/18 18:46	205-99-2	
Benzo(g,h,i)perylene	<0.79	ug/kg	2.6	0.79	1	06/25/18 06:31	06/26/18 18:46	191-24-2	
Benzo(k)fluoranthene	<1.1	ug/kg	3.5	1.1	1	06/25/18 06:31	06/26/18 18:46	207-08-9	
Chrysene	<1.7	ug/kg	5.7	1.7	1	06/25/18 06:31	06/26/18 18:46	218-01-9	
Dibenz(a,h)anthracene	<0.58	ug/kg	1.9	0.58	1	06/25/18 06:31	06/26/18 18:46	53-70-3	
Fluoranthene	<0.54	ug/kg	1.8	0.54	1	06/25/18 06:31	06/26/18 18:46	206-44-0	
Fluorene	<0.39	ug/kg	1.3	0.39	1	06/25/18 06:31	06/26/18 18:46	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.84	ug/kg	2.8	0.84	1	06/25/18 06:31	06/26/18 18:46	193-39-5	
Naphthalene	<0.97	ug/kg	3.2	0.97	1	06/25/18 06:31	06/26/18 18:46	91-20-3	
Phenanthrene	<2.4	ug/kg	8.0	2.4	1	06/25/18 06:31	06/26/18 18:46	85-01-8	
Pyrene	<1.9	ug/kg	6.4	1.9	1	06/25/18 06:31	06/26/18 18:46	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	60	%.	42-125		1	06/25/18 06:31	06/26/18 18:46		
p-Terphenyl-d14 (S)	74	%.	57-125		1	06/25/18 06:31	06/26/18 18:46	1718-51-0	
8260 MSV Med Level Normal List	Analytical	Method: EP/	A 8260 Prepar	ration Meth	od: EP	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1		06/28/18 18:47		W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47		W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47		W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47		W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47		W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47		W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	78-87-5	W
2-Butanone (MEK)	<107	ug/kg	250	107	1	06/28/18 11:30	06/28/18 18:47		W
2-Hexanone	<52.0	ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 18:47	591-78-6	W



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-2_0-1 Lab ID: 10436863003 Collected: 06/21/18 15:15 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepai	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 18:47	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 18:47	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 18:47	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 18:47	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 18:47	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 18:47	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 18:47	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	117	%	57-148		1	06/28/18 11:30	06/28/18 18:47	1868-53-7	
Toluene-d8 (S)	102	%	58-142		1	06/28/18 11:30	06/28/18 18:47	2037-26-5	
4-Bromofluorobenzene (S)	87	%	48-130		1	06/28/18 11:30	06/28/18 18:47	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-2_6-7 Lab ID: 10436863004 Collected: 06/21/18 15:30 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EP	A 6010D Prepa	aration Met	thod: E	PA 3050			
Arsenic	3.3	mg/kg	1.5	0.45	1	06/26/18 04:58	06/27/18 07:06	7440-38-2	
Barium	150	mg/kg	0.79	0.24	1	06/26/18 04:58	06/27/18 07:06	7440-39-3	
Cadmium	< 0.070	mg/kg	0.23	0.070	1	06/26/18 04:58	06/27/18 07:06	7440-43-9	
Chromium	39.5	mg/kg	0.96	0.29	1	06/26/18 04:58	06/27/18 07:06	7440-47-3	
Lead	8.1	mg/kg	1.0	0.30	1	06/26/18 04:58	06/27/18 07:06	7439-92-1	
Selenium	<0.52	mg/kg	1.7	0.52	1	06/26/18 04:58	06/27/18 07:06	7782-49-2	
Silver	<0.11	mg/kg	0.35	0.11	1	06/26/18 04:58	06/27/18 07:06	7440-22-4	
7471B Mercury	Analytical	Method: EP	A 7471B Prepa	aration Met	hod: E	PA 7471B			
Mercury	0.020J	mg/kg	0.032	0.0097	1	06/25/18 07:21	06/28/18 17:56	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	24.5	%	0.10	0.10	1		06/27/18 16:26		
8270D MSSV PAH by SIM	Analytical	Method: EP	A 8270D by SI	M Prepara	tion Me	thod: EPA 3550			
Acenaphthene	<0.54	ug/kg	1.8	0.54	1	06/25/18 06:31	06/26/18 19:10	83-32-9	
Acenaphthylene	<0.66	ug/kg	2.2	0.66	1	06/25/18 06:31	06/26/18 19:10	208-96-8	
Anthracene	< 0.62	ug/kg	2.1	0.62	1	06/25/18 06:31	06/26/18 19:10	120-12-7	
Benzo(a)anthracene	<1.4	ug/kg	4.8	1.4	1	06/25/18 06:31	06/26/18 19:10	56-55-3	
Benzo(a)pyrene	<0.91	ug/kg	3.0	0.91	1	06/25/18 06:31	06/26/18 19:10	50-32-8	
Benzo(b)fluoranthene	< 0.49	ug/kg	1.6	0.49	1	06/25/18 06:31	06/26/18 19:10	205-99-2	
Benzo(g,h,i)perylene	<0.84	ug/kg	2.8	0.84	1	06/25/18 06:31	06/26/18 19:10	191-24-2	
Benzo(k)fluoranthene	<1.1	ug/kg	3.7	1.1	1	06/25/18 06:31	06/26/18 19:10	207-08-9	
Chrysene	<1.8	ug/kg	6.0	1.8	1	06/25/18 06:31	06/26/18 19:10	218-01-9	
Dibenz(a,h)anthracene	<0.61	ug/kg	2.0	0.61	1	06/25/18 06:31	06/26/18 19:10	53-70-3	
Fluoranthene	<0.57	ug/kg	1.9	0.57	1	06/25/18 06:31	06/26/18 19:10	206-44-0	
Fluorene	<0.41	ug/kg	1.4	0.41	1	06/25/18 06:31	06/26/18 19:10	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.89	ug/kg	3.0	0.89	1	06/25/18 06:31	06/26/18 19:10	193-39-5	
Naphthalene	<1.0	ug/kg	3.4	1.0	1	06/25/18 06:31	06/26/18 19:10	91-20-3	
Phenanthrene	<2.5	ug/kg	8.5	2.5	1	06/25/18 06:31	06/26/18 19:10	85-01-8	
Pyrene	<2.0	ug/kg	6.7	2.0	1	06/25/18 06:31	06/26/18 19:10	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	55	%.	42-125		1	06/25/18 06:31	06/26/18 19:10		
p-Terphenyl-d14 (S)	75	%.	57-125		1	06/25/18 06:31	06/26/18 19:10	1718-51-0	
8260 MSV Med Level Normal List	Analytical	Method: EP	A 8260 Prepar	ation Meth	od: EP/	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	71-55-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40		W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40		W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40		W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40		W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40		W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	78-87-5	W
2-Butanone (MEK)	<107	ug/kg	250	107	1	06/28/18 11:30	06/28/18 17:40	78-93-3	W
2-Hexanone	<52.0	ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 17:40	591-78-6	W



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-2_6-7 Lab ID: 10436863004 Collected: 06/21/18 15:30 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepai	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 17:40	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 17:40	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 17:40	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 17:40	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 17:40	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 17:40	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:40	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	109	%	57-148		1	06/28/18 11:30	06/28/18 17:40		
Toluene-d8 (S)	105	%	58-142		1	06/28/18 11:30	06/28/18 17:40		
4-Bromofluorobenzene (S)	89	%	48-130		1	06/28/18 11:30	06/28/18 17:40	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-3_0-2 Lab ID: 10436863005 Collected: 06/21/18 16:20 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EP/	A 6010D Prep	aration Met	hod: E	PA 3050			
Arsenic	3.5	mg/kg	1.5	0.44	1	06/26/18 04:58	06/27/18 07:10	7440-38-2	
Barium	174	mg/kg	0.77	0.23	1	06/26/18 04:58	06/27/18 07:10	7440-39-3	
Cadmium	< 0.069	mg/kg	0.23	0.069	1	06/26/18 04:58	06/27/18 07:10	7440-43-9	
Chromium	41.7	mg/kg	0.94	0.28	1	06/26/18 04:58	06/27/18 07:10	7440-47-3	
Lead	9.0	mg/kg	0.99	0.30	1	06/26/18 04:58	06/27/18 07:10	7439-92-1	
Selenium	<0.51	mg/kg	1.7	0.51	1	06/26/18 04:58	06/27/18 07:10	7782-49-2	
Silver	<0.10	mg/kg	0.35	0.10	1	06/26/18 04:58	06/27/18 07:10	7440-22-4	
7471B Mercury	Analytical	Method: EPA	A 7471B Prepa	aration Met	hod: E	PA 7471B			
Mercury	0.026J	mg/kg	0.031	0.0094	1	06/25/18 07:21	06/28/18 18:03	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	24.5	%	0.10	0.10	1		06/27/18 16:26		
8270D MSSV PAH by SIM	Analytical	Method: EPA	A 8270D by SII	M Prepara	ion Me	ethod: EPA 3550			
Acenaphthene	<0.54	ug/kg	1.8	0.54	1	06/25/18 06:31	06/26/18 19:33	83-32-9	
Acenaphthylene	<0.65	ug/kg	2.2	0.65	1	06/25/18 06:31	06/26/18 19:33	208-96-8	
Anthracene	<0.62	ug/kg	2.1	0.62	1	06/25/18 06:31	06/26/18 19:33	120-12-7	
Benzo(a)anthracene	<1.4	ug/kg	4.7	1.4	1	06/25/18 06:31	06/26/18 19:33	56-55-3	
Benzo(a)pyrene	<0.91	ug/kg	3.0	0.91	1	06/25/18 06:31	06/26/18 19:33	50-32-8	
Benzo(b)fluoranthene	<0.49	ug/kg	1.6	0.49	1	06/25/18 06:31	06/26/18 19:33	205-99-2	
Benzo(g,h,i)perylene	<0.83	ug/kg	2.8	0.83	1	06/25/18 06:31	06/26/18 19:33	191-24-2	
Benzo(k)fluoranthene	<1.1	ug/kg	3.7	1.1	1	06/25/18 06:31	06/26/18 19:33	207-08-9	
Chrysene	<1.8	ug/kg	6.0	1.8	1	06/25/18 06:31	06/26/18 19:33	218-01-9	
Dibenz(a,h)anthracene	<0.61	ug/kg	2.0	0.61	1	06/25/18 06:31	06/26/18 19:33	53-70-3	
Fluoranthene	<0.56	ug/kg	1.9	0.56	1	06/25/18 06:31	06/26/18 19:33	206-44-0	
Fluorene	<0.41	ug/kg	1.4	0.41	1	06/25/18 06:31	06/26/18 19:33	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.88	ug/kg	2.9	0.88	1	06/25/18 06:31	06/26/18 19:33	193-39-5	
Naphthalene	<1.0	ug/kg	3.4	1.0	1	06/25/18 06:31	06/26/18 19:33	91-20-3	
Phenanthrene	<2.5	ug/kg	8.4	2.5	1	06/25/18 06:31	06/26/18 19:33	85-01-8	
Pyrene	<2.0	ug/kg	6.7	2.0	1	06/25/18 06:31	06/26/18 19:33	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	79	%.	42-125		1	06/25/18 06:31	06/26/18 19:33		
p-Terphenyl-d14 (S)	77	%.	57-125		1	06/25/18 06:31	06/26/18 19:33	1718-51-0	
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepar	ration Meth	od: EP	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	71-55-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	79-34-5	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	79-00-5	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	75-34-3	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	75-35-4	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	107-06-2	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	78-87-5	W
2-Butanone (MEK)	<107	ug/kg	250	107	1	06/28/18 11:30	06/28/18 19:10	78-93-3	W
2-Hexanone	<52.0	ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 19:10	591-78-6	W



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-3_0-2 Lab ID: 10436863005 Collected: 06/21/18 16:20 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepai	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 19:10	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 19:10	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 19:10	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 19:10	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 19:10	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 19:10	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:10	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	109	%	57-148		1	06/28/18 11:30	06/28/18 19:10		
Toluene-d8 (S)	99	%	58-142		1	06/28/18 11:30	06/28/18 19:10		
4-Bromofluorobenzene (S)	83	%	48-130		1	06/28/18 11:30	06/28/18 19:10	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-3_8-9 Lab ID: 10436863006 Collected: 06/21/18 16:35 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EP	A 6010D Prepa	aration Met	hod: E	PA 3050			
Arsenic	2.8	mg/kg	1.7	0.50	1	06/26/18 04:58	06/27/18 07:12	7440-38-2	
Barium	176	mg/kg	0.87	0.26	1	06/26/18 04:58	06/27/18 07:12	7440-39-3	
Cadmium	0.11J	mg/kg	0.26	0.077	1	06/26/18 04:58	06/27/18 07:12	7440-43-9	
Chromium	42.6	mg/kg	1.1	0.32	1	06/26/18 04:58	06/27/18 07:12	7440-47-3	
Lead	7.8	mg/kg	1.1	0.33	1	06/26/18 04:58	06/27/18 07:12	7439-92-1	
Selenium	<0.58	mg/kg	1.9	0.58	1	06/26/18 04:58	06/27/18 07:12	7782-49-2	
Silver	<0.12	mg/kg	0.39	0.12	1	06/26/18 04:58	06/27/18 07:12	7440-22-4	
7471B Mercury	Analytical	Method: EP	A 7471B Prepa	aration Met	hod: E	PA 7471B			
Mercury	0.021J	mg/kg	0.037	0.011	1	06/25/18 07:21	06/28/18 18:05	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	31.6	%	0.10	0.10	1		06/27/18 16:27		
8270D MSSV PAH by SIM	Analytical	Method: EP	A 8270D by SII	M Prepara	tion Me	ethod: EPA 3550			
Acenaphthene	<0.60	ug/kg	2.0	0.60	1	06/25/18 06:31	06/26/18 19:57	83-32-9	
Acenaphthylene	<0.72	ug/kg	2.4	0.72	1	06/25/18 06:31	06/26/18 19:57	208-96-8	
Anthracene	<0.68	ug/kg	2.3	0.68	1	06/25/18 06:31	06/26/18 19:57	120-12-7	
Benzo(a)anthracene	<1.6	ug/kg	5.3	1.6	1	06/25/18 06:31	06/26/18 19:57	56-55-3	
Benzo(a)pyrene	1.2J	ug/kg	3.3	1.0	1	06/25/18 06:31	06/26/18 19:57	50-32-8	
Benzo(b)fluoranthene	2.2	ug/kg	1.8	0.55	1	06/25/18 06:31	06/26/18 19:57	205-99-2	
Benzo(g,h,i)perylene	2.3J	ug/kg	3.1	0.93	1	06/25/18 06:31	06/26/18 19:57	191-24-2	
Benzo(k)fluoranthene	2.2J	ug/kg	4.1	1.2	1	06/25/18 06:31	06/26/18 19:57	207-08-9	
Chrysene	<2.0	ug/kg	6.6	2.0	1	06/25/18 06:31	06/26/18 19:57	218-01-9	
Dibenz(a,h)anthracene	2.2J	ug/kg	2.2	0.67	1	06/25/18 06:31	06/26/18 19:57	53-70-3	
Fluoranthene	1.9J	ug/kg	2.1	0.63	1	06/25/18 06:31	06/26/18 19:57	206-44-0	
Fluorene	< 0.46	ug/kg	1.5	0.46	1	06/25/18 06:31	06/26/18 19:57	86-73-7	
Indeno(1,2,3-cd)pyrene	2.2J	ug/kg	3.3	0.98	1	06/25/18 06:31	06/26/18 19:57	193-39-5	
Naphthalene	<1.1	ug/kg	3.8	1.1	1	06/25/18 06:31	06/26/18 19:57	91-20-3	
Phenanthrene	<2.8	ug/kg	9.3	2.8	1	06/25/18 06:31	06/26/18 19:57	85-01-8	
Pyrene	<2.2	ug/kg	7.4	2.2	1	06/25/18 06:31	06/26/18 19:57	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	60	%.	42-125		1	06/25/18 06:31	06/26/18 19:57		
p-Terphenyl-d14 (S)	77	%.	57-125		1	06/25/18 06:31	06/26/18 19:57	1718-51-0	
8260 MSV Med Level Normal List	Analytical	Method: EP	A 8260 Prepar	ation Meth	od: EP/	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30			W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	79-34-5	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32		W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32		W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32		W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32		W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	78-87-5	W
2-Butanone (MEK)	<107	ug/kg	250	107	1	06/28/18 11:30	06/28/18 19:32	78-93-3	W
2-Hexanone	<52.0	ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 19:32	591-78-6	W



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-3_8-9 Lab ID: 10436863006 Collected: 06/21/18 16:35 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepar	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 19:32	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 19:32	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 19:32	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 19:32	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 19:32	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 19:32	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:32	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	103	%	57-148		1	06/28/18 11:30	06/28/18 19:32	1868-53-7	
Toluene-d8 (S)	98	%	58-142		1	06/28/18 11:30	06/28/18 19:32	2037-26-5	
4-Bromofluorobenzene (S)	82	%	48-130		1	06/28/18 11:30	06/28/18 19:32	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-4_0-2 Lab ID: 10436863007 Collected: 06/22/18 08:40 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EP	A 6010D Prepa	aration Met	hod: E	PA 3050			
Arsenic	3.0	mg/kg	1.5	0.46	1	06/26/18 04:58	06/27/18 07:14	7440-38-2	
Barium	191	mg/kg	0.79	0.24	1	06/26/18 04:58	06/27/18 07:14	7440-39-3	
Cadmium	< 0.071	mg/kg	0.24	0.071	1	06/26/18 04:58	06/27/18 07:14	7440-43-9	
Chromium	48.6	mg/kg	0.97	0.29	1	06/26/18 04:58	06/27/18 07:14	7440-47-3	
Lead	9.1	mg/kg	1.0	0.30	1	06/26/18 04:58	06/27/18 07:14	7439-92-1	
Selenium	<0.53	mg/kg	1.8	0.53	1	06/26/18 04:58	06/27/18 07:14	7782-49-2	
Silver	<0.11	mg/kg	0.36	0.11	1	06/26/18 04:58	06/27/18 07:14	7440-22-4	
7471B Mercury	Analytical	Method: EP	A 7471B Prepa	aration Met	hod: E	PA 7471B			
Mercury	0.023J	mg/kg	0.032	0.0097	1	06/25/18 07:21	06/28/18 18:07	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	26.7	%	0.10	0.10	1		06/27/18 16:27		
8270D MSSV PAH by SIM	Analytical	Method: EP	A 8270D by SI	M Prepara	tion Me	thod: EPA 3550			
Acenaphthene	<0.56	ug/kg	1.9	0.56	1	06/25/18 06:31	06/26/18 20:20	83-32-9	
Acenaphthylene	<0.67	ug/kg	2.2	0.67	1	06/25/18 06:31	06/26/18 20:20	208-96-8	
Anthracene	<0.64	ug/kg	2.1	0.64	1	06/25/18 06:31	06/26/18 20:20	120-12-7	
Benzo(a)anthracene	<1.5	ug/kg	4.9	1.5	1	06/25/18 06:31	06/26/18 20:20	56-55-3	
Benzo(a)pyrene	< 0.94	ug/kg	3.1	0.94	1	06/25/18 06:31	06/26/18 20:20	50-32-8	
Benzo(b)fluoranthene	<0.51	ug/kg	1.7	0.51	1	06/25/18 06:31	06/26/18 20:20	205-99-2	
Benzo(g,h,i)perylene	<0.86	ug/kg	2.9	0.86	1	06/25/18 06:31	06/26/18 20:20	191-24-2	
Benzo(k)fluoranthene	<1.2	ug/kg	3.8	1.2	1	06/25/18 06:31	06/26/18 20:20	207-08-9	
Chrysene	<1.9	ug/kg	6.2	1.9	1	06/25/18 06:31	06/26/18 20:20	218-01-9	
Dibenz(a,h)anthracene	< 0.63	ug/kg	2.1	0.63	1	06/25/18 06:31	06/26/18 20:20	53-70-3	
Fluoranthene	<0.58	ug/kg	1.9	0.58	1	06/25/18 06:31	06/26/18 20:20	206-44-0	
Fluorene	< 0.43	ug/kg	1.4	0.43	1	06/25/18 06:31	06/26/18 20:20	86-73-7	
Indeno(1,2,3-cd)pyrene	<0.91	ug/kg	3.0	0.91	1	06/25/18 06:31	06/26/18 20:20	193-39-5	
Naphthalene	<1.1	ug/kg	3.5	1.1	1	06/25/18 06:31	06/26/18 20:20	91-20-3	
Phenanthrene	<2.6	ug/kg	8.7	2.6	1	06/25/18 06:31	06/26/18 20:20	85-01-8	
Pyrene	<2.1	ug/kg	6.9	2.1	1	06/25/18 06:31	06/26/18 20:20	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	64	%.	42-125		1	06/25/18 06:31	06/26/18 20:20		
p-Terphenyl-d14 (S)	74	%.	57-125		1	06/25/18 06:31	06/26/18 20:20	1718-51-0	
8260 MSV Med Level Normal List	Analytical	Method: EP	A 8260 Prepar	ation Meth	od: EP/	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	71-55-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55		W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	79-00-5	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	75-34-3	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	75-35-4	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	107-06-2	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	78-87-5	W
2-Butanone (MEK)	<107	ug/kg	250	107	1	06/28/18 11:30	06/28/18 19:55	78-93-3	W
2-Hexanone	<52.0	ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 19:55	591-78-6	W



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-4_0-2 Lab ID: 10436863007 Collected: 06/22/18 08:40 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepai	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 19:55	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 19:55	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 19:55	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 19:55	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 19:55	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 19:55	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 19:55	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	109	%	57-148		1	06/28/18 11:30	06/28/18 19:55		
Toluene-d8 (S)	97	%	58-142		1	06/28/18 11:30	06/28/18 19:55		
4-Bromofluorobenzene (S)	80	%	48-130		1	06/28/18 11:30	06/28/18 19:55	460-00-4	



Project: 49161423.00 Husky Phase II

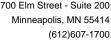
Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-4_6-7 Lab ID: 10436863008 Collected: 06/22/18 08:55 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EP	A 6010D Prepa	aration Met	hod: E	PA 3050			
Arsenic	3.0	mg/kg	1.6	0.48	1	06/26/18 04:58	06/27/18 07:15	7440-38-2	
Barium	160	mg/kg	0.84	0.25	1	06/26/18 04:58	06/27/18 07:15	7440-39-3	
Cadmium	0.097J	mg/kg	0.25	0.075	1	06/26/18 04:58	06/27/18 07:15	7440-43-9	
Chromium	39.4	mg/kg	1.0	0.31	1	06/26/18 04:58	06/27/18 07:15	7440-47-3	
Lead	7.7	mg/kg	1.1	0.32	1		06/27/18 07:15		
Selenium	<0.56	mg/kg	1.9	0.56	1	06/26/18 04:58	06/27/18 07:15	7782-49-2	
Silver	<0.11	mg/kg	0.38	0.11	1		06/27/18 07:15		
7471B Mercury	Analytical	Method: EP	A 7471B Prepa	aration Met	hod: E	PA 7471B			
Mercury	0.021J	mg/kg	0.038	0.011	1	06/25/18 07:21	06/28/18 18:09	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	29.4	%	0.10	0.10	1		06/27/18 16:27		
8270D MSSV PAH by SIM	Analytical	Method: EP	A 8270D by SI	M Prepara	tion Me	thod: EPA 3550			
Acenaphthene	<0.58	ug/kg	1.9	0.58	1	06/25/18 06:31	06/26/18 20:44	83-32-9	
Acenaphthylene	<0.70	ug/kg	2.3	0.70	1	06/25/18 06:31	06/26/18 20:44	208-96-8	
Anthracene	<0.66	ug/kg	2.2	0.66	1	06/25/18 06:31	06/26/18 20:44	120-12-7	
Benzo(a)anthracene	<1.5	ug/kg	5.1	1.5	1	06/25/18 06:31	06/26/18 20:44	56-55-3	
Benzo(a)pyrene	< 0.97	ug/kg	3.2	0.97	1	06/25/18 06:31	06/26/18 20:44	50-32-8	
Benzo(b)fluoranthene	< 0.53	ug/kg	1.8	0.53	1	06/25/18 06:31	06/26/18 20:44	205-99-2	
Benzo(g,h,i)perylene	< 0.90	ug/kg	3.0	0.90	1	06/25/18 06:31	06/26/18 20:44	191-24-2	
Benzo(k)fluoranthene	<1.2	ug/kg	4.0	1.2	1	06/25/18 06:31	06/26/18 20:44	207-08-9	
Chrysene	<1.9	ug/kg	6.4	1.9	1	06/25/18 06:31	06/26/18 20:44	218-01-9	
Dibenz(a,h)anthracene	< 0.65	ug/kg	2.2	0.65	1	06/25/18 06:31	06/26/18 20:44	53-70-3	
Fluoranthene	<0.61	ug/kg	2.0	0.61	1	06/25/18 06:31	06/26/18 20:44	206-44-0	
Fluorene	< 0.44	ug/kg	1.5	0.44	1	06/25/18 06:31	06/26/18 20:44	86-73-7	
Indeno(1,2,3-cd)pyrene	< 0.95	ug/kg	3.2	0.95	1	06/25/18 06:31	06/26/18 20:44	193-39-5	
Naphthalene	<1.1	ug/kg	3.6	1.1	1	06/25/18 06:31	06/26/18 20:44	91-20-3	
Phenanthrene	<2.7	ug/kg	9.0	2.7	1	06/25/18 06:31	06/26/18 20:44	85-01-8	
Pyrene	<2.2	ug/kg	7.2	2.2	1	06/25/18 06:31	06/26/18 20:44	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	75	%.	42-125		1	06/25/18 06:31	06/26/18 20:44	321-60-8	
p-Terphenyl-d14 (S)	74	%.	57-125		1	06/25/18 06:31	06/26/18 20:44	1718-51-0	
8260 MSV Med Level Normal List	Analytical	Method: EP	A 8260 Prepar	ration Meth	od: EP/	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	71-55-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	79-34-5	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	79-00-5	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	75-34-3	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	75-35-4	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	107-06-2	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	78-87-5	W
2-Butanone (MEK)	<107	ug/kg	250	107	1	06/28/18 11:30	06/28/18 20:18	78-93-3	W
2-Hexanone	<52.0	ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 20:18	591-78-6	W





Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-4_6-7 Lab ID: 10436863008 Collected: 06/22/18 08:55 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepa	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 20:18	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 20:18	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 20:18	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 20:18	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 20:18	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 20:18	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:18	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	108	%	57-148		1	06/28/18 11:30	06/28/18 20:18		
Toluene-d8 (S)	93	%	58-142		1	06/28/18 11:30	06/28/18 20:18		
4-Bromofluorobenzene (S)	80	%	48-130		1	06/28/18 11:30	06/28/18 20:18	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-5_0-1 Lab ID: 10436863009 Collected: 06/22/18 09:35 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EPA	A 6010D Prepa	aration Met	hod: E	PA 3050			
Arsenic	5.1J	mg/kg	7.5	2.3	5	06/26/18 04:58	06/27/18 07:19	7440-38-2	D3
Barium	287	mg/kg	3.9	1.2	5	06/26/18 04:58	06/27/18 07:19	7440-39-3	
Cadmium	0.56J	mg/kg	1.2	0.35	5	06/26/18 04:58	06/27/18 07:19	7440-43-9	D3
Chromium	1850	mg/kg	9.5	2.9	10	06/26/18 04:58			
Lead	88.2	mg/kg	10.0	3.0	10	06/26/18 04:58	06/27/18 07:20		
Selenium	<5.2	mg/kg	17.4	5.2	10	06/26/18 04:58	06/27/18 07:20		D3
Silver	1.1J	mg/kg	3.5	1.1	10	06/26/18 04:58	06/27/18 07:20		D3
7471B Mercury	Analytical	Method: EPA	A 7471B Prepa	aration Met	hod: E	PA 7471B			
Mercury	0.10	mg/kg	0.033	0.0098	1	06/25/18 07:21	06/28/18 18:11	7439-97-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	23.3	%	0.10	0.10	1		06/27/18 16:27		
8270D MSSV PAH by SIM	Analytical	Method: EPA	A 8270D by SII	M Preparat	ion Me	ethod: EPA 3550			
Acenaphthene	6.9	ug/kg	1.8	0.53	1	06/25/18 06:31	06/26/18 21:07	83-32-9	
Acenaphthylene	3.4	ug/kg	2.1	0.64	1	06/25/18 06:31	06/26/18 21:07	208-96-8	
Anthracene	11.0	ug/kg	2.0	0.61	1	06/25/18 06:31	06/26/18 21:07	120-12-7	
Benzo(a)anthracene	77.8	ug/kg	4.7	1.4	1	06/25/18 06:31	06/26/18 21:07	56-55-3	
Benzo(a)pyrene	128	ug/kg	3.0	0.89	1	06/25/18 06:31	06/26/18 21:07	50-32-8	
Benzo(b)fluoranthene	162	ug/kg	1.6	0.49	1	06/25/18 06:31	06/26/18 21:07	205-99-2	
Benzo(g,h,i)perylene	116	ug/kg	2.7	0.82	1	06/25/18 06:31	06/26/18 21:07	191-24-2	
Benzo(k)fluoranthene	55.7	ug/kg	3.7	1.1	1	06/25/18 06:31	06/26/18 21:07	207-08-9	
Chrysene	98.1	ug/kg	5.9	1.8	1	06/25/18 06:31	06/26/18 21:07		
Dibenz(a,h)anthracene	32.5	ug/kg	2.0	0.60	1	06/25/18 06:31	06/26/18 21:07		
Fluoranthene	90.4	ug/kg	1.9	0.56	1	06/25/18 06:31	06/26/18 21:07		
Fluorene	2.5	ug/kg	1.4	0.41	1	06/25/18 06:31	06/26/18 21:07		
Indeno(1,2,3-cd)pyrene	94.4	ug/kg	2.9	0.87	1	06/25/18 06:31	06/26/18 21:07		
Naphthalene	4.3	ug/kg	3.3	1.0	1	06/25/18 06:31	06/26/18 21:07		
Phenanthrene	39.1	ug/kg ug/kg	8.3	2.5	1	06/25/18 06:31	06/26/18 21:07		
Pyrene	75.2	ug/kg ug/kg	6.6	2.0	1	06/25/18 06:31	06/26/18 21:07		
Surrogates	. 0.2	ug/Ng	0.0	2.0	•	00/20/10 00:01	00/20/10 21:01	120 00 0	
2-Fluorobiphenyl (S)	77	%.	42-125		1	06/25/18 06:31	06/26/18 21:07	321-60-8	
p-Terphenyl-d14 (S)	85	%.	57-125		1	06/25/18 06:31	06/26/18 21:07		
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepar	ation Metho	od: EP	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	71-55-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	79-34-5	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40		W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40		W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40		W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40		W
1,2-Dichloropropane	<25.0	ug/kg ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40		W
2-Butanone (MEK)	<107	ug/kg ug/kg	250	107	1	06/28/18 11:30	06/28/18 20:40		W
2-Hexanone	<52.0	ug/kg ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 20:40		W
	402.0	~9, Ng	200	32.0	•	30,20,10 11.00	33/23/10 20:40	551.750	••



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-5_0-1 Lab ID: 10436863009 Collected: 06/22/18 09:35 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	8260 Prepa	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 20:40	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 20:40	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 20:40	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 20:40	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 20:40	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	127-18-4	W
Toluene	38.8J	ug/kg	78.3	32.6	1	06/28/18 11:30	06/28/18 20:40	108-88-3	
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 20:40	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 20:40	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	111	%	57-148		1	06/28/18 11:30	06/28/18 20:40	1868-53-7	
Toluene-d8 (S)	99	%	58-142		1	06/28/18 11:30	06/28/18 20:40	2037-26-5	
4-Bromofluorobenzene (S)	83	%	48-130		1	06/28/18 11:30	06/28/18 20:40	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-5_8-9 Lab ID: 10436863010 Collected: 06/22/18 09:50 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP	Analytical	Method: EPA	A 6010D Prep	aration Met	hod: E	PA 3050			
Arsenic	3.4	mg/kg	1.6	0.47	1	06/26/18 04:58	06/27/18 07:22	7440-38-2	
Barium	173	mg/kg	0.82	0.25	1	06/26/18 04:58	06/27/18 07:22		
Cadmium	< 0.073	mg/kg	0.24	0.073	1	06/26/18 04:58	06/27/18 07:22	7440-43-9	
Chromium	42.0	mg/kg	1.0	0.30	1	06/26/18 04:58			
Lead	8.4	mg/kg	1.0	0.31	1		06/27/18 07:22		
Selenium	<0.54	mg/kg	1.8	0.54	1	06/26/18 04:58	06/27/18 07:22		
Silver	<0.11	mg/kg	0.37	0.11	1		06/27/18 07:22		
7471B Mercury	Analytical		A 7471B Prepa	aration Met	hod: El	PA 7471B			
Mercury	0.017J	mg/kg	0.032	0.0096	1	06/25/18 07:21	06/28/18 18:13	7439-97-6	
Dry Weight / %M by ASTM D2974		Method: AS							
Percent Moisture	28.1	%	0.10	0.10	1		06/27/18 16:28		
8270D MSSV PAH by SIM						thod: EPA 3550			
Acenaphthene	<0.57	ug/kg	1.9	0.57	1	06/25/18 06:31	06/26/18 21:31	83-32-9	
Acenaphthylene	< 0.69	ug/kg	2.3	0.69	1	06/25/18 06:31	06/26/18 21:31	208-96-8	
Anthracene	< 0.65	ug/kg	2.2	0.65	1	06/25/18 06:31	06/26/18 21:31	120-12-7	
Benzo(a)anthracene	<1.5	ug/kg	5.0	1.5	1	06/25/18 06:31	06/26/18 21:31		
Benzo(a)pyrene	<0.95	ug/kg	3.2	0.95	1	06/25/18 06:31	06/26/18 21:31		
Benzo(b)fluoranthene	<0.52	ug/kg	1.7	0.52	1	06/25/18 06:31	06/26/18 21:31		
Benzo(g,h,i)perylene	<0.88	ug/kg	2.9	0.88	1	06/25/18 06:31	06/26/18 21:31		
Benzo(k)fluoranthene	<1.2	ug/kg	3.9	1.2	1	06/25/18 06:31	06/26/18 21:31		
Chrysene	<1.9	ug/kg	6.3	1.9	1	06/25/18 06:31	06/26/18 21:31		
Dibenz(a,h)anthracene	<0.64	ug/kg	2.1	0.64	1	06/25/18 06:31	06/26/18 21:31		
Fluoranthene	<0.59	ug/kg	2.0	0.59	1	06/25/18 06:31	06/26/18 21:31		
Fluorene	<0.43	ug/kg	1.4	0.43	1	06/25/18 06:31	06/26/18 21:31		
Indeno(1,2,3-cd)pyrene	<0.93	ug/kg	3.1	0.93	1	06/25/18 06:31	06/26/18 21:31		
Naphthalene	<1.1	ug/kg	3.6	1.1	1	06/25/18 06:31	06/26/18 21:31		
Phenanthrene	<2.7	ug/kg	8.9	2.7	1	06/25/18 06:31	06/26/18 21:31		
Pyrene	<2.1	ug/kg	7.1	2.1	1	06/25/18 06:31	06/26/18 21:31		
Surrogates		99							
2-Fluorobiphenyl (S)	60	%.	42-125		1	06/25/18 06:31	06/26/18 21:31	321-60-8	
p-Terphenyl-d14 (S)	74	%.	57-125		1	06/25/18 06:31	06/26/18 21:31	1718-51-0	
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepar	ation Meth	od: EP/	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03		W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03		W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03		W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03		W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	75-35-4	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	107-06-2	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	78-87-5	W
2-Butanone (MEK)	<107	ug/kg	250	107	1	06/28/18 11:30	06/28/18 21:03	78-93-3	W
2-Hexanone	<52.0	ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 21:03	591-78-6	W



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-5_8-9 Lab ID: 10436863010 Collected: 06/22/18 09:50 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepa	ration Metho	od: EP/	A 5035/5030B			
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 21:03	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 21:03	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 21:03	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 21:03	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 21:03	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 21:03	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 21:03	10061-02-6	W
Surrogates									
Dibromofluoromethane (S)	103	%	57-148		1	06/28/18 11:30	06/28/18 21:03	1868-53-7	
Toluene-d8 (S)	94	%	58-142		1	06/28/18 11:30	06/28/18 21:03	2037-26-5	
4-Bromofluorobenzene (S)	82	%	48-130		1	06/28/18 11:30	06/28/18 21:03	460-00-4	



Date: 07/03/2018 03:29 PM

ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863 Lab ID: 10436863011 Sample: SB-3_14.5-19.5 Collected: 06/22/18 11:20 Received: 06/22/18 20:00 Matrix: Water DF Results Units LOO LOD CAS No. **Parameters** Prepared Analyzed Qual 8270D MSSV PAH by SIM Analytical Method: EPA 8270D by SIM Preparation Method: EPA Mod. 3510C < 0.0043 0.014 0.0043 06/27/18 17:24 83-32-9 Acenaphthene ug/L 06/26/18 14:37 0.0063 Acenaphthylene < 0.0063 ug/L 0.021 1 06/26/18 14:37 06/27/18 17:24 208-96-8 0.0083 Anthracene < 0.0083 ug/L 0.028 1 06/26/18 14:37 06/27/18 17:24 120-12-7 Benzo(a)anthracene < 0.0053 ug/L 0.018 0.0053 06/26/18 14:37 06/27/18 17:24 56-55-3 1 < 0.0054 ug/L 0.018 0.0054 06/26/18 14:37 06/27/18 17:24 50-32-8 Benzo(a)pyrene 1 0.057 0.017 06/27/18 17:24 205-99-2 Benzo(b)fluoranthene <0.017 ug/L 06/26/18 14:37 1 0.013 06/27/18 17:24 191-24-2 Benzo(g,h,i)perylene < 0.013 ug/L 0.044 1 06/26/18 14:37 Benzo(k)fluoranthene < 0.014 ug/L 0.047 0.014 1 06/26/18 14:37 06/27/18 17:24 207-08-9 Chrysene <0.012 ug/L 0.041 0.012 1 06/26/18 14:37 06/27/18 17:24 218-01-9 Dibenz(a,h)anthracene < 0.012 ug/L 0.041 0.012 1 06/26/18 14:37 06/27/18 17:24 53-70-3 Fluoranthene < 0.025 ug/L 0.082 0.025 06/26/18 14:37 06/27/18 17:24 206-44-0 1 0.0080 Fluorene < 0.0080 ug/L 0.027 1 06/26/18 14:37 06/27/18 17:24 86-73-7 0.018 Indeno(1,2,3-cd)pyrene <0.018 ug/L 0.060 1 06/26/18 14:37 06/27/18 17:24 193-39-5 Naphthalene < 0.0092 ug/L 0.031 0.0092 1 06/26/18 14:37 06/27/18 17:24 91-20-3 <0.014 ug/L 0.047 0.014 1 06/26/18 14:37 06/27/18 17:24 85-01-8 Phenanthrene Pvrene <0.020 0.066 0.020 1 06/26/18 14:37 06/27/18 17:24 129-00-0 ug/L Surrogates 2-Fluorobiphenyl (S) 72 %. 30-145 1 06/26/18 14:37 06/27/18 17:24 321-60-8 A5 p-Terphenyl-d14 (S) 88 30-149 06/26/18 14:37 06/27/18 17:24 1718-51-0 %. 1 Analytical Method: EPA 8260B 8260B VOC <9.2 ug/L 30.8 9.2 1 06/27/18 15:59 67-64-1 Acetone Allyl chloride <0.29 ug/L 0.97 0.29 1 06/27/18 15:59 107-05-1 Benzene <0.10 ug/L 0.34 0.10 1 06/27/18 15:59 71-43-2 Bromobenzene <0.21 ug/L 0.69 0.21 1 06/27/18 15:59 108-86-1 Bromochloromethane <0.27 ug/L 0.91 0.27 06/27/18 15:59 74-97-5 1 Bromodichloromethane <0.22 ug/L 0.72 0.22 06/27/18 15:59 75-27-4 1 0.80 75-25-2 Bromoform <0.80 ug/L 2.7 06/27/18 15:59 1 Bromomethane <1.8 ug/L 6.1 1.8 1 06/27/18 15:59 74-83-9 2-Butanone (MEK) < 0.99 ug/L 3.3 0.99 1 06/27/18 15:59 78-93-3 n-Butylbenzene <0.24 ug/L 0.80 0.24 1 06/27/18 15:59 104-51-8 sec-Butylbenzene <0.15 ug/L 0.50 0.15 1 06/27/18 15:59 135-98-8 tert-Butylbenzene < 0.15 ug/L 0.49 0.15 1 06/27/18 15:59 98-06-6 Carbon tetrachloride <0.19 ug/L 0.63 0.19 1 06/27/18 15:59 56-23-5 Chlorobenzene <0.17 ug/L 0.57 0.17 1 06/27/18 15:59 108-90-7 Chloroethane < 0.49 ug/L 1.6 0.49 1 06/27/18 15:59 75-00-3 <0.45 0.45 Chloroform ug/L 1.5 1 06/27/18 15:59 67-66-3 Chloromethane < 0.16 ug/L 0.52 0.16 1 06/27/18 15:59 74-87-3 06/27/18 15:59 95-49-8 2-Chlorotoluene < 0.16 ug/L 0.54 0.161 4-Chlorotoluene < 0.13 ug/L 0.45 0.13 1 06/27/18 15:59 106-43-4 1,2-Dibromo-3-chloropropane <1.7 ug/L 5.5 1.7 1 06/27/18 15:59 96-12-8 Dibromochloromethane < 0.12 ug/L 0.41 0.12 1 06/27/18 15:59 124-48-1 1,2-Dibromoethane (EDB) <0.24 ug/L 0.80 0.24 1 06/27/18 15:59 106-93-4 0.54 0.16 06/27/18 15:59 74-95-3 Dibromomethane < 0.16 ug/L 1 1.2-Dichlorobenzene < 0.14 ua/L 0.46 0.14 1 06/27/18 15:59 95-50-1 1,3-Dichlorobenzene < 0.16 ug/L 0.54 0.16 1 06/27/18 15:59 541-73-1



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: SB-3_14.5-19.5 Lab ID: 10436863011 Collected: 06/22/18 11:20 Received: 06/22/18 20:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
8260B VOC	Analytical	Method: EPA	A 8260B						
1,4-Dichlorobenzene	<0.17	ug/L	0.56	0.17	1		06/27/18 15:59	106-46-7	
Dichlorodifluoromethane	<0.23	ug/L	0.78	0.23	1		06/27/18 15:59	75-71-8	
1,1-Dichloroethane	<0.17	ug/L	0.57	0.17	1		06/27/18 15:59	75-34-3	
1,2-Dichloroethane	<0.22	ug/L	0.73	0.22	1		06/27/18 15:59	107-06-2	
1,1-Dichloroethene	<0.16	ug/L	0.53	0.16	1		06/27/18 15:59	75-35-4	
cis-1,2-Dichloroethene	<0.15	ug/L	0.51	0.15	1		06/27/18 15:59	156-59-2	
trans-1,2-Dichloroethene	<0.12	ug/L	0.39	0.12	1		06/27/18 15:59	156-60-5	
Dichlorofluoromethane	<0.14	ug/L	0.47	0.14	1		06/27/18 15:59	75-43-4	N2
1,2-Dichloropropane	<0.16	ug/L	0.55	0.16	1		06/27/18 15:59	78-87-5	
1,3-Dichloropropane	< 0.070	ug/L	0.23	0.070	1		06/27/18 15:59	142-28-9	
2,2-Dichloropropane	<0.17	ug/L	0.57	0.17	1		06/27/18 15:59	594-20-7	
1,1-Dichloropropene	<0.20	ug/L	0.66	0.20	1		06/27/18 15:59		
cis-1,3-Dichloropropene	<0.20	ug/L	0.68	0.20	1		06/27/18 15:59		
trans-1,3-Dichloropropene	<0.18	ug/L	0.61	0.18	1		06/27/18 15:59		
Diethyl ether (Ethyl ether)	<0.095	ug/L	0.32	0.095	1		06/27/18 15:59		
Ethylbenzene	<0.14	ug/L	0.46	0.14	1		06/27/18 15:59		
Hexachloro-1,3-butadiene	<0.31	ug/L	1.0	0.31	1		06/27/18 15:59		
sopropylbenzene (Cumene)	<0.18	ug/L	0.62	0.18	1		06/27/18 15:59		
p-Isopropyltoluene	<0.15	ug/L	0.51	0.15	1		06/27/18 15:59		
Methylene Chloride	<0.98	ug/L	3.3	0.13	1		06/27/18 15:59		
4-Methyl-2-pentanone (MIBK)	<0.42	ug/L ug/L	1.4	0.42	1		06/27/18 15:59		
	<0.42	_	0.54	0.42	1		06/27/18 15:59		
Methyl-tert-butyl ether	<0.16	ug/L	1.6	0.18	1		06/27/18 15:59		
Naphthalene Brandhanzana	<0.46 <0.10	ug/L	0.34	0.46	1		06/27/18 15:59		
n-Propylbenzene		ug/L							
Styrene	<0.19	ug/L	0.62	0.19	1		06/27/18 15:59		
1,1,1,2-Tetrachloroethane	<0.20	ug/L	0.65	0.20	1		06/27/18 15:59		
1,1,2,2-Tetrachloroethane	<0.17	ug/L	0.57	0.17	1		06/27/18 15:59		
Tetrachloroethene	<0.17	ug/L	0.57	0.17	1		06/27/18 15:59		
Tetrahydrofuran 	<2.2	ug/L	7.4	2.2	1		06/27/18 15:59		
Toluene	2.1	ug/L	0.28	0.083	1		06/27/18 15:59		
1,2,3-Trichlorobenzene	<0.21	ug/L	0.69	0.21	1		06/27/18 15:59		
1,2,4-Trichlorobenzene	<0.20	ug/L	0.66	0.20	1		06/27/18 15:59		
1,1,1-Trichloroethane	<0.14	ug/L	0.45	0.14	1		06/27/18 15:59		
1,1,2-Trichloroethane	<0.18	ug/L	0.60	0.18	1		06/27/18 15:59		
Trichloroethene	<0.15	ug/L	0.50	0.15	1		06/27/18 15:59		
Trichlorofluoromethane	<0.23	ug/L	0.77	0.23	1		06/27/18 15:59		
1,2,3-Trichloropropane	<0.26	ug/L	0.86	0.26	1		06/27/18 15:59	96-18-4	
1,1,2-Trichlorotrifluoroethane	<0.22	ug/L	0.72	0.22	1		06/27/18 15:59		
1,2,4-Trimethylbenzene	<0.20	ug/L	0.65	0.20	1		06/27/18 15:59		
1,3,5-Trimethylbenzene	<0.12	ug/L	0.41	0.12	1		06/27/18 15:59		
Vinyl chloride	<0.092	ug/L	0.31	0.092	1		06/27/18 15:59	75-01-4	
Xylene (Total)	<0.31	ug/L	1.0	0.31	1		06/27/18 15:59	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	100	%.	75-125		1		06/27/18 15:59		
Toluene-d8 (S)	98	%.	75-125		1		06/27/18 15:59		
4-Bromofluorobenzene (S)	98	%.	75-125		1		06/27/18 15:59	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: Trip Blank Lab ID: 10436863012 Collected: 06/21/18 00:00 Received: 06/22/18 20:00 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
3260B VOC	Analytical	Method: EPA	A 8260B						
Acetone	<9.2	ug/L	30.8	9.2	1		06/27/18 15:42	67-64-1	
Allyl chloride	<0.29	ug/L	0.97	0.29	1		06/27/18 15:42	107-05-1	
Benzene	<0.10	ug/L	0.34	0.10	1		06/27/18 15:42	71-43-2	
Bromobenzene	<0.21	ug/L	0.69	0.21	1		06/27/18 15:42	108-86-1	
Bromochloromethane	<0.27	ug/L	0.91	0.27	1		06/27/18 15:42	74-97-5	
Bromodichloromethane	<0.22	ug/L	0.72	0.22	1		06/27/18 15:42	75-27-4	
Bromoform	<0.80	ug/L	2.7	0.80	1		06/27/18 15:42	75-25-2	
Bromomethane	<1.8	ug/L	6.1	1.8	1		06/27/18 15:42	74-83-9	
2-Butanone (MEK)	<0.99	ug/L	3.3	0.99	1		06/27/18 15:42	78-93-3	
n-Butylbenzene	<0.24	ug/L	0.80	0.24	1		06/27/18 15:42		
sec-Butylbenzene	<0.15	ug/L	0.50	0.15	1		06/27/18 15:42		
ert-Butylbenzene	<0.15	ug/L	0.49	0.15	1		06/27/18 15:42		
Carbon tetrachloride	<0.19	ug/L	0.63	0.19	1		06/27/18 15:42		
Chlorobenzene	<0.17	ug/L	0.57	0.17	1		06/27/18 15:42		
Chloroethane	<0.49	ug/L	1.6	0.49	1		06/27/18 15:42		
Chloroform	<0.45	ug/L	1.5	0.45	1		06/27/18 15:42		
Chloromethane	<0.16	ug/L	0.52	0.43	1		06/27/18 15:42		
2-Chlorotoluene	<0.16	ug/L ug/L	0.54	0.16	1		06/27/18 15:42		
	<0.13	_	0.45	0.10	1		06/27/18 15:42		
-Chlorotoluene		ug/L							
,2-Dibromo-3-chloropropane	<1.7	ug/L	5.5	1.7	1		06/27/18 15:42		
Dibromochloromethane	<0.12	ug/L	0.41	0.12	1		06/27/18 15:42		
,2-Dibromoethane (EDB)	<0.24	ug/L	0.80	0.24	1		06/27/18 15:42		
Dibromomethane	<0.16	ug/L	0.54	0.16	1		06/27/18 15:42		
1,2-Dichlorobenzene	<0.14	ug/L	0.46	0.14	1		06/27/18 15:42		
,3-Dichlorobenzene	<0.16	ug/L	0.54	0.16	1		06/27/18 15:42		
1,4-Dichlorobenzene	<0.17	ug/L	0.56	0.17	1		06/27/18 15:42	106-46-7	
Dichlorodifluoromethane	<0.23	ug/L	0.78	0.23	1		06/27/18 15:42		
1,1-Dichloroethane	<0.17	ug/L	0.57	0.17	1		06/27/18 15:42	75-34-3	
,2-Dichloroethane	<0.22	ug/L	0.73	0.22	1		06/27/18 15:42	107-06-2	
1,1-Dichloroethene	<0.16	ug/L	0.53	0.16	1		06/27/18 15:42	75-35-4	
cis-1,2-Dichloroethene	<0.15	ug/L	0.51	0.15	1		06/27/18 15:42	156-59-2	
rans-1,2-Dichloroethene	<0.12	ug/L	0.39	0.12	1		06/27/18 15:42	156-60-5	
Dichlorofluoromethane	<0.14	ug/L	0.47	0.14	1		06/27/18 15:42	75-43-4	N2
,2-Dichloropropane	<0.16	ug/L	0.55	0.16	1		06/27/18 15:42	78-87-5	
,3-Dichloropropane	<0.070	ug/L	0.23	0.070	1		06/27/18 15:42	142-28-9	
2,2-Dichloropropane	<0.17	ug/L	0.57	0.17	1		06/27/18 15:42	594-20-7	
,1-Dichloropropene	<0.20	ug/L	0.66	0.20	1		06/27/18 15:42	563-58-6	
sis-1,3-Dichloropropene	<0.20	ug/L	0.68	0.20	1		06/27/18 15:42		
rans-1,3-Dichloropropene	<0.18	ug/L	0.61	0.18	1		06/27/18 15:42		
Diethyl ether (Ethyl ether)	<0.095	ug/L	0.32	0.095	1		06/27/18 15:42		
Ethylbenzene	<0.14	ug/L	0.46	0.14	1		06/27/18 15:42		
Hexachloro-1,3-butadiene	<0.31	ug/L	1.0	0.14	1		06/27/18 15:42		
sopropylbenzene (Cumene)	<0.18	ug/L ug/L	0.62	0.31	1		06/27/18 15:42		
o-Isopropyltoluene	<0.15	ug/L ug/L	0.62	0.15	1		06/27/18 15:42		
Methylene Chloride		-		0.13	1		06/27/18 15:42		
VIEUTYIETTE CHIOHUE	<0.98	ug/L	3.3	0.90	1		00/21/10 13:42	13-09-2	



ANALYTICAL RESULTS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

 Sample: Trip Blank
 Lab ID: 10436863012
 Collected: 06/21/18 00:00
 Received: 06/22/18 20:00
 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260B VOC	Analytical	Method: EPA	A 8260B						
Methyl-tert-butyl ether	<0.16	ug/L	0.54	0.16	1		06/27/18 15:42	1634-04-4	
Naphthalene	<0.48	ug/L	1.6	0.48	1		06/27/18 15:42	91-20-3	
n-Propylbenzene	<0.10	ug/L	0.34	0.10	1		06/27/18 15:42	103-65-1	
Styrene	<0.19	ug/L	0.62	0.19	1		06/27/18 15:42	100-42-5	
1,1,1,2-Tetrachloroethane	<0.20	ug/L	0.65	0.20	1		06/27/18 15:42	630-20-6	
1,1,2,2-Tetrachloroethane	<0.17	ug/L	0.57	0.17	1		06/27/18 15:42	79-34-5	
Tetrachloroethene	<0.17	ug/L	0.57	0.17	1		06/27/18 15:42	127-18-4	
Tetrahydrofuran	<2.2	ug/L	7.4	2.2	1		06/27/18 15:42	109-99-9	
Toluene	<0.083	ug/L	0.28	0.083	1		06/27/18 15:42	108-88-3	
1,2,3-Trichlorobenzene	<0.21	ug/L	0.69	0.21	1		06/27/18 15:42	87-61-6	
1,2,4-Trichlorobenzene	<0.20	ug/L	0.66	0.20	1		06/27/18 15:42	120-82-1	
1,1,1-Trichloroethane	<0.14	ug/L	0.45	0.14	1		06/27/18 15:42	71-55-6	
1,1,2-Trichloroethane	<0.18	ug/L	0.60	0.18	1		06/27/18 15:42	79-00-5	
Trichloroethene	<0.15	ug/L	0.50	0.15	1		06/27/18 15:42	79-01-6	
Trichlorofluoromethane	<0.23	ug/L	0.77	0.23	1		06/27/18 15:42	75-69-4	
1,2,3-Trichloropropane	<0.26	ug/L	0.86	0.26	1		06/27/18 15:42	96-18-4	
1,1,2-Trichlorotrifluoroethane	<0.22	ug/L	0.72	0.22	1		06/27/18 15:42	76-13-1	
1,2,4-Trimethylbenzene	<0.20	ug/L	0.65	0.20	1		06/27/18 15:42	95-63-6	
1,3,5-Trimethylbenzene	<0.12	ug/L	0.41	0.12	1		06/27/18 15:42	108-67-8	
Vinyl chloride	<0.092	ug/L	0.31	0.092	1		06/27/18 15:42	75-01-4	
Xylene (Total) Surrogates	<0.31	ug/L	1.0	0.31	1		06/27/18 15:42	1330-20-7	
1,2-Dichloroethane-d4 (S)	100	%.	75-125		1		06/27/18 15:42	17060-07-0	
Toluene-d8 (S)	98	%.	75-125		1		06/27/18 15:42	2037-26-5	
4-Bromofluorobenzene (S)	96	%.	75-125		1		06/27/18 15:42	460-00-4	



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Sample: MeOH Trip Blank Lab ID: 10436863013 Collected: 06/21/18 00:00 Received: 06/22/18 20:00 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV Med Level Normal List	Analytical	Method: EPA	A 8260 Prepar	ration Meth	od: EP/	A 5035/5030B			
1,1,1-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	71-55-6	W
1,1,2,2-Tetrachloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	79-34-5	W
1,1,2-Trichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	79-00-5	W
1,1-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	75-34-3	W
1,1-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	75-35-4	W
1,2-Dichloroethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	107-06-2	W
1,2-Dichloropropane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	78-87-5	W
2-Butanone (MEK)	<107	ug/kg	250	107	1	06/28/18 11:30	06/28/18 17:17	78-93-3	W
2-Hexanone	<52.0	ug/kg	250	52.0	1	06/28/18 11:30	06/28/18 17:17	591-78-6	W
4-Methyl-2-pentanone (MIBK)	<41.1	ug/kg	250	41.1	1	06/28/18 11:30	06/28/18 17:17	108-10-1	W
Acetone	<77.8	ug/kg	250	77.8	1	06/28/18 11:30	06/28/18 17:17	67-64-1	W
Benzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	71-43-2	W
Bromodichloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	75-27-4	W
Bromoform	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	75-25-2	W
Bromomethane	<69.9	ug/kg	250	69.9	1	06/28/18 11:30	06/28/18 17:17	74-83-9	W
Carbon disulfide	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	75-15-0	W
Carbon tetrachloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	56-23-5	W
Chlorobenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	108-90-7	W
Chloroethane	<67.0	ug/kg	250	67.0	1	06/28/18 11:30	06/28/18 17:17	75-00-3	W
Chloroform	<46.4	ug/kg	250	46.4	1	06/28/18 11:30	06/28/18 17:17	67-66-3	W
Chloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	74-87-3	W
Dibromochloromethane	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	124-48-1	W
Ethylbenzene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	100-41-4	W
Methyl-tert-butyl ether	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	1634-04-4	W
Methylene Chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	75-09-2	W
Styrene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	100-42-5	W
Tetrachloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	127-18-4	W
Toluene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	108-88-3	W
Trichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	79-01-6	W
Vinyl chloride	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	75-01-4	W
cis-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	156-59-2	W
cis-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	10061-01-5	W
m&p-Xylene	<50.0	ug/kg	120	50.0	1	06/28/18 11:30	06/28/18 17:17	179601-23-1	W
o-Xylene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	95-47-6	W
trans-1,2-Dichloroethene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	156-60-5	W
trans-1,3-Dichloropropene	<25.0	ug/kg	60.0	25.0	1	06/28/18 11:30	06/28/18 17:17	10061-02-6	W
Surrogates		0 0							
Dibromofluoromethane (S)	110	%	57-148		1	06/28/18 11:30	06/28/18 17:17	1868-53-7	
Toluene-d8 (S)	102	%	58-142		1	06/28/18 11:30	06/28/18 17:17	2037-26-5	
4-Bromofluorobenzene (S)	94	%	48-130		1	06/28/18 11:30	06/28/18 17:17	460-00-4	



QUALITY CONTROL DATA

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

QC Batch: 546627 Analysis Method: EPA 7471B

QC Batch Method: EPA 7471B Analysis Description: 7471B Mercury Solids

Associated Lab Samples: 10436863001, 10436863002, 10436863003, 10436863004, 10436863005, 10436863006, 10436863007,

10436863008, 10436863009, 10436863010

METHOD BLANK: 2972710 Matrix: Solid

Associated Lab Samples: 10436863001, 10436863002, 10436863003, 10436863004, 10436863005, 10436863006, 10436863007,

10436863008, 10436863009, 10436863010

Blank Reporting

Parameter Units Result Limit Analyzed Qualifiers

Mercury mg/kg <0.0080 0.027 06/28/18 17:42

LABORATORY CONTROL SAMPLE: 2972711

Spike LCS LCS % Rec

Parameter Units Conc. Result % Rec Limits Qualifiers

Mercury mg/kg .47 0.46 98 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2972712 2972713 MS MSD

MSD 10436863001 Spike Spike MS MS MSD % Rec Max RPD RPD Parameter Units Result Conc. Result Result % Rec % Rec Limits Conc. Qual Mercury 0.023J .62 .62 0.63 0.64 97 75-125 20 mg/kg

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

QC Batch: 546886 Analysis Method: EPA 6010D
QC Batch Method: EPA 3050 Analysis Description: 6010D Solids

Associated Lab Samples: 10436863001, 10436863002, 10436863003, 10436863004, 10436863005, 10436863006, 10436863007,

10436863008, 10436863009, 10436863010

METHOD BLANK: 2973660 Matrix: Solid

Associated Lab Samples: 10436863001, 10436863002, 10436863003, 10436863004, 10436863005, 10436863006, 10436863007,

10436863008, 10436863009, 10436863010

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Arsenic	mg/kg	<0.35	1.2	06/27/18 06:51	
Barium	mg/kg	<0.18	0.60	06/27/18 06:51	
Cadmium	mg/kg	< 0.054	0.18	06/27/18 06:51	
Chromium	mg/kg	<0.22	0.74	06/27/18 06:51	
Lead	mg/kg	< 0.23	0.77	06/27/18 06:51	
Selenium	mg/kg	< 0.40	1.3	06/27/18 06:51	
Silver	mg/kg	<0.082	0.27	06/27/18 06:51	

LABORATORY CONTROL SAMPLE:	2973661					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Arsenic	mg/kg	50	48.7	97	80-120	
Barium	mg/kg	50	51.9	104	80-120	
Cadmium	mg/kg	50	50.8	102	80-120	
Chromium	mg/kg	50	52.0	104	80-120	
Lead	mg/kg	50	51.9	104	80-120	
Selenium	mg/kg	50	47.4	95	80-120	
Silver	mg/kg	25	25.0	100	80-120	

MATRIX SPIKE & MATRIX S	PIKE DUPLICA	TE: 29736	62		2973663							
Parameter	10 Units	0436863001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/kg	3.1	67.7	67.7	50.0	54.7	69	76	75-125	9	20	M1
Barium	mg/kg	245	67.7	67.7	326	284	119	57	75-125	14	20	M1
Cadmium	mg/kg	< 0.075	67.7	67.7	50.8	55.8	75	82	75-125	9	20	
Chromium	mg/kg	49.6	67.7	67.7	113	123	94	108	75-125	8	20	
Lead	mg/kg	10.5	67.7	67.7	70.8	78.8	89	101	75-125	11	20	
Selenium	mg/kg	0.56J	67.7	67.7	45.5	48.9	66	71	75-125	7	20	M1
Silver	mg/kg	<0.11	33.9	33.9	24.4	27.0	72	80	75-125	10	20	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700



QUALITY CONTROL DATA

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

QC Batch: 547426 Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974 Analysis Description: Dry Weight / %M by ASTM D2974

Associated Lab Samples: 10436863001, 10436863002, 10436863003, 10436863004, 10436863005, 10436863006, 10436863007,

10436863008, 10436863009, 10436863010

SAMPLE DUPLICATE: 2975910

 Parameter
 Units
 10436863001 Result
 Dup Result
 Max RPD
 RPD
 Qualifiers

 Percent Moisture
 %
 27.6
 27.4
 1
 30

SAMPLE DUPLICATE: 2975911

Date: 07/03/2018 03:29 PM

		10436863010	Dup		Max	
Parameter	Units	Result	Result	RPD	RPD	Qualifiers
Percent Moisture	%	28.1	28.4	1	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

QC Batch: 293184 Analysis Method: EPA 8260

QC Batch Method: EPA 5035/5030B Analysis Description: 8260 MSV Med Level Normal List

Associated Lab Samples: 10436863001, 10436863002, 10436863003, 10436863004, 10436863005, 10436863006, 10436863007,

10436863008, 10436863009, 10436863010, 10436863013

METHOD BLANK: 1714466 Matrix: Solid

Associated Lab Samples: 10436863001, 10436863002, 10436863003, 10436863004, 10436863005, 10436863006, 10436863007,

10436863008, 10436863009, 10436863010, 10436863013

Parameter Units Result Limit Analyzed Qualifiers
1,1,1-Trichloroethane
1,1,2,2-Tetrachloroethane ug/kg <17.5
1,1,2-Trichloroethane ug/kg <20.2
1,1-Dichloroethane ug/kg <17.6
1,1-Dichloroethene ug/kg <17.6
1,2-Dichloroethane ug/kg <15.0
1,2-Dichloropropane ug/kg <16.8
2-Butanone (MEK) ug/kg <124
2-Hexanone ug/kg <52.0
4-Methyl-2-pentanone (MIBK) ug/kg <41.1
Acetone ug/kg <98.6 250 06/28/18 15:01 Benzene ug/kg <9.2
Benzene ug/kg <9.2
Bromodichloromethane ug/kg <9.8 50.0 06/28/18 15:01 Bromoform ug/kg <19.8
Bromoform ug/kg <19.8 50.0 06/28/18 15:01 Bromomethane ug/kg <69.9
Bromomethane ug/kg <69.9
Carbon disulfide ug/kg <11.1
Carbon tetrachloride ug/kg <12.1
Chlorobenzene ug/kg <14.8 50.0 06/28/18 15:01 Chloroethane ug/kg <67.0
Chloroethane ug/kg <67.0 250 06/28/18 15:01 Chloroform ug/kg <46.4
Chloroform ug/kg <46.4 250 06/28/18 15:01 Chloromethane ug/kg <20.4
Chloromethane ug/kg <20.4 50.0 06/28/18 15:01 cis-1,2-Dichloroethene ug/kg <16.6
cis-1,2-Dichloroethene ug/kg <16.6 50.0 06/28/18 15:01
Dibromochloromethane ug/kg <17.9 50.0 06/28/18 15:01
Ethylbenzene ug/kg <12.4 50.0 06/28/18 15:01
m&p-Xylene ug/kg <34.4 100 06/28/18 15:01
Methyl-tert-butyl ether ug/kg <12.7 50.0 06/28/18 15:01
Methylene Chloride ug/kg <16.2 50.0 06/28/18 15:01
o-Xylene ug/kg <14.0 50.0 06/28/18 15:01
Styrene ug/kg <9.0 50.0 06/28/18 15:01
Tetrachloroethene ug/kg <12.9 50.0 06/28/18 15:01
Toluene ug/kg <11.2 50.0 06/28/18 15:01
trans-1,2-Dichloroethene ug/kg <16.5 50.0 06/28/18 15:01
trans-1,3-Dichloropropene ug/kg <14.4 50.0 06/28/18 15:01
Trichloroethene ug/kg <23.6 50.0 06/28/18 15:01
Vinyl chloride ug/kg <21.1 50.0 06/28/18 15:01
4-Bromofluorobenzene (S) % 93 48-130 06/28/18 15:01
Dibromofluoromethane (S)
Toluene-d8 (S) % 107 58-142 06/28/18 15:01

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Parameter Units Spike LCS Result W Rec Limits Qualifiers
ichloroethane ug/kg 2500 2590 104 70-130 Tetrachloroethane ug/kg 2500 2840 114 68-130 ichloroethane ug/kg 2500 2610 104 70-130 illoroethane ug/kg 2500 2550 102 67-132 illoroethane ug/kg 2500 2550 102 67-132 illoroethane ug/kg 2500 2740 110 67-128 illoroethane ug/kg 2500 2500 100 65-137 illoropropane ug/kg 2500 2820 113 75-126 illoropropane ug/kg 2500 2820 113 75-126 illoromethane ug/kg 2500 2470 99 70-130 illoromethane ug/kg 2500 2750 110 70-130 illoromethane ug/kg 2500 2750 110 70-130 illoromethane ug/kg 2500 2310 92 57-117 inethane ug/kg 2500 2360 94 48-135 illoromethane ug/kg 2500 2580 103 66-143 illoromethane ug/kg 2500 2580 103 66-143 illoromethane ug/kg 2500 2580 106 65-133 illoromethane ug/kg 2500 2590 103 70-130
Tetrachloroethane ug/kg 2500 2840 114 68-130 ichloroethane ug/kg 2500 2610 104 70-130 ichloroethane ug/kg 2500 2550 102 67-132 ichloroethane ug/kg 2500 2550 102 67-132 ichloroethane ug/kg 2500 2740 110 67-128 ichloroethane ug/kg 2500 2500 100 65-137 ichloropropane ug/kg 2500 2820 113 75-126 ichloromethane ug/kg 2500 2470 99 70-130 ichloromethane ug/kg 2500 2750 110 70-130 ichloromethane ug/kg 2500 2750 110 70-130 ichloromethane ug/kg 2500 2310 92 57-117 ichloromethane ug/kg 2500 2360 94 48-135 ichloromethane ug/kg 2500 2580 103 66-143 ichloride ug/kg 2500 2500 106 65-133 ichloride ug/kg 2500 2590 103 70-130 ichloride ug/kg 2500 2590
dichloroethane ug/kg 2500 2610 104 70-130 nloroethane ug/kg 2500 2550 102 67-132 nloroethene ug/kg 2500 2740 110 67-128 nloroethane ug/kg 2500 2500 100 65-137 nloropropane ug/kg 2500 2820 113 75-126 e ug/kg 2500 2470 99 70-130 lichloromethane ug/kg 2500 2750 110 70-130 orm ug/kg 2500 2310 92 57-117 nethane ug/kg 2500 2360 94 48-135 disulfide ug/kg 2500 2580 103 66-143 tetrachloride ug/kg 2500 2650 106 65-133 eenzene ug/kg 2500 2590 103 70-130
Alloroethane ug/kg 2500 2550 102 67-132 1010 1010 1010 1010 1010 1010 1010 1
Alloroethene ug/kg 2500 2740 110 67-128 and oroethane ug/kg 2500 2500 100 65-137 and oroethane ug/kg 2500 2820 113 75-126 and oropropane ug/kg 2500 2820 113 75-126 and oronged ug/kg 2500 2470 99 70-130 and oronged ug/kg 2500 2750 110 70-130 and oronged ug/kg 2500 2310 92 57-117 and oronged ug/kg 2500 2360 94 48-135 and oronged ug/kg 2500 2580 103 66-143 and oronged ug/kg 2500 2500 106 65-133 and oronged ug/kg 2500 2590 103 70-130 and oronged ug/kg 2500 2590 103 70-130
Alloroethane ug/kg 2500 2500 100 65-137 100 65-137 1000 1000 10000 10000 1000 1000 1000
nloropropane ug/kg 2500 2820 113 75-126 e ug/kg 2500 2470 99 70-130 lichloromethane ug/kg 2500 2750 110 70-130 orm ug/kg 2500 2310 92 57-117 nethane ug/kg 2500 2360 94 48-135 disulfide ug/kg 2500 2580 103 66-143 tetrachloride ug/kg 2500 2650 106 65-133 eenzene ug/kg 2500 2590 103 70-130
e ug/kg 2500 2470 99 70-130 iichloromethane ug/kg 2500 2750 110 70-130 prm ug/kg 2500 2310 92 57-117 nethane ug/kg 2500 2360 94 48-135 disulfide ug/kg 2500 2580 103 66-143 tetrachloride ug/kg 2500 2590 106 65-133 ienzene ug/kg 2500 2590 103 70-130
dischloromethane ug/kg 2500 2750 110 70-130 orm ug/kg 2500 2310 92 57-117 nethane ug/kg 2500 2360 94 48-135 disulfide ug/kg 2500 2580 103 66-143 tetrachloride ug/kg 2500 2650 106 65-133 eenzene ug/kg 2500 2590 103 70-130
brm ug/kg 2500 2310 92 57-117 hethane ug/kg 2500 2360 94 48-135 disulfide ug/kg 2500 2580 103 66-143 tetrachloride ug/kg 2500 2650 106 65-133 henzene ug/kg 2500 2590 103 70-130
nethane ug/kg 2500 2360 94 48-135 disulfide ug/kg 2500 2580 103 66-143 tetrachloride ug/kg 2500 2650 106 65-133 enzene ug/kg 2500 2590 103 70-130
disulfide ug/kg 2500 2580 103 66-143 tetrachloride ug/kg 2500 2650 106 65-133 enzene ug/kg 2500 2590 103 70-130
tetrachloride ug/kg 2500 2650 106 65-133 enzene ug/kg 2500 2590 103 70-130
enzene ug/kg 2500 2590 103 70-130
thane ug/kg 2500 2500 100 37-165
orm ug/kg 2500 2530 101 72-126
nethane ug/kg 2500 1960 78 34-120
Dichloroethene ug/kg 2500 2430 97 70-130
Dichloropropene ug/kg 2500 2700 108 69-130
ochloromethane ug/kg 2500 2610 104 68-130
nzene ug/kg 2500 2630 105 79-121
rlene ug/kg 5000 5260 105 70-130
tert-butyl ether ug/kg 2500 2370 95 66-129
ne Chloride ug/kg 2500 2580 103 68-129
e ug/kg 2500 2670 107 70-130
ug/kg 2500 2660 107 70-130
oroethene ug/kg 2500 2630 105 70-130
ug/kg 2500 2660 106 80-123
2-Dichloroethene ug/kg 2500 2540 102 70-130
3-Dichloropropene ug/kg 2500 2290 91 67-130
pethene ug/kg 2500 2720 109 70-130
loride ug/kg 2500 2080 83 52-122
ofluorobenzene (S)
ofluoromethane (S) % 105 57-148
-d8 (S) % 101 58-142

MATRIX SPIKE & MATRIX SP	IKE DUPLIC	ATE: 17144	68		1714469							
		10436863004	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
1,1,1-Trichloroethane	ug/kg		1660	1660	1500	1440	90	87	62-130	4	20	
1,1,2,2-Tetrachloroethane	ug/kg	<25.0	1660	1660	1670	1550	101	94	64-137	7	20	
1,1,2-Trichloroethane	ug/kg	<25.0	1660	1660	1650	1520	100	92	70-130	8	20	
1,1-Dichloroethane	ug/kg	<25.0	1660	1660	1590	1510	96	91	65-132	5	20	
1,1-Dichloroethene	ug/kg	<25.0	1660	1660	1460	1410	88	85	50-128	4	21	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

MATRIX SPIKE & MATRIX SP	IKE DUPLICA	ATE: 17144	88		1714469							
Parameter	1 Units	0436863004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qua
1,2-Dichloroethane	ug/kg	<25.0	1660	1660	1670	1570	101	95	65-139	6	20	
1,2-Dichloropropane	ug/kg	<25.0	1660	1660	1790	1660	108	100	74-128	8	20	
Benzene	ug/kg	<25.0	1660	1660	1550	1470	93	89	66-132	5	20	
Bromodichloromethane	ug/kg	<25.0	1660	1660	1710	1650	103	99	69-130	4	20	
Bromoform	ug/kg	<25.0	1660	1660	1600	1550	97	94	57-130	3	20	
Bromomethane	ug/kg	<69.9	1660	1660	1330	1250	80	75	34-145	6	20	
Carbon disulfide	ug/kg	<25.0	1660	1660	1320	1270	80	77	48-143	4	20	
Carbon tetrachloride	ug/kg	<25.0	1660	1660	1480	1460	90	88	54-133	2	20	
Chlorobenzene	ug/kg	<25.0	1660	1660	1670	1590	101	96	70-130	5	20	
Chloroethane	ug/kg	<67.0	1660	1660	1370	1360	83	82	33-165	1	20	
Chloroform	ug/kg	<46.4	1660	1660	1650	1570	99	95	72-128	5	20	
Chloromethane	ug/kg	<25.0	1660	1660	836	777	50	47	20-120	7	20	
sis-1,2-Dichloroethene	ug/kg	<25.0	1660	1660	1620	1480	98	90	69-130	9	20	
cis-1,3-Dichloropropene	ug/kg	<25.0	1660	1660	1620	1500	98	91	65-130	7	20	
Dibromochloromethane	ug/kg	<25.0	1660	1660	1620	1460	98	88	65-130	10	20	
Ethylbenzene	ug/kg	<25.0	1660	1660	1590	1480	96	90	63-127	7	20	
n&p-Xylene	ug/kg	<50.0	3310	3310	3250	3100	98	94	70-130	5	20	
Methyl-tert-butyl ether	ug/kg	<25.0	1660	1660	1480	1390	89	84	62-135	6	20	
Methylene Chloride	ug/kg	<25.0	1660	1660	1670	1560	101	94	68-129	7	20	
o-Xylene	ug/kg	<25.0	1660	1660	1620	1530	98	92	69-130	6	20	
Styrene	ug/kg	<25.0	1660	1660	1720	1580	104	96	70-130	8	20	
Tetrachloroethene	ug/kg	<25.0	1660	1660	1570	1540	95	93	70-130	2	20	
Toluene	ug/kg	<25.0	1660	1660	1680	1580	102	95	80-123	6	20	
rans-1,2-Dichloroethene	ug/kg	<25.0	1660	1660	1590	1420	96	86	70-130	11	20	
rans-1,3-Dichloropropene	ug/kg	<25.0	1660	1660	1460	1370	88	83	67-130	6	20	
Frichloroethene	ug/kg	<25.0	1660	1660	1640	1590	99	96	70-130	3	20	
/inyl chloride	ug/kg	<25.0	1660	1660	928	899	56	54	39-122	3	20	
I-Bromofluorobenzene (S)	%						97	90	48-130			
Dibromofluoromethane (S)	%						106	100	57-148			
Toluene-d8 (S)	%						102	96	58-142			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

QC Batch: 547301 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV 465 W

Associated Lab Samples: 10436863011, 10436863012

METHOD BLANK: 2975400 Matrix: Water

Associated Lab Samples: 10436863011, 10436863012

1,1,1,2-Tetrachloroethane	Parameter Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane ug/L <0.14	1,1,1,2-Tetrachloroethane	ug/L	<0.20	0.65	06/27/18 12:47	
1,1,2-Trichloroethane ug/L <0.18	1,1,1-Trichloroethane		< 0.14	0.45	06/27/18 12:47	
1,1,2-Trichloroethane ug/L <0.18	1,1,2,2-Tetrachloroethane	ug/L	< 0.17	0.57	06/27/18 12:47	
1,1,2-Trichlorotrifluoroethane ug/L <0.17	1,1,2-Trichloroethane		<0.18	0.60	06/27/18 12:47	
1,1-Dichloroethene ug/L <0.16 0.53 06/27/18 12:47 1,1-Dichloropropene ug/L <0.20	1,1,2-Trichlorotrifluoroethane		< 0.22	0.72	06/27/18 12:47	
1,1-Dichloropropene ug/L <0.20	1,1-Dichloroethane	ug/L	< 0.17	0.57	06/27/18 12:47	
1,2,3-Trichlorobenzene ug/L	1,1-Dichloroethene	ug/L	<0.16	0.53	06/27/18 12:47	
1,2,3-Trichloropropane ug/L <0.26	1,1-Dichloropropene	ug/L	< 0.20	0.66	06/27/18 12:47	
1,2,4-Trichlorobenzene ug/L <0.20	1,2,3-Trichlorobenzene	ug/L	<0.21	0.69	06/27/18 12:47	
1,2,4-Trimethylbenzene ug/L <0.20	1,2,3-Trichloropropane	ug/L	< 0.26	0.86	06/27/18 12:47	
1,2-Dibromo-3-chloropropane ug/L <1.7	1,2,4-Trichlorobenzene	ug/L	< 0.20	0.66	06/27/18 12:47	
1,2-Dibromoethane (EDB) ug/L <0.24	1,2,4-Trimethylbenzene	ug/L	< 0.20	0.65	06/27/18 12:47	
1,2-Dichlorobenzene ug/L <0.14	1,2-Dibromo-3-chloropropane	ug/L	<1.7	5.5	06/27/18 12:47	
1,2-Dichloroethane ug/L <0.22	1,2-Dibromoethane (EDB)	ug/L	< 0.24	0.80	06/27/18 12:47	
1,2-Dichloropropane ug/L <0.16	1,2-Dichlorobenzene	ug/L	< 0.14	0.46	06/27/18 12:47	
1,3,5-Trimethylbenzene ug/L <0.12	1,2-Dichloroethane	ug/L	< 0.22	0.73	06/27/18 12:47	
1,3-Dichlorobenzene ug/L <0.16	1,2-Dichloropropane	ug/L	<0.16	0.55	06/27/18 12:47	
1,3-Dichloropropane ug/L <0.070	1,3,5-Trimethylbenzene	ug/L	< 0.12	0.41	06/27/18 12:47	
1,4-Dichlorobenzene ug/L <0.17	1,3-Dichlorobenzene	ug/L	<0.16	0.54	06/27/18 12:47	
2,2-Dichloropropane ug/L <0.17	1,3-Dichloropropane	ug/L	< 0.070	0.23	06/27/18 12:47	
2-Butanone (MEK) ug/L <0.99	1,4-Dichlorobenzene	ug/L	< 0.17	0.56	06/27/18 12:47	
2-Chlorotoluene ug/L <0.16	2,2-Dichloropropane	ug/L	< 0.17	0.57	06/27/18 12:47	
4-Chlorotoluene ug/L <0.13	2-Butanone (MEK)	ug/L	< 0.99	3.3	06/27/18 12:47	
4-Methyl-2-pentanone (MIBK) ug/L <0.42	2-Chlorotoluene	ug/L	<0.16	0.54	06/27/18 12:47	
Acetone ug/L <9.2 30.8 06/27/18 12:47 Allyl chloride ug/L <0.29	4-Chlorotoluene	ug/L	< 0.13	0.45	06/27/18 12:47	
Allyl chloride ug/L <0.29 0.97 06/27/18 12:47 Benzene ug/L <0.10	4-Methyl-2-pentanone (MIBK)	ug/L	< 0.42	1.4	06/27/18 12:47	
Benzene ug/L <0.10 0.34 06/27/18 12:47 Bromobenzene ug/L <0.21	Acetone	ug/L	<9.2	30.8	06/27/18 12:47	
Bromobenzene ug/L <0.21 0.69 06/27/18 12:47 Bromochloromethane ug/L <0.27	Allyl chloride	ug/L	< 0.29	0.97	06/27/18 12:47	
Bromochloromethane ug/L <0.27 0.91 06/27/18 12:47 Bromodichloromethane ug/L <0.22	Benzene	ug/L	< 0.10	0.34	06/27/18 12:47	
Bromodichloromethane ug/L <0.22 0.72 06/27/18 12:47 Bromoform ug/L <0.80	Bromobenzene	ug/L	<0.21	0.69	06/27/18 12:47	
Bromoform ug/L <0.80 2.7 06/27/18 12:47 Bromomethane ug/L <1.8	Bromochloromethane	ug/L	< 0.27	0.91	06/27/18 12:47	
Bromomethane ug/L <1.8 6.1 06/27/18 12:47 Carbon tetrachloride ug/L <0.19	Bromodichloromethane	ug/L	< 0.22	0.72	06/27/18 12:47	
Carbon tetrachloride ug/L <0.19 0.63 06/27/18 12:47 Chlorobenzene ug/L <0.17	Bromoform	ug/L	<0.80	2.7	06/27/18 12:47	
Chlorobenzene ug/L <0.17 0.57 06/27/18 12:47 Chloroethane ug/L <0.49	Bromomethane	ug/L	<1.8	6.1	06/27/18 12:47	
Chloroethane ug/L <0.49 1.6 06/27/18 12:47 Chloroform ug/L <0.45	Carbon tetrachloride	ug/L	< 0.19	0.63	06/27/18 12:47	
Chloroform ug/L <0.45 1.5 06/27/18 12:47 Chloromethane ug/L <0.16	Chlorobenzene	ug/L	<0.17	0.57	06/27/18 12:47	
Chloromethane ug/L <0.16 0.52 06/27/18 12:47 cis-1,2-Dichloroethene ug/L <0.15	Chloroethane	ug/L	< 0.49	1.6	06/27/18 12:47	
cis-1,2-Dichloroethene ug/L <0.15 0.51 06/27/18 12:47	Chloroform	ug/L	< 0.45	1.5	06/27/18 12:47	
cis-1,2-Dichloroethene ug/L <0.15 0.51 06/27/18 12:47	Chloromethane	-	<0.16	0.52	06/27/18 12:47	
	cis-1,2-Dichloroethene		<0.15	0.51	06/27/18 12:47	
	cis-1,3-Dichloropropene	_	<0.20	0.68	06/27/18 12:47	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

METHOD BLANK: 2975400 Matrix: Water

Associated Lab Samples: 10436863011, 10436863012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dibromochloromethane	ug/L	<0.12	0.41	06/27/18 12:47	
Dibromomethane	ug/L	<0.16	0.54	06/27/18 12:47	
Dichlorodifluoromethane	ug/L	< 0.23	0.78	06/27/18 12:47	
Dichlorofluoromethane	ug/L	< 0.14	0.47	06/27/18 12:47	N2
Diethyl ether (Ethyl ether)	ug/L	< 0.095	0.32	06/27/18 12:47	
Ethylbenzene	ug/L	< 0.14	0.46	06/27/18 12:47	
Hexachloro-1,3-butadiene	ug/L	< 0.31	1.0	06/27/18 12:47	
Isopropylbenzene (Cumene)	ug/L	<0.18	0.62	06/27/18 12:47	
Methyl-tert-butyl ether	ug/L	<0.16	0.54	06/27/18 12:47	
Methylene Chloride	ug/L	< 0.98	3.3	06/27/18 12:47	
n-Butylbenzene	ug/L	< 0.24	0.80	06/27/18 12:47	
n-Propylbenzene	ug/L	<0.10	0.34	06/27/18 12:47	
Naphthalene	ug/L	< 0.48	1.6	06/27/18 12:47	
p-Isopropyltoluene	ug/L	<0.15	0.51	06/27/18 12:47	
sec-Butylbenzene	ug/L	<0.15	0.50	06/27/18 12:47	
Styrene	ug/L	<0.19	0.62	06/27/18 12:47	
tert-Butylbenzene	ug/L	<0.15	0.49	06/27/18 12:47	
Tetrachloroethene	ug/L	<0.17	0.57	06/27/18 12:47	
Tetrahydrofuran	ug/L	<2.2	7.4	06/27/18 12:47	
Toluene	ug/L	<0.083	0.28	06/27/18 12:47	
trans-1,2-Dichloroethene	ug/L	<0.12	0.39	06/27/18 12:47	
trans-1,3-Dichloropropene	ug/L	<0.18	0.61	06/27/18 12:47	
Trichloroethene	ug/L	<0.15	0.50	06/27/18 12:47	
Trichlorofluoromethane	ug/L	< 0.23	0.77	06/27/18 12:47	
Vinyl chloride	ug/L	< 0.092	0.31	06/27/18 12:47	
Xylene (Total)	ug/L	<0.31	1.0	06/27/18 12:47	
1,2-Dichloroethane-d4 (S)	%.	99	75-125	06/27/18 12:47	
4-Bromofluorobenzene (S)	%.	96	75-125	06/27/18 12:47	
Toluene-d8 (S)	%.	98	75-125	06/27/18 12:47	

LABORATORY CONTROL SAMPLE:	2975401					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	20	17.7	89	75-125	
1,1,1-Trichloroethane	ug/L	20	21.1	106	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	18.5	92	75-129	
1,1,2-Trichloroethane	ug/L	20	19.5	97	75-125	
1,1,2-Trichlorotrifluoroethane	ug/L	20	18.7	94	74-125	
1,1-Dichloroethane	ug/L	20	20.7	103	75-127	
1,1-Dichloroethene	ug/L	20	18.4	92	73-125	
1,1-Dichloropropene	ug/L	20	20.5	102	75-125	
1,2,3-Trichlorobenzene	ug/L	20	17.4	87	74-126	
1,2,3-Trichloropropane	ug/L	20	19.7	98	75-125	
1,2,4-Trichlorobenzene	ug/L	20	16.9	84	75-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Parameter Units Conc. Result % Rec Limits Qualifier 1,2,4-Trimethylbenzene ug/L 20	LABORATORY CONTROL SAMPLE:	2975401	Spike	LCS	LCS	% Rec
1.2-Dibromo-3-chloropropane ug/L 20	Parameter	Units				
1.2-Dibromo-3-chloropropane ug/L 20	1.2.4-Trimethylbenzene	ua/L		18.4	92	75-125
1.2-Dibriomoethane (EDB)	•					
1.2-Dichlorobenzene	• •	_				
2-Dichloroethane	, ,	_				
1,2-Dichloropropane	•	_				
1.3,5-Trimethylbenzene	· ·	_				
1,3-Dichlorobenzene		_				
1.3-Dichloropropane ug/L 20 19.5 98 75-125 1.4-Dichlorobenzene ug/L 20 18.1 91 75-125 2.2-Dichloropropane ug/L 20 21.0 105 70-125 2.2-Dichloropropane ug/L 20 21.0 105 70-125 2.2-Dichlorotoluene ug/L 20 18.0 90 75-125 2.C-Chlorotoluene ug/L 20 18.3 92 75-125 2.C-Chlorotoluene ug/L 100 103 103 69-137 3.C-Edello ug/L 100 103 103 69-137 3.C-Edello ug/L 20 18.5 93 32-150 3.C-Edello ug/L 20 18.5 93 32-150 3.C-Edello ug/L 20 19.6 98 75-126 3.C-Edello ug/L 20 19.6 98 75-126 3.C-Edello ug/L 20 20.0 100 75-125 3.C-Edello ug/L 20 20.0 100 75-126 3.C-Edello ug/L 20 19.3 96 75-126 3.C-Edello ug/L 20 19.3 96 75-125 3.C-Edello ug/L 20 17.0 85 67-125 3.C-Edello ug/L 20 17.0 85 67-125 3.C-Edello ug/L 20 18.0 90 75-125 3.C-Edello ug/L 20 18.0 90 75-125 3.C-Edello ug/L 20 18.0 90 75-125 3.C-Edello ug/L 20 19.8 99 75-125 3.C-Edello ug/L 20 19.8 99 75-125 3.C-Edello ug/L 20 19.8 99 75-125 3.C-Edello ug/L 20 19.7 99 75-125 3.C-Edello ug/L 20 19.7 99 75-125 3.C-Edello ug/L 20 19.7 99 75-125 3.C-Edello ug/L 20 19.5 97 75-125 3.C-Edello ug/L 20 17.6 88 75-125 3.C-Edello ug/L 20 17.6 88 75-125 3.C-Edello ug/L 20 19.5 97 75-125 3.C-Edello ug/L 20 19.5 97 75-125 3.C-Edello ug/L 20 19.5 97 75-125 3.C-Edello ug/L 20 19.6 98 75-125 3.C-Edello ug/L 20 19.6 98 75-125 3.C-Edello ug/L 20 19.6 98 75-125 3.C-Edello ug/L 20 19.6 98 75-125 3.C-Edello ug/L 20 19.6 98 75-125 3.C-Edello ug/L 20 19.6 98 75-125 3.C-Edello ug/L 20 19.6 98 75-125 3.C-Edello ug/L 20 19.6 98 75-125 3.C-Edello	The state of the s					
A-Dichlorobenzene ug/L 20	•	_				
2.2-Dichloropropane ug/L 20 21.0 105 70-125 2-Butanone (MEK) ug/L 100 106 106 57-130 2-Chlorotoluene ug/L 20 18.0 90 75-125 4-Chlorotoluene ug/L 20 18.3 92 75-125 4-Methyl-2-pentanone (MIBK) ug/L 100 103 103 69-137 Acetone ug/L 100 98.0 98 32-150 Allyl chloride ug/L 20 18.5 93 64-135 Senzene ug/L 20 19.6 98 75-126 Bromobenzene ug/L 20 20.0 100 75-125 Bromobloromethane ug/L 20 21.9 109 75-125 Bromobloromethane ug/L 20 19.3 96 75-125 Bromobloromethane ug/L 20 19.3 96 75-125 Bromobloromethane ug/L 20 14.1		_				
2-Butanone (MEK) ug/L 100 106 106 57-130 2-Chiorotoluene ug/L 20 18.0 90 75-125 1-Chiorotoluene ug/L 20 18.3 92 75-125 1-Methyl-2-pentanone (MIBK) ug/L 100 103 103 69-137 Acetone ug/L 100 98.0 98 32-150 I-Methyl-2-pentanone (MIBK) ug/L 20 18.5 93 64-135 Benzene ug/L 20 19.6 98 75-126 Benzene ug/L 20 19.6 98 75-126 Bromobenzene ug/L 20 20.0 100 75-125 Bromodichloromethane ug/L 20 19.3 96 75-125 Bromodichloromethane ug/L 20 19.3 96 75-125 Bromodichloromethane ug/L 20 19.3 96 75-125 Bromodichloromethane ug/L 20 19.3 96 75-125 Bromodichloromethane ug/L 20 19.3 96 75-125 Bromodichloromethane ug/L 20 19.3 96 75-125 Bromodichloromethane ug/L 20 19.3 96 75-125 Bromodichloromethane ug/L 20 19.3 96 75-125 Bromodichloromethane ug/L 20 19.3 96 75-125 Bromodichloromethane ug/L 20 18.0 90 75-125 Bromodichloromethane ug/L 20 18.0 90 75-125 Chlorotobenzene ug/L 20 18.0 90 75-125 Chlorotomethane ug/L 20 18.0 90 75-125 Chlorotomethane ug/L 20 19.8 99 75-125 Chlorotomethane ug/L 20 19.7 99 75-125 Chlorotomethane ug/L 20 16.1 81 64-142 Chlorotomethane ug/L 20 17.5 87 75-125 Chloromethane ug/L 20 17.5 87 75-125 Chloromethane ug/L 20 17.5 87 75-125 Chloromethane ug/L 20 17.5 87 75-125 Chloromethane ug/L 20 18.3 92 75-125 Chloromethane ug/L 20 18.3 92 75-125 Chloromethane ug/L 20 18.3 92 75-125 Chloromethane ug/L 20 18.3 92 75-125 Chloromethane ug/L 20 18.3 92 75-125 Chloromethane ug/L 20 18.3 92 75-125 Chloromethane ug/L 20 18.3 92 75-125 Chloromethane ug/L 20 18.3 92 75-125 Chloromethane ug/L 20 18.9 95 75-125 Chloromethane ug/L 20 18.9 95 75-125 Chloromethane ug/L 20 18.9 95 75-125 Chlorotofluoromethane ug/L 20 18.9 95 75-125 Chlorotofluoromethane ug/L 20 18.9 95 75-125 Chlorotofluoromethane ug/L 20 18.9 95 75-125 Chlorotofluoromethane ug/L 20 18.9 95 75-125 Chlorotofluoromethane ug/L 20 18.9 95 75-125 Chlorotofluoromethane ug/L 20 18.9 95 75-125 Chlorotofluoromethane ug/L 20 18.9 95 75-125 Chlorotofluoromethane ug/L 20 18.9 95 75-125 Chlorotofluoromethane ug/L 20 18.9 95 75-125 Chlorotofluoromethane ug/L 20 18.9 95 75-125 Chlorot		_				
P-Chlorotoluene ug/L 20 18.0 90 75-125 P-Chlorotoluene ug/L 20 18.3 92 75-125 P-Chlorotoluene ug/L 20 18.3 92 75-125 P-Chlorotoluene ug/L 100 103 103 69-137 P-Chlorotoluene ug/L 100 103 103 69-137 P-Chlorotoluene ug/L 100 103 103 69-137 P-Chlorotoluene ug/L 100 103 103 69-137 P-Chlorotoluene ug/L 20 18.5 93 64-135 P-Chlorotoluene ug/L 20 19.6 98 75-126 P-Chlorotene ug/L 20 20.0 100 75-125 P-Chlorotenene ug/L 20 20.0 100 75-125 P-Chlorotenene ug/L 20 21.9 109 75-126 P-Chlorotenene ug/L 20 19.3 96 75-125 P-Chlorotenene ug/L 20 17.0 85 67-125 P-Chlorotenene ug/L 20 14.1 71 30-150 P-C-Chlorotenene ug/L 20 18.0 90 75-125 P-C-Chlorotenene ug/L 20 18.0 90 75-125 P-C-Chlorotenene ug/L 20 18.0 90 75-125 P-C-Chlorotenene ug/L 20 19.8 99 75-125 P-C-Chlorotenene ug/L 20 19.7 99 75-125 P-C-Chlorotenene ug/L 20 19.7 99 75-125 P-C-Chlorotenene ug/L 20 19.7 99 75-125 P-C-Chlorotenene ug/L 20 19.7 99 75-125 P-C-Chlorotenene ug/L 20 19.7 99 75-125 P-C-Chlorotenene ug/L 20 19.7 99 75-125 P-C-Chlorotenene ug/L 20 19.7 99 75-125 P-C-Chlorotenene ug/L 20 19.7 99 75-125 P-C-Chlorotenene ug/L 20 19.7 99 75-125 P-C-Chlorotenene ug/L 20 19.5 97 75-125 P-C-Chlorotenene ug/L 20 19.5 97 75-125 P-C-Chlorotenene ug/L 20 19.5 97 75-125 P-C-Chlorotenene ug/L 20 19.5 97 75-125 P-C-Chlorotenene ug/L 20 19.5 97 75-125 P-C-Chlorotenene ug/L 20 19.5 97 75-125 P-C-Chlorotenene ug/L 20 19.5 97 75-125 P-C-Chlorotenenene ug/L 20 19.5 98 75-125 P-C-Chlorotenenene ug/L 20 19.5 98 75-125 P-C-Chlorotenenene ug/L 20 19.5 98 75-125 P-C-Chlorotenenene ug/L 20 19.5 98 75-125 P-C-Chlorotenenene ug/L 20 19.6 98 75-125 P-C-Chlorotenenene ug/L 20 19.6 98 75-125 P-C-Chlorotenenene ug/L 20 19.6 98 75-125 P-C-Chlorotenenene ug/L 20 19.6 98 75-125 P-C-Chlorotenenene ug/L 20 19.6 98 75-125 P-C-Chlorotenenene ug/L 20 19.6 98 75-125 P-C-Chlorotenenene ug/L 20 19.6 98 75-125 P-C-Chlorotenenene ug/L 20 19.6 98 75-125 P-C-Chlorotenenene ug/L 20 19.6 98 75-125 P-C-Chlorotenenene ug/L 20 19.6 98 75-125 P-C-Chlorotenenene ug/L 20 16.9 85 75-125 P-C-Chlorotenenene ug/L 20 16.9		_				
Chlorotoluene						
Healthyl-2-pentanone (MIBK)		_				
Acetone ug/L 100 98.0 98 32-150 Allyl chloride ug/L 20 18.5 93 64-135 Beazene ug/L 20 19.6 98 75-126 Bromobenzene ug/L 20 19.6 98 75-126 Bromochloromethane ug/L 20 20.0 100 75-125 Bromochloromethane ug/L 20 21.9 109 75-126 Bromochloromethane ug/L 20 19.3 96 75-125 Bromochloromethane ug/L 20 17.0 85 67-125 Bromomethane ug/L 20 14.1 71 30-150 Bromothane ug/L 20 18.0 90 75-125 Bromothane ug/L 20 18.0 90 75-125 Bromomethane ug/L 20 18.0 90 75-125 Bromothane ug/L 20 19.8 99 75-125 Chlorobenzene ug/L 20 19.8 99 75-125 Chlorothane ug/L 20 19.7 99 75-125 Chlorothane ug/L 20 19.7 99 75-125 Chlorothane ug/L 20 15.9 80 40-150 Chis-1,2-Dichlorothene ug/L 20 15.9 80 40-150 Cisis-1,2-Dichlorothene ug/L 20 17.5 87 75-125 Dibromochloromethane ug/L 20 17.6 88 75-125 Dibromochloromethane ug/L 20 19.5 97 75-125 Dibromochloromethane ug/L 20 19.5 97 75-125 Dibromochloromethane ug/L 20 19.5 97 75-125 Dibromochloromethane ug/L 20 19.5 97 75-125 Dibromochloromethane ug/L 20 19.5 97 75-125 Dibromochloromethane ug/L 20 19.5 97 75-125 Dibromochloromethane ug/L 20 19.5 97 75-125 Dibromochloromethane ug/L 20 19.5 97 75-125 Dibromochloromethane ug/L 20 19.5 97 75-125 Dibromochloromethane ug/L 20 19.5 97 75-125 Dibromochloromethane ug/L 20 19.5 97 75-125 Dibromochloromethane ug/L 20 19.5 98 75-125 Dibromochloromethane ug/L 20 19.5 98 75-125 Dibromochloromethane ug/L 20 19.5 98 75-125 Dibromochloromethane ug/L 20 19.5 98 75-125 Dibromochloromethane ug/L 20 19.5 98 75-125 Dibromochloromethane ug/L 20 19.5 98 75-125 Dibromochloromethane ug/L 20 19.6 98 75-125 Dibromochloromethane ug/L 20 19.9 99 72-125 Dibromochloromethane ug/L 20 19.6 98 75-125 Dibromochloromethane ug/L 20 19.6 98 75-125 Dibromochloromethane ug/L 20 16.9 85 65-126 Dibromochloromethane ug/L 20 16.9 85 75-125 Dibromochloromethane ug/L 20 16.9 85 75-125 Dibromochloromethane ug/L 20 16.9 85 75-125 Dibromochloromethane ug/L 20 16.9 85 75-125 Dibromochloromethane ug/L 20 16.9 85 75-125 Dibromochloromethane ug/L 20 16.9 85 75-125 Dibromochloromethane ug/L 20 16.9 85 75-125 Dibromochl		_				
Allyl chloride		_				
Senzene		_				
Bromobenzene ug/L 20 20.0 100 75-125 Bromochloromethane ug/L 20 21.9 109 75-126 Bromodichloromethane ug/L 20 19.3 96 75-125 Bromodichloromethane ug/L 20 17.0 85 67-125 Bromomethane ug/L 20 14.1 71 30-150 Carbon tetrachloride ug/L 20 18.0 90 75-125 Chlorobenzene ug/L 20 19.8 99 75-125 Chlorobenzene ug/L 20 19.8 99 75-125 Chloroform ug/L 20 19.7 99 75-125 Chloromethane ug/L 20 19.7 99 75-125 Chloromethane ug/L 20 15.9 80 40-150 cis-1,3-Dichloroptopene ug/L 20 17.5 87 75-125 Dibromochloromethane ug/L 20 17.6	-					
Bromochloromethane ug/L 20 21.9 109 75-126 Bromodichloromethane ug/L 20 19.3 96 75-125 Bromoform ug/L 20 17.0 85 67-125 Bromomethane ug/L 20 14.1 71 30-150 Carbon tetrachloride ug/L 20 18.0 90 75-125 Chlorobenzene ug/L 20 19.8 99 75-125 Chlorothane ug/L 20 19.8 99 75-125 Chloroform ug/L 20 19.7 99 75-125 Chloroform ug/L 20 19.7 99 75-125 Chloromethane ug/L 20 15.9 80 40-150 Cis-1,2-Dichloroptopene ug/L 20 17.5 87 75-125 Dibromomethane ug/L 20 17.5 88 75-125 Dichlorodifluoromethane ug/L 20 19.5 97 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>						
Second content Second color Se						
Stromoform Ug/L 20 17.0 85 67-125 17.0 17.		_				
Stromomethane Ug/L 20 14.1 71 30-150		_				
Carbon tetrachloride		_				
Chlorobenzene ug/L 20 19.8 99 75-125 Chloroethane ug/L 20 16.1 81 64-142 Chloroform ug/L 20 19.7 99 75-125 Chloromethane ug/L 20 15.9 80 40-150 Chloromethane ug/L 20 21.3 107 75-125 Dichloropfluoropropene ug/L 20 17.5 87 75-125 Dichloropfluoromethane ug/L 20 17.6 88 75-125 Dichlorodifluoromethane ug/L 20 19.5 97 75-125 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dicthyl ether (Ethyl ether) ug/L 20 18.3 92 75-129 N2 Dicthyl ether (Ethyl ether) ug/L 20 19.5 98 75-125 Ethylbenzene ug/L 20 18.9 95 75-125 Hexachloro-1,3-butadiene <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td>		_				
Chloroethane ug/L 20 16.1 81 64-142 Chloroform ug/L 20 19.7 99 75-125 Chloromethane ug/L 20 15.9 80 40-150 cis-1,2-Dichloroethene ug/L 20 21.3 107 75-125 cis-1,2-Dichloropropene ug/L 20 17.5 87 75-125 Dichloromethane ug/L 20 17.6 88 75-125 Dichlorodifluoromethane ug/L 20 19.5 97 75-125 Dichlorodifluoromethane ug/L 20 14.4 72 61-132 Dichlorofluoromethane ug/L 20 18.3 92 75-125 Dichlorofluoromethane ug/L 20 18.3 92 75-125 Dichlorofluoromethane ug/L 20 18.3 92 75-125 Dichlorofluoromethane ug/L 20 18.3 92 75-125 Dichlorofluoromethane ug/L 20 18.9 95 75-125 Ethylbenzene ug/L		_				
Chloroform ug/L 20 19.7 99 75-125 Chloromethane ug/L 20 15.9 80 40-150 cis-1,2-Dichloroethene ug/L 20 21.3 107 75-125 cis-1,3-Dichloropropene ug/L 20 17.5 87 75-125 Dichloromethane ug/L 20 17.6 88 75-125 Dichlorodifluoromethane ug/L 20 19.5 97 75-125 Dichlorodifluoromethane ug/L 20 14.4 72 61-132 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-125		_				
Chloromethane ug/L 20 15.9 80 40-150 cis-1,2-Dichloroethene ug/L 20 21.3 107 75-125 cis-1,3-Dichloropropene ug/L 20 17.5 87 75-125 Dibromochloromethane ug/L 20 17.6 88 75-125 Dibromomethane ug/L 20 19.5 97 75-125 Dichlorodifluoromethane ug/L 20 14.4 72 61-132 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 19.5 98 75-129 N2 Dichlorofluoromethane ug/L 20 19.5 98 75-125 Ethylbenzene ug/L 20 19.5 98 75-125 Ethylbenzene (Cumene) ug/L 20 18.9 95 75-125 Methyl-tert-butyl et		_				
cis-1,2-Dichloroethene ug/L 20 21.3 107 75-125 cis-1,3-Dichloropropene ug/L 20 17.5 87 75-125 Dibromochloromethane ug/L 20 17.6 88 75-125 Dibromomethane ug/L 20 19.5 97 75-125 Dichlorodifluoromethane ug/L 20 14.4 72 61-132 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 19.5 98 75-125 Dichlorofluoromethane ug/L 20 19.5 98 75-125 Hexachloro-1,3-butadiene ug/L 20 18.9 95 75-125 Soppropylbenzene (Cumene) ug/L 20 19.6 98 75-125						
cis-1,3-Dichloropropene ug/L 20 17.5 87 75-125 Dibromochloromethane ug/L 20 17.6 88 75-125 Dibromomethane ug/L 20 19.5 97 75-125 Dichlorodifluoromethane ug/L 20 14.4 72 61-132 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 19.5 98 75-125 N2 Dichlorofluoromethane ug/L 20 19.5 98 75-125 N2 Ethyllenzene ug/L 20 18.9 95 75-125 N5 N5 75-125 N5 N5 N5 75-125 N5 N6 N6 N6 75-125 N5 N5 N5 N5 N5 N5 N5 N5 N5 N5 N5		_				
Dibromochloromethane ug/L 20 17.6 88 75-125 Dibromomethane ug/L 20 19.5 97 75-125 Dichlorodifluoromethane ug/L 20 14.4 72 61-132 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 19.5 98 75-125 N2 Dichlorofluoromethane ug/L 20 19.5 98 75-125 N2 <t< td=""><td>-</td><td>_</td><td></td><td></td><td></td><td></td></t<>	-	_				
Dibromomethane ug/L 20 19.5 97 75-125 Dichlorodifluoromethane ug/L 20 14.4 72 61-132 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Dichlorofluoromethane ug/L 20 20.1 101 74-125 Dichlorofluoromethane ug/L 20 20.1 101 74-125 Dichlorofluoromethane ug/L 20 19.5 98 75-125 Ethylbenzene ug/L 20 18.9 95 75-125 Methylchorologous (Cumene) ug/L 20 19.6 98 75-125 Methylchert-butyl ether ug/L 20 19.9 99 72-125 Methylcher Chloride ug/L 20 19.9 99 72-125 m-Butylbenzene ug/L 20 16.8 84 75-125 m-Propylbenzene ug/L 20 18.4 92 75-125 Naphthalene		_				
Dichlorodifluoromethane ug/L 20 14.4 72 61-132 Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Diethyl ether (Ethyl ether) ug/L 20 20.1 101 74-125 Ethylbenzene ug/L 20 19.5 98 75-125 Ethylbenzene ug/L 20 18.9 95 75-125 Hexachloro-1,3-butadiene ug/L 20 18.9 95 75-125 sopropylbenzene (Cumene) ug/L 20 19.6 98 75-125 Methyl-tert-butyl ether ug/L 20 20.8 104 73-129 Methyl-tert-butyl ether ug/L 20 19.9 99 72-125 Methylene Chloride ug/L 20 19.9 99 72-125 n-Butylbenzene ug/L 20 16.8 84 75-125 Naphthalene ug/L 20 18.4 92 75-125 Naphthalene ug/L 20 16.9 85 75-125 Sec-Butylbenzene ug/L </td <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td>		_				
Dichlorofluoromethane ug/L 20 18.3 92 75-129 N2 Diethyl ether (Ethyl ether) ug/L 20 20.1 101 74-125 Ethylbenzene ug/L 20 19.5 98 75-125 Hexachloro-1,3-butadiene ug/L 20 18.9 95 75-125 sopropylbenzene (Cumene) ug/L 20 19.6 98 75-125 Methyl-tert-butyl ether ug/L 20 20.8 104 73-129 Methylene Chloride ug/L 20 19.9 99 72-125 n-Butylbenzene ug/L 20 16.8 84 75-125 n-Propylbenzene ug/L 20 18.4 92 75-125 Naphthalene ug/L 20 16.9 85 65-126 o-Isopropyltoluene ug/L 20 16.9 85 75-125 sec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125		_				
Diethyl ether (Ethyl ether) ug/L 20 20.1 101 74-125 Ethylbenzene ug/L 20 19.5 98 75-125 Hexachloro-1,3-butadiene ug/L 20 18.9 95 75-125 sopropylbenzene (Cumene) ug/L 20 19.6 98 75-125 Methyl-tert-butyl ether ug/L 20 20.8 104 73-129 Methylene Chloride ug/L 20 19.9 99 72-125 n-Butylbenzene ug/L 20 16.8 84 75-125 n-Propylbenzene ug/L 20 18.4 92 75-125 Naphthalene ug/L 20 16.9 85 65-126 o-Isopropyltoluene ug/L 20 16.9 85 75-125 sec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125		_				
Ethylbenzene ug/L 20 19.5 98 75-125 Hexachloro-1,3-butadiene ug/L 20 18.9 95 75-125 sopropylbenzene (Cumene) ug/L 20 19.6 98 75-125 Methyl-tert-butyl ether ug/L 20 20.8 104 73-129 Methylene Chloride ug/L 20 19.9 99 72-125 n-Butylbenzene ug/L 20 16.8 84 75-125 n-Propylbenzene ug/L 20 18.4 92 75-125 Naphthalene ug/L 20 16.9 85 65-126 p-Isopropyltoluene ug/L 20 16.9 85 75-125 sec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125		_				
Hexachloro-1,3-butadiene ug/L 20 18.9 95 75-125 sopropylbenzene (Cumene) ug/L 20 19.6 98 75-125 whethyl-tert-butyl ether ug/L 20 20.8 104 73-129 whethylene Chloride ug/L 20 19.9 99 72-125 m-Butylbenzene ug/L 20 16.8 84 75-125 m-Propylbenzene ug/L 20 18.4 92 75-125 whethylene Chloride ug/L 20 16.9 85 65-126 whethylene ug/L 20 16.9 85 75-125 whethylene ug/L 20 16.9 85 75-125 whethylene ug/L 20 16.9 85 75-125 whethylene ug/L 20 17.9 89 75-125 whethylene ug/L 20 19.6 98 75-125 whet		_				
sopropylbenzene (Cumene) ug/L 20 19.6 98 75-125 Methyl-tert-butyl ether ug/L 20 20.8 104 73-129 Methylene Chloride ug/L 20 19.9 99 72-125 n-Butylbenzene ug/L 20 16.8 84 75-125 n-Propylbenzene ug/L 20 18.4 92 75-125 Naphthalene ug/L 20 16.9 85 65-126 o-Isopropyltoluene ug/L 20 16.9 85 75-125 sec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125	•	_				
Methyl-tert-butyl ether ug/L 20 20.8 104 73-129 Methylene Chloride ug/L 20 19.9 99 72-125 n-Butylbenzene ug/L 20 16.8 84 75-125 n-Propylbenzene ug/L 20 18.4 92 75-125 Naphthalene ug/L 20 16.9 85 65-126 o-Isopropyltoluene ug/L 20 16.9 85 75-125 sec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125	The state of the s					
Wethylene Chloride ug/L 20 19.9 99 72-125 n-Butylbenzene ug/L 20 16.8 84 75-125 n-Propylbenzene ug/L 20 18.4 92 75-125 Naphthalene ug/L 20 16.9 85 65-126 o-Isopropyltoluene ug/L 20 16.9 85 75-125 sec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125						
n-Butylbenzene ug/L 20 16.8 84 75-125 n-Propylbenzene ug/L 20 18.4 92 75-125 Naphthalene ug/L 20 16.9 85 65-126 n-Isopropyltoluene ug/L 20 16.9 85 75-125 sec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125	,					
n-Propylbenzene ug/L 20 18.4 92 75-125 Naphthalene ug/L 20 16.9 85 65-126 D-Isopropyltoluene ug/L 20 16.9 85 75-125 Eec-Butylbenzene ug/L 20 17.9 89 75-125 Etyrene ug/L 20 19.6 98 75-125		_				
Naphthalene ug/L 20 16.9 85 65-126 b-Isopropyltoluene ug/L 20 16.9 85 75-125 bec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125		_				
o-Isopropyltoluene ug/L 20 16.9 85 75-125 eec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125						
sec-Butylbenzene ug/L 20 17.9 89 75-125 Styrene ug/L 20 19.6 98 75-125						
Styrene ug/L 20 19.6 98 75-125		_				
	-	_				
	ert-Butylbenzene	ug/L ug/L	20	18.3	98 92	75-125 75-125

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

LABORATORY CONTROL SAMPLE:	2975401					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Tetrachloroethene	ug/L		18.9	94	75-125	
Tetrahydrofuran	ug/L	200	206	103	30-150	
Toluene	ug/L	20	19.1	96	74-125	
trans-1,2-Dichloroethene	ug/L	20	19.9	99	70-126	
trans-1,3-Dichloropropene	ug/L	20	19.7	99	75-125	
Trichloroethene	ug/L	20	18.8	94	75-125	
Trichlorofluoromethane	ug/L	20	17.5	87	71-131	
Vinyl chloride	ug/L	20	18.1	90	65-137	
Xylene (Total)	ug/L	60	59.2	99	75-125	
1,2-Dichloroethane-d4 (S)	%.			101	75-125	
4-Bromofluorobenzene (S)	%.			96	75-125	
Toluene-d8 (S)	%.			100	75-125	

MATRIX SPIKE & MATRIX SPIK	KE DUPLIC	ATE: 297542	_		2975424						
		10436832003	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD Qual
1,1,1,2-Tetrachloroethane	ug/L	<1.0	20	20	8.5	5.7	43	28	69-130	41	30 M1,R1
1,1,1-Trichloroethane	ug/L	<1.0	20	20	10.4	6.8	52	34	72-133	42	30 M1,R1
1,1,2,2-Tetrachloroethane	ug/L	<1.0	20	20	8.4	5.8	42	29	60-137	37	30 M1,R1
1,1,2-Trichloroethane	ug/L	<1.0	20	20	9.3	6.4	46	32	70-128	36	30 M1,R1
1,1,2-Trichlorotrifluoroethane	ug/L	<1.0	20	20	7.6	4.9	38	24	64-147	43	30 M1,R1
1,1-Dichloroethane	ug/L	<1.0	20	20	10.3	7.0	52	35	64-136	38	30 M1,R1
1,1-Dichloroethene	ug/L	<1.0	20	20	9.5	6.4	47	32	67-139	39	30 M1,R1
1,1-Dichloropropene	ug/L	<1.0	20	20	9.7	6.0	48	30	69-131	47	30 M1,R1
1,2,3-Trichlorobenzene	ug/L	<1.0	20	20	6.5	3.9	32	20	60-138	49	30 M1,R1
1,2,3-Trichloropropane	ug/L	<4.0	20	20	9.3	6.1	46	31	67-129	41	30 M1,R1
1,2,4-Trichlorobenzene	ug/L	<1.0	20	20	6.3	4.0	32	20	71-125	45	30 M1,R1
1,2,4-Trimethylbenzene	ug/L	<1.0	20	20	8.1	4.9	40	24	67-130	49	30 M1,R1
1,2-Dibromo-3-	ug/L	<4.0	50	50	19.6	13.2	39	26	52-141	39	30 M1,R1
chloropropane	-										
1,2-Dibromoethane (EDB)	ug/L	<1.0	20	20	8.7	6.1	43	31	66-130		30 M1,R1
1,2-Dichlorobenzene	ug/L	<1.0	20	20	8.2	5.2	41	26	72-126		30 M1,R1
1,2-Dichloroethane	ug/L	<1.0	20	20	9.5	6.9	47	35	64-125		30 M1,R1
1,2-Dichloropropane	ug/L	<4.0	20	20	9.9	6.9	50	34	65-128	37	30 M1,R1
1,3,5-Trimethylbenzene	ug/L	<1.0	20	20	8.0	4.8	40	24	63-139	51	30 M1,R1
1,3-Dichlorobenzene	ug/L	<1.0	20	20	7.9	4.9	39	24	70-128	47	30 M1,R1
1,3-Dichloropropane	ug/L	<1.0	20	20	9.2	6.3	46	31	70-131	38	30 M1,R1
1,4-Dichlorobenzene	ug/L	<1.0	20	20	7.6	5.0	38	25	74-125	42	30 M1,R1
2,2-Dichloropropane	ug/L	<4.0	20	20	10.9	7.5	55	37	58-137	38	30 M1,R1
2-Butanone (MEK)	ug/L	<5.0	100	100	50.6	35.1	51	35	45-132	36	30 M1,R1
2-Chlorotoluene	ug/L	<1.0	20	20	8.2	5.0	41	25	66-134	48	30 M1,R1
4-Chlorotoluene	ug/L	<1.0	20	20	7.9	4.9	40	25	70-132	46	30 M1,R1
4-Methyl-2-pentanone (MIBK)	ug/L	<5.0	100	100	49.1	33.6	49	34	54-143	38	30 M1,R1
Acetone	ug/L	<20.0	100	100	45.6	36.4	46	36	51-150	23	30 M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

MATRIX SPIKE & MATRIX SPIR	KE DUPLICA	TE: 29754	23		2975424							
			MS	MSD								
	10	0436832003	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qua
Allyl chloride	ug/L	<4.0	20	20	8.9	6.7	45	34	52-150	28	30	M1
Benzene	ug/L	<1.0	20	20	9.7	6.6	48	32	62-140	38	30	M1,R
Bromobenzene	ug/L	<1.0	20	20	9.3	5.9	47	29	70-128	45	30	M1, F
Bromochloromethane	ug/L	<1.0	20	20	10.6	7.2	53	36	65-131	38	30	M1, F
Bromodichloromethane	ug/L	<1.0	20	20	9.0	6.2	45	31	74-127	37	30	M1, F
Bromoform	ug/L	<4.0	20	20	7.6	5.4	38	27	59-125	34	30	M1, F
Bromomethane	ug/L	<4.0	20	20	9.8	5.8J	49	29	30-149	52	30	M1, F
Carbon tetrachloride	ug/L	<1.0	20	20	8.7	5.6	44	28	67-134	43	30	M1, F
Chlorobenzene	ug/L	<1.0	20	20	9.2	5.9	46	29	72-131	44	30	M1, F
Chloroethane	ug/L	<1.0	20	20	13.5	7.0	67	35	55-150	63	30	M1, R
Chloroform	ug/L	<1.0	20	20	9.3	6.4	47	32	67-125	38	30	M1, F
Chloromethane	ug/L	<4.0	20	20	13.3	7.3	67	37	43-148	58	30	M1, F
cis-1,2-Dichloroethene	ug/L	<1.0	20	20	10.3	7.0	51	35	62-132	38	30	M1, R
cis-1,3-Dichloropropene	ug/L	<4.0	20	20	8.1	5.6	41	28	63-129	37	30	M1, R
Dibromochloromethane	ug/L	<1.0	20	20	8.2	5.8	41	29	67-127	35	30	M1, F
Dibromomethane	ug/L	<4.0	20	20	9.2	6.4	46	32	68-132	36	30	M1, F
Dichlorodifluoromethane	ug/L	<1.0	20	20	12.6	5.6	63	28	59-144		30	M1, R
Dichlorofluoromethane	ug/L	<1.0	20	20	15.1	7.9	76	40	63-144	62		M1,N R1
Diethyl ether (Ethyl ether)	ug/L	<4.0	20	20	9.8	6.8	49	34	52-139	36	30	M1,F
Ethylbenzene	ug/L	<1.0	20	20	9.5	5.9	45	28	75-131	46	30	M1, F
Hexachloro-1,3-butadiene	ug/L	<1.0	20	20	6.1	3.6	30	18	58-146	50	30	M1, F
sopropylbenzene (Cumene)	ug/L	<1.0	20	20	8.9	5.2	45	26	71-132	52	30	M1, F
Methyl-tert-butyl ether	ug/L	<1.0	20	20	9.9	7.1	49	35	65-130	32	30	M1, F
Methylene Chloride	ug/L	<4.0	20	20	9.5	6.8	47	34	66-125	33	30	M1, F
n-Butylbenzene	ug/L	<1.0	20	20	6.1	3.7	30	18	57-141	49	30	M1, F
n-Propylbenzene	ug/L	<1.0	20	20	7.9	4.7	39	23	70-131	51	30	M1, R
Naphthalene	ug/L	<4.0	20	20	7.1	4.7	36	23	48-134	42	30	M1, F
o-Isopropyltoluene	ug/L	<1.0	20	20	6.9	4.0	34	20	66-136	52	30	M1, F
sec-Butylbenzene	ug/L	<1.0	20	20	7.5	4.1	37	20	69-134	58	30	M1,R
Styrene	ug/L	<1.0	20	20	8.9	5.5	44	28	65-134	46		M1,R
ert-Butylbenzene	ug/L	<1.0	20	20	8.3	4.7	41	23	71-130	56		M1,R
Tetrachloroethene	ug/L	<1.0	20	20	8.4	5.1	42	26	69-135	48	30	M1, R
Tetrahydrofuran	ug/L	<10.0	200	200	93.1	68.4	47	34	48-150	31		M1, R
Toluene	ug/L	<1.0	20	20	9.5	6.1	45	28	68-132	43		M1,F
rans-1,2-Dichloroethene	ug/L	<1.0	20	20	9.6	6.4	48	32	61-134			M1,F
rans-1,3-Dichloropropene	ug/L	<4.0	20	20	9.1	6.1	46	31	66-125	39		M1,F
richloroethene	ug/L	<0.40	20	20	9.1	6.0	45	30	64-136			M1,F
Frichlorofluoromethane	ug/L	<1.0	20	20	15.0	7.2	75	36	65-146			M1,F
/inyl chloride	ug/L	<0.20	20	20	15.4	8.0	77	40	51-150			M1,F
Kylene (Total)	ug/L ug/L	<3.0	60	60	27.8	17.3	46	29	69-135			MS,F
1,2-Dichloroethane-d4 (S)	ug/∟ %.	₹3.0	00	00	21.0	17.3	101	101	75-125		50	1410, [
1-Bromofluorobenzene (S)	%. %.						95	96	75-125 75-125			
DIGITIONIQUIODENZENE (G)	/0.						93	90	10-120			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

QC Batch: 546641 Analysis Method: EPA 8270D by SIM

QC Batch Method: EPA 3550 Analysis Description: 8270D Solid PAH by SIM MSSV

Associated Lab Samples: 10436863001, 10436863002, 10436863003, 10436863004, 10436863005, 10436863006, 10436863007,

10436863008, 10436863009, 10436863010

METHOD BLANK: 2972761 Matrix: Solid

Associated Lab Samples: 10436863001, 10436863002, 10436863003, 10436863004, 10436863005, 10436863006, 10436863007,

10436863008, 10436863009, 10436863010

		Blank F			
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Acenaphthene	ug/kg	<0.41	1.4	06/26/18 11:44	
Acenaphthylene	ug/kg	< 0.50	1.6	06/26/18 11:44	
Anthracene	ug/kg	< 0.47	1.6	06/26/18 11:44	
Benzo(a)anthracene	ug/kg	<1.1	3.6	06/26/18 11:44	
Benzo(a)pyrene	ug/kg	< 0.69	2.3	06/26/18 11:44	
Benzo(b)fluoranthene	ug/kg	< 0.37	1.2	06/26/18 11:44	
Benzo(g,h,i)perylene	ug/kg	< 0.63	2.1	06/26/18 11:44	
Benzo(k)fluoranthene	ug/kg	<0.84	2.8	06/26/18 11:44	
Chrysene	ug/kg	<1.4	4.5	06/26/18 11:44	
Dibenz(a,h)anthracene	ug/kg	< 0.46	1.5	06/26/18 11:44	
Fluoranthene	ug/kg	< 0.43	1.4	06/26/18 11:44	
Fluorene	ug/kg	<0.31	1.0	06/26/18 11:44	
Indeno(1,2,3-cd)pyrene	ug/kg	< 0.67	2.2	06/26/18 11:44	
Naphthalene	ug/kg	< 0.77	2.6	06/26/18 11:44	
Phenanthrene	ug/kg	<1.9	6.4	06/26/18 11:44	
Pyrene	ug/kg	<1.5	5.1	06/26/18 11:44	
2-Fluorobiphenyl (S)	%.	60	42-125	06/26/18 11:44	
p-Terphenyl-d14 (S)	%.	78	57-125	06/26/18 11:44	

LABORATORY CONTROL SAMPLE:	2972762					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Acenaphthene	ug/kg	33.3	21.4	64	52-125	
Acenaphthylene	ug/kg	33.3	21.9	66	50-125	
Anthracene	ug/kg	33.3	31.2	94	65-125	
Benzo(a)anthracene	ug/kg	33.3	36.2	109	60-125	
Benzo(a)pyrene	ug/kg	33.3	33.4	100	69-125	
Benzo(b)fluoranthene	ug/kg	33.3	39.3	118	61-125	
Benzo(g,h,i)perylene	ug/kg	33.3	34.6	104	60-125	
Benzo(k)fluoranthene	ug/kg	33.3	31.2	94	67-125	
Chrysene	ug/kg	33.3	37.4	112	67-125	
Dibenz(a,h)anthracene	ug/kg	33.3	31.2	94	63-125	
Fluoranthene	ug/kg	33.3	37.6	113	75-125	
Fluorene	ug/kg	33.3	24.5	74	54-125	
Indeno(1,2,3-cd)pyrene	ug/kg	33.3	33.6	101	63-125	
Naphthalene	ug/kg	33.3	22.6	68	49-125	
Phenanthrene	ug/kg	33.3	28.6	86	65-125	
Pyrene	ug/kg	33.3	32.2	97	64-125	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

LABORATORY CONTROL SAMPLE: 2972762

LABORATORT CONTROL SAMPLE.	2912102	Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
2-Fluorobiphenyl (S)	%.			67	42-125	
p-Terphenyl-d14 (S)	%.			80	57-125	

MATRIX SPIKE & MATRIX SPIR	KE DUPLICA	TE: 29727	63		2972764						
			MS	MSD							
	10	0436821003	Spike	Spike	MS	MSD	MS	MSD	% Rec	Ma	х
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD RP	D Qual
Acenaphthene	ug/kg	ND	39.3	39.3	45.3	38.3	115	98	30-125		0
Acenaphthylene	ug/kg	ND	39.3	39.3	36.1	28.8	92	73	30-133	3	0
Anthracene	ug/kg	ND	39.3	39.3	<5.5	<5.5	0	0	30-150	3	0 M6
Benzo(a)anthracene	ug/kg	ND	39.3	39.3	34.2J	33.1J	87	84	30-150	3	0
Benzo(a)pyrene	ug/kg	ND	39.3	39.3	33.9	33.6	86	86	30-150	3	0
Benzo(b)fluoranthene	ug/kg	ND	39.3	39.3	30.6	28.9	78	74	30-150	3	0
Benzo(g,h,i)perylene	ug/kg	ND	39.3	39.3	32.5	32.0	82	81	30-150	3	0
Benzo(k)fluoranthene	ug/kg	ND	39.3	39.3	37.3	31.1J	95	79	30-150	3	0
Chrysene	ug/kg	ND	39.3	39.3	35.4J	37.2J	90	95	30-150	3	0
Dibenz(a,h)anthracene	ug/kg	ND	39.3	39.3	31.4	29.4	80	75	30-131	3	0
Fluoranthene	ug/kg	ND	39.3	39.3	36.6	35.1	93	89	30-150	3	0
Fluorene	ug/kg	ND	39.3	39.3	32.3	28.1	82	72	30-147	3	0
Indeno(1,2,3-cd)pyrene	ug/kg	ND	39.3	39.3	32.4	31.0	82	79	30-150	3	0
Naphthalene	ug/kg	ND	39.3	39.3	28.8J	24.2J	73	62	30-131	3	0
Phenanthrene	ug/kg	ND	39.3	39.3	51.6J	44.7J	131	114	30-150	3	0
Pyrene	ug/kg	ND	39.3	39.3	60.3	53.6J	153	136	30-150	3	0 M6
2-Fluorobiphenyl (S)	%.						0	0	42-125		D3,S4
p-Terphenyl-d14 (S)	%.						0	0	57-125		S4

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

QC Batch: 547072 Analysis Method: EPA 8270D by SIM

QC Batch Method: EPA Mod. 3510C Analysis Description: 8270D PAH by SIM MSSV

Associated Lab Samples: 10436863011

METHOD BLANK: 2974269 Matrix: Water

Associated Lab Samples: 10436863011

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
Acenaphthene	ug/L	<0.0032	0.011	06/27/18 09:55	
Acenaphthylene	ug/L	< 0.0046	0.015	06/27/18 09:55	
Anthracene	ug/L	< 0.0062	0.021	06/27/18 09:55	
Benzo(a)anthracene	ug/L	< 0.0039	0.013	06/27/18 09:55	
Benzo(a)pyrene	ug/L	< 0.0040	0.013	06/27/18 09:55	
Benzo(b)fluoranthene	ug/L	< 0.013	0.042	06/27/18 09:55	
Benzo(g,h,i)perylene	ug/L	<0.0098	0.033	06/27/18 09:55	
Benzo(k)fluoranthene	ug/L	< 0.010	0.035	06/27/18 09:55	
Chrysene	ug/L	< 0.0092	0.031	06/27/18 09:55	
Dibenz(a,h)anthracene	ug/L	< 0.0092	0.031	06/27/18 09:55	
Fluoranthene	ug/L	<0.018	0.061	06/27/18 09:55	
Fluorene	ug/L	< 0.0059	0.020	06/27/18 09:55	
Indeno(1,2,3-cd)pyrene	ug/L	< 0.013	0.044	06/27/18 09:55	
Naphthalene	ug/L	<0.0068	0.023	06/27/18 09:55	
Phenanthrene	ug/L	< 0.010	0.035	06/27/18 09:55	
Pyrene	ug/L	< 0.015	0.049	06/27/18 09:55	
2-Fluorobiphenyl (S)	%.	76	30-145	06/27/18 09:55	
p-Terphenyl-d14 (S)	%.	91	30-149	06/27/18 09:55	

LABORATORY CONTROL SAMPLE:	2974270					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Acenaphthene	ug/L		0.70	70	50-125	
Acenaphthylene	ug/L	1	0.72	72	47-125	
Anthracene	ug/L	1	0.93	93	65-125	
Benzo(a)anthracene	ug/L	1	0.91	91	60-125	
Benzo(a)pyrene	ug/L	1	0.92	92	67-125	
Benzo(b)fluoranthene	ug/L	1	0.88	88	64-125	
Benzo(g,h,i)perylene	ug/L	1	0.83	83	53-125	
Benzo(k)fluoranthene	ug/L	1	0.88	88	61-125	
Chrysene	ug/L	1	0.91	91	68-125	
Dibenz(a,h)anthracene	ug/L	1	0.75	75	45-125	
Fluoranthene	ug/L	1	0.91	91	73-125	
Fluorene	ug/L	1	0.72	72	53-125	
Indeno(1,2,3-cd)pyrene	ug/L	1	0.83	83	62-125	
Naphthalene	ug/L	1	0.74	74	46-125	
Phenanthrene	ug/L	1	0.81	81	66-125	
Pyrene	ug/L	1	0.89	89	65-125	
2-Fluorobiphenyl (S)	%.			75	30-145	
p-Terphenyl-d14 (S)	%.			94	30-149	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

MATRIX SPIKE & MATRIX SI	PIKE DUPLICA	TE: 29742		MCD	2974272							
	1	0436884010	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qua
Acenaphthene	ug/L	ND	.95	.95	0.65	0.63	69	67	53-125	3	30	
Acenaphthylene	ug/L	ND	.95	.95	0.67	0.66	70	70	48-125	1	30	
Anthracene	ug/L	ND	.95	.95	0.88	0.89	92	94	66-125	2	30	
Benzo(a)anthracene	ug/L	ND	.95	.95	0.86	0.82	90	86	57-125	5	30	
Benzo(a)pyrene	ug/L	ND	.95	.95	0.84	0.87	89	91	62-125	2	30	
Benzo(b)fluoranthene	ug/L	ND	.95	.95	0.78	0.91	82	96	50-125	16	30	
Benzo(g,h,i)perylene	ug/L	ND	.95	.95	0.73	0.76	76	81	34-125	5	30	
Benzo(k)fluoranthene	ug/L	ND	.95	.95	0.80	0.77	84	81	50-125	4	30	
Chrysene	ug/L	ND	.95	.95	0.90	0.87	95	92	65-125	4	30	
Dibenz(a,h)anthracene	ug/L	ND	.95	.95	0.71	0.74	75	78	31-127	4	30	
Fluoranthene	ug/L	ND	.95	.95	0.88	0.90	92	95	70-125	2	30	
Fluorene	ug/L	ND	.95	.95	0.69	0.68	73	72	53-125	1	30	
ndeno(1,2,3-cd)pyrene	ug/L	ND	.95	.95	0.74	0.77	78	81	45-125	4	30	
Naphthalene	ug/L	ND	.95	.95	0.57	0.65	60	69	34-125	13	30	
Phenanthrene	ug/L	ND	.95	.95	0.78	0.79	82	84	61-125	1	30	
Pyrene	ug/L	ND	.95	.95	0.88	0.84	92	89	60-125	4	30	
2-Fluorobiphenyl (S)	%.						69	69	30-145			
o-Terphenyl-d14 (S)	%.						98	96	30-149			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALIFIERS

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor and percent moisture.

LOQ - Limit of Quantitation adjusted for dilution factor and percent moisture.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-G	Pace Analytical Services - Green Bay
PASI-M	Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

Date: 07/03/2018 03:29 PM

A5	Greater than 5% sediment in sample determined by visual observation. Aqueous portion decanted from the sediment and extracted. The sample container could not be rinsed with solvent per the method requirement.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
M6	Matrix spike and Matrix spike duplicate recovery not evaluated against control limits due to sample dilution.
MS	Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.
N2	The lab does not hold NELAC/TNI accreditation for this parameter.
R1	RPD value was outside control limits.
RS	The RPD value in one of the constituent analytes was outside the control limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
W	Non-detect results are reported on a wet weight basis.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
10436863001	SB-1_2-3	EPA 3050	546886	EPA 6010D	547086
0436863002	SB-1_12-13	EPA 3050	546886	EPA 6010D	547086
0436863003	SB-2_0-1	EPA 3050	546886	EPA 6010D	547086
0436863004	SB-2_6-7	EPA 3050	546886	EPA 6010D	547086
0436863005	SB-3_0-2	EPA 3050	546886	EPA 6010D	547086
0436863006	SB-3_8-9	EPA 3050	546886	EPA 6010D	547086
0436863007	SB-4_0-2	EPA 3050	546886	EPA 6010D	547086
0436863008	SB-4_6-7	EPA 3050	546886	EPA 6010D	547086
0436863009	SB-5_0-1	EPA 3050	546886	EPA 6010D	547086
0436863010	SB-5_8-9	EPA 3050	546886	EPA 6010D	547086
0436863001	SB-1_2-3	EPA 7471B	546627	EPA 7471B	546772
0436863002	SB-1_12-13	EPA 7471B	546627	EPA 7471B	546772
0436863003	SB-2_0-1	EPA 7471B	546627	EPA 7471B	546772
0436863004	SB-2_6-7	EPA 7471B	546627	EPA 7471B	546772
0436863005	SB-3_0-2	EPA 7471B	546627	EPA 7471B	546772
0436863006	SB-3_8-9	EPA 7471B	546627	EPA 7471B	546772
0436863007	SB-4_0-2	EPA 7471B	546627	EPA 7471B	546772
0436863008	SB-4_6-7	EPA 7471B	546627	EPA 7471B	546772
0436863009	SB-5_0-1	EPA 7471B	546627	EPA 7471B	546772
0436863010	SB-5_8-9	EPA 7471B	546627	EPA 7471B	546772
0436863001	SB-1_2-3	ASTM D2974	547426		
0436863002	SB-1_12-13	ASTM D2974	547426		
0436863003	SB-2_0-1	ASTM D2974	547426		
0436863004	SB-2_6-7	ASTM D2974	547426		
0436863005	SB-3_0-2	ASTM D2974	547426		
0436863006	SB-3_8-9	ASTM D2974	547426		
0436863007	SB-4_0-2	ASTM D2974	547426		
0436863008	SB-4_6-7	ASTM D2974	547426		
0436863009	SB-5_0-1	ASTM D2974	547426		
0436863010	SB-5_8-9	ASTM D2974	547426		
0436863001	SB-1_2-3	EPA 3550	546641	EPA 8270D by SIM	546989
0436863002	SB-1_12-13	EPA 3550	546641	EPA 8270D by SIM	546989
0436863003	SB-2_0-1	EPA 3550	546641	EPA 8270D by SIM	546989
0436863004	SB-2_6-7	EPA 3550	546641	EPA 8270D by SIM	546989
0436863005	SB-3_0-2	EPA 3550	546641	EPA 8270D by SIM	546989
0436863006	SB-3_8-9	EPA 3550	546641	EPA 8270D by SIM	546989
0436863007	SB-4_0-2	EPA 3550	546641	EPA 8270D by SIM	546989
0436863008	SB-4_6-7	EPA 3550	546641	EPA 8270D by SIM	546989
0436863009	SB-5_0-1	EPA 3550	546641	EPA 8270D by SIM	546989
0436863010	SB-5_8-9	EPA 3550	546641	EPA 8270D by SIM	546989
0436863011	SB-3_14.5-19.5	EPA Mod. 3510C	547072	EPA 8270D by SIM	547275
0436863001	SB-1_2-3	EPA 5035/5030B	293184	EPA 8260	293187
0436863002	SB-1_12-13	EPA 5035/5030B	293184	EPA 8260	293187
0436863003	SB-2_0-1 SB-2_6-7	EPA 5035/5030B	293184	EPA 8260	293187
0436863004		EPA 5035/5030B	293184	EPA 8260	293187





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 49161423.00 Husky Phase II

Pace Project No.: 10436863

Date: 07/03/2018 03:29 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10436863006	SB-3_8-9	EPA 5035/5030B	293184	EPA 8260	293187
10436863007	SB-4_0-2	EPA 5035/5030B	293184	EPA 8260	293187
10436863008	SB-4_6-7	EPA 5035/5030B	293184	EPA 8260	293187
10436863009	SB-5_0-1	EPA 5035/5030B	293184	EPA 8260	293187
10436863010	SB-5_8-9	EPA 5035/5030B	293184	EPA 8260	293187
10436863013	MeOH Trip Blank	EPA 5035/5030B	293184	EPA 8260	293187
10436863011	SB-3_14.5-19.5	EPA 8260B	547301		
10436863012	Trip Blank	EPA 8260B	547301		

Barr Engineering Co.	Chain	of	Cust	ody		ole Origination		\prod		Analy	ysis Requ	ested		COC Nii	mher 1	58003	
☐ Ann Arbor ဩDuluth BARR ☐ Bismarck ☐ Grand Rapids	☐ Hibbing			neapolis Lake City	☐ KS ☐ MI ☐ MN	□ND 🔄	lUT ĽWI			Water		Soi		coc _		oouus of <u>ユ</u>	_
REPORT TO		1			VOICE		=1	1		.]. .			12	Matri	ix Code:	Pres	ervative Code:
Company: Bary Engineering		Com	oany:		BAVV		± : 1	0 4	13	6863	}		T X		iroundwat urface Wa		= None = HCl
Address: 325 S. Lalu Ave.	Duluth	Addre	ess:		1741-		1					:		WW= W	Vaste Wat Prinking W	er C	= HNO ₃
Name: Lynette Carney		Name	2:				 363		-				\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	S = S	oil/Solid	E	= H₂SO₄ = NaOH
email: LMC ebarv. com		email	:			10436	363					.,	8	O = 0	ediment ther	G	= MeOH = NaHSO ₄
Copy to: datamgt@barr.com		P.O.			V			MS/MS									= Na₂S₂O₃= Ascorbic Acid
Project Name: Husky phase 11	,			No: 니	116142	3.00		m MS.					2 4 S			j	= NH ₄ Cl = Zn Acetate
Location	Sam	iple De	epth Unit		ection	Collection	Matrix	ا ا		<u> </u>			> ८- %			0	= Other
Location	Start	Stop	(m./ft. or in.)		ate ld/yyyy)	Time (hh:mm)	Matrix Code	Perfo	5 -			į		Preservat			
1 5B-1	2	3	Ft	2	1/18	1405	1	N	+				2 1 1	Field Filte	erea Y/N	_	701
2 53-1	12_	13				1430	1								***		007
3 SB-2	0	1				1515											003
4. 53-2	6	7_				1530									,		064
5. 513-3	0	2				1620											865
^{6.} SB-3	8	9		1		1635											006
^{7.} SB-4	0	2		6/2	2/18	0840			·					į.			007
8 S B - 4	b	7				0855											008
^{9.} SB-5	O	ĵ				0935											009
^{10.} SB-5	8	9				0950	1										010
BARR USE ONLY Sampled by: MAB		•	uished l	W^{\vee}	12	~ 👸 '		Date 2/1	ر اد	177 /	e Dived	DUV	d			6/22/18	14:35
Barr Proj. Manager: LM C		Relinq	uished	VL C	Uth	On I		Pate 2/18	lt-	700 B	eceived	by:		d.		Date 3-21-/ g	Time // oc
Barth DQ Manager: JET Lab Name: Pace		Sample	e Shipp	oed VIA:	☐ Co	urier 🗌 Fed	leral Expi				ir Bill N				Re	equested l	Due Date:
Labo Name: 14 CC Labo N		Lab W	/O:		□ Otl	Temperature on	Receipt	(°C):-	2,5	Custody S	Seal Inta	ct? 🗆 Y	′ □N	☑ None	X u Sta		Around Time
Distribution - White-Original: Accompar			Laborate	ory; Yello	w Copy:	Include in Field	Docum	ents;									
		R)	$\subset \iota$	~~	6-22	-18 20	,00			~~ <	m	Trans	ی سے	mir	2000	1:	28

Barr Engineering Co. C	hain	of	Cust	ody Samp	le Origination S		Г				Analys	is R	eque	sted			СС	C Num	nber:		Νō	4	7625	
☐ Ann Arbor ☑ Duluth Bismarck ☐ Hibbing] Jeffers] Minne		—	□ ND Oi	WI ther:				Wa	ter			So	il 	1		oc						
REPORT TO			-	INVOICE T	o		1					İ						Matrix / = Gre					ative Coo	<u>le:</u>
Company: Barr Engineering	·	Comp	any:	BAVI	···	700	1	rs										/ = Gre / = Su				4 = B =	None HCl	•
Address: 325 S. Loke Ave. Dulat	n	Addre	ess:				1 z	aine										V = Wa / = Dri			tor I		HNO₃ H₂SO₄	
Name: Lynette Carney		Name	:		**************************************		1 ≻	Containers				- 1					S	= So	il/Soli	d		E =	NaOH	ı
email: LMCP, hurv. um		email:		,			۱٫۱											= Se		nt			MeOH NaHSO₄	
Copy to: datamgt@barr.com		P.O.		V		***	MSD	0							ĺ						ļ		Na ₂ S ₂ O ₃ Ascorbic	Acid
Project Name: Harly Musc !		Barr F	Project N	vo: 4916142	३ .७€		MS/	mbe	7]	בָּ			٦			Solids						J =	NH₄Cl	- 1
	Sam	ple De		Collection	Collection		١٤	Z S	> 0		1	ľ	2			s s							Zn Aceta [.] Other	ie
Location	Start	Stop	Unit (m./ft. or in.)	Date (mm/dd/yyyy)	Time (hh:mm)	Matrix Code	Perfo	Total	8 Z	4			FZ					servati i Filter						_
1 5B-3	14.5	19.5	t+	6/22/18	1120	GW			- 1										<u>.</u>				711	
2. Trip Dlank 3. MEDY Trip Blank 4. 6/22/18 20	1	ı			-		N	3	2				1					72.0					0 17	
3. MEAN This Blank																						(213	
4. ७१२४१४ ४०																				•			1	
5.																								
6.																								
7.	``			~~					 					 										\dashv
8.									\dagger												·			
9.																								
10.												1			-									
BARR USE ONLY		Relina	uished b	ov: 1 1/1 //a	ga I		Date	, <u> </u>		Time	Re	cei	∕≱d /	 9∨:		1	<u> </u>				/ Date	<u>. </u>	Time	
Sampled by: INAB]			14116		-+-/-	14	/Ų	_	35		1			Š	WO				6/	20/10	3 1	19:35	
Barr Proj. Manager: LMC		Kelinqi	uishe d b	"HA AM	On I	,	Date 21	7		Time 7ටව	(Re	ce(\	red b	^{ру.} /2	/ (24				6	Date フン・	ş	Time (ついつ	10
Barr DQ Manager: JET]	Sample	es Shipp	ed VIA: Co		leral Exp			Sam	pler	Air	Bi	ll Nu	ımbeı						<u> </u>			Date:	
Lap Name: Pau				□ Oth												٠.						ırn Ar	ound Tim	e
Leb Location: MPLS		Lab W			Temperature on			_	څ.	Cust	ody Se	al .	Intac	t? □	ΥL	JN	ďN	опе] Rush	(mm/c	id/yyyy	1	1

Distribution - White-Original: Accompanies Shipment to Laboratory, Yellow Copy: Include in Field Documents; Pink Copy: Send to Data Management Administrators.

1. 2.6

Pace Analytical*

Document Name:

Sample Condition Upon Receipt Form

Document No.: F-MN-L-213-rev.23 Document Revised: 02May2018 Page 1 of 2

Issuing Authority: Pace Minnesota Quality Office

Sample Condition Upon Receipt	Project #	" W0#∶10436863
Pur (<u></u>	
Courier: Fed Ex UPS USPS	Client	PM: AA1 Due Date: 07/02/18
☐Commercial ☐Pace ☐SpeeDee ☐Other:		CLIENT: BARR
Tracking Number:		
Custody Seal on Cooler/Box Present? Yes No Sea	ıls Intact? 🛮 🖽	Yes No Optional: Proj. Due Date: Proj. Name:
Packing Material: Bubble Wrap Bubble Bags None	Other:	Temp Blank? Æ Yes □No
Thermometer ☐ G87A9170600254 Type of Used: ☑ G87A9155100842	fice: Wet	☐Blue ☐None ☐Dry ☐Melted
Cooler Temp Read (°C): 2.7 Cooler Temp Corrected (°C):	2.8	Biological Tissue Frozen? Yes No XN/A
Temp should be above freezing to 6°C Correction Factor:	Date	and Initials of Person Examining Contents:
USDA Regulated Soil (N/A, water sample) Did samples originate in a quarantine zone within the United States: AL, AR,	CA. FL. GA. ID. 14	A. MS, Did samples originate from a foreign source (internationally,
NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)?	□Yes 🗵	No including Hawaii and Puerto Rico)? 🔲 Yes 🔎 No
If Yes to either question, fill out a Regulated Soil Cl	hecklist (F-MN-0	Q-338) and include with SCUR/COC paperwork.
		COMMENTS:
	□No	1,
	No	2.
	No	3.
	□No □N/A	-
	□No -£	5.
	ŽĮNo	6.
	X ∫No 	7.
	∏No	8.
	□No	9.
	No	
	No	10.
	□No ☑Ñ/A	11. Note if sediment is visible in the dissolved container
Is sufficient information available to reconcile the samples to the COC? Matrix: WT W	No	12.
All containers needing acid/base preservation have been		13.
checked?	□No XIN/A	Chlorine? Y N
compliance with EPA recommendation?		Sample #
(HNO ₃ , H ₂ SO ₃ , ≤2pH, NaOH >9 Sulfide, NaOH>12 Cyanide) ☐ Yes [Exceptions: VOA Coliform, TOC/DOC Oil and Grease,	□No X (N/A	Jack Hard Co. 11. 1
landing of the second of the s	No □N/A	initial when Lot # of added completed: preservative:
	No □N/A	14. Tiji Blank 2/2 hearspace Signer
Trip Blank Present?	□No □N/A	15.
·	□No □N/A	
Pace Trip Blank Lot # (if purchased): HU: 189185, meo#: 040	5[8-3	
CLIENT NOTIFICATION/RESOLUTION		Field Data Required? ☐Yes ☐No
Person Contacted:		Date/Time:
Comments/Resolution:		
A AA	20-15-	

Project Manager Review:

Date: 6/25/18

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of hold, incorrect preservative, out of temp, incorrect containers).

Chain	of C	usto	ody
-------	------	------	-----

Sh

40171636

Pace Analytical®	
MARKE BOCOING NOW	

Samples were sent directly to the Subcontracting Laborator
--

State Of Origin:

WI

https://documented	rkorder: 10436863 Wo	rkorder	Name: 4916142		Phase II	Water construction of the	Owner Rece	ived Date:			uested By: 7/3/2018
THE PROPERTY AND ADDRESS OF			Subcontra	THE RESIDENCE AND ADDRESS OF THE PERSON OF T					Requeste	d Analysis	
Pac 170 Sui Min	anda Albrecht se Analytical Minnesota 0 Elm Street se 200 neapolis, MN 55414 sne (612)607-6382		1241 Suite Greer	Analytical Gree Bellevue Stree 9 1 Bay, WI 5430 e (920)469-243	t	Presi	erved Containers	8260 (Pace-Green Bay)			
After PROFESSION AND ADDRESS OF A DESCRIPTION ADDRESS OF A DESCRIPTION ADDRESS OF A DESCRIPTION ADDRESS OF A DESCRIPTION ADDRESS OF A DESCRIPTION ADDRESS OF A DESCRIPTION ADDRESS OF A DESCRIPTION ADDRESS OF A DESCRIPTION ADDRESS OF A DESCRIPTION ADDRESS OF A DESCRIPTION ADDRESS OF A DESCRIPTION ADDRESS OF A DESCRIPTION ADDRESS OF A DESCRIPTION ADDRESS OF A DESCRIPTION ADDRESS OF A DESCRIPTION ADDRESS OF A DESCRIPTION ADDRESS OF A DESCRIPTION ADDRE		Sample	Collect			MeOH		VOC by {		SCOCCOPERICATION STATES AND STATE	
Item	Sample ID	Туре	Date/Time	Lab ID	Matrix	Name of the last o	especial de la constant de la consta		A TANANS AND A TAN	MAGRICAN MAG	LAB USE ONLY
1	SB-1_2-3	PS	6/21/2018 14:05	10436863001	Solid	1		X			001
2	SB-1_12-13	PS	6/21/2018 14:30	10436863002	Solid	2		X			
3	SB-2_0-1	PS	6/21/2018 15:15	10436863003	Solid	2	THE RESERVE THE PROPERTY OF TH	X			002
4	SB-2_6-7	PS	6/21/2018 15:30	10436863004	Solid	2	Description of the second of t	X			004
5	SB-3_0-2	PS	6/21/2018 16:20	10436863005	Solid	2		X			005
6	SB-3_8-9	PS	6/21/2018 16:35	10436863006	Solid	2	A CONTRACTOR OF THE CONTRACTOR	X			006
7	SB-4_0-2	PS	6/22/2018 08:40	10436863007	Solid	2		X			006
8	SB-4_6-7	PS	6/22/2018 08:55	10436863008	Solid	2		X			008
9	SB-5_0-1	PS	6/22/2018 09:35	10436863009	Solid	2		X			009
10	SB-5_8-9	PS	6/22/2018 09:50	10436863010	Solid	2		X			009
11	MeOH Trip Blank	PS	6/21/2018 00:00	10436863013	Solid	1		X			The State of the s
					*					Comment	
Tran	sfers Released By		Date/Time	Received E	Зу		Date/Tin	1е		Milliadinal habo (pulphys) (1) a ram ere ore man i est ere se se constituent and ere ere ere ere ere ere ere e	THE THE THE BEAT OF THE AND
1 2 2	Wastro		4/27/18): 4/28/18 0	7/2 855 Jus	vKU	ylee	Paul yrep	085	_		
D-COND-COQUARENCE OF						<u>U</u>				oo yo maanaa ka maanaa ka ka a a a a a a a a a a a a a a	
CUC	ler Temperature on Receipt		C Cus	tody Seal (// Jor N		Received or	i Ice/ Y∫oi	. N	Samples	Intact(Y or N

^{***}In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.

This chain of custody is considered complete as is since this information is available in the owner laboratory.

Client Name: Project # Sample Preservation Receipt Form

Lab Lot# of pH paper:

MO171636

All containers needing preservation have been checked and noted below: DYes DNO DN/A

Lab Std #ID of preservation (if pH adjusted):

Initial when completed:

Date/

	Г							T			LU1#	or pri	paper		т		Cal	Joid	#IU 0)	prese	rvatio	n (if pi	H adju	isted):					COM	oleted:		Time:	
		1	Station of the state of the sta	Glas	is				•		Plasi	tic	1				Vi	als				Jars		G	enera	al	(>6mm) *	23	ct pH ≥9	2		sted	\/-t-
	AG10	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP2N	BP2Z	BP3U	ВРЗС	BP3N	BP3S	DG9A	DG9T	VG9U	У СЭН	VG9M	VG9D	JGFU	WGFU	WPFU	SP5T	ZPLC	N O	VOA Vials (H2SO4 pH s	VaOH+Zn Act pH ≥9	NaOH pH ≥12	4NO3 pH s2	pH after adjusted	Volume (mL)
01																		ĺ	a		†	T		107	N		_	I	Z	Z	<u> </u>	<u>ā</u>	25/5/
02								i Wa											ュ			300							N. A. S.				2.5 / 5 /
03													1		1	1			2	T				1						\$400.00			2.5 / 5 /
04																			2				100			100.00							2.5 / 5 /
05							T		T										12	2007.01.01.02.02	10 = Q 10	W-118,000			A CONTRACT								2.5 / 5 /
06							1 1					100			2.0				コ					\$1.45 Y.	254.5%			Qa(G), viga	9E 4 - 244			2.3.353388	2.5 / 5 /
07												1	5 (3) (3) (5-6)		20.230.00	1 200000-000			12			127216							8				2.5 / 5 /
80						1							V. A. V.				in the said	248.0	2			1900	\$ 1 1 H		975 just	10000	J-1994			8000000		6773,080,084	2.5 / 5 /
09			T	T		1	†	1	1		1	2542435					\$190/24 Add		5		4,00				834.543								2.5 / 5 /
10								1000			DATE:								2		RANGES				Na Airise	ASS-36	12000	Bassocavo	2011 N. 1122	nervi neve	Ray or the Contract of the Con	10.3 30.00000	2.5 / 5 /
11	03/04/2		T	T		1		1		 			100000	38,54,545		3 WHEET		As well	1														2.5 / 5 /
12				1373								1		S 10 - 10 S	1000000		8 5 5 V 8 5 6		H			dicales	46 (S.V.)	rier s	38 8	35. 1129	32.000.000	1212-01 AV	Kasa as saas				2.5 / 5 /
13		10.38-1-70				†			 							200000	100		 											Section 1.3			2.5 / 5 /
14				100	4850				1000	1 115/25			90,239		108555 V	11111111	6272592	43 14 15 A.S.	2000 F 100 L	92091286	4,000,000,000		W612 1 113	3,4 (0.0 (0.0))	S. 11 11								2.5 / 5 /
15		284,800			30000	1-	1-	 	-	1.4.18.08											1000												2.5 / 5 / :
16					100.003				182814			4000	\$71.11.628	\$90.05.85.E	Eskilla o	astantas	Cold Market		Angel Sales	40.75075.000				N 2 3 75									2.5 / 5 / 3
17			\$ 445.165		150,100,0	Na Visi		Ī	6888333																								2.5 / 5 / :
18				43353			1 4 1.23		3000	\$10,50 LD	JAN 184 N		1900-00-00	2500000	- A 19 10 - A	ZONNIA (S		2dig: 150 cm															2.5 / 5 / 3
19				10000	10.55	+-			698															pila si									2.5 / 5 / :
20			-	1460.86			1 10 (0.00)	3,000				200																					2.5 / 5 /
4																								100			1.00			100			2.5 / 5 / 3

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other:

__Headspace in VOA Vials (>6mm): □Yes □No □MA *If yes look in headspace column

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	0.001			
	_		i itter plastic unpres	DG9A	40 mL amber ascorbic	JGFU	4 oz amber jar unpres
AGTH	1 liter amber glass HCL	BP2N	500 mL plastic HNO3	DG9T	40 mL amber Na Thio		
AG4S	125 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH, Znact				4 oz clear jar unpres
	120 mL amber glass unpres			VG9U	40 mL clear vial unpres	WPFU	4 oz plastic jar unpres
	_ ,	BP3U	250 mL plastic unpres	VG9H	40 mL clear vial HCL		
AG5U	100 mL amber glass unpres	ВР3С	250 mL plastic NaOH	VCONA	40 1 -1 1 -1		
			•	VGSIVI	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
	500 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres	BP3S	250 mL plastic H2SO4		· - ·		. •
N						GN:	

Pace Analytical"

1241 Bellevue Street, Green Bay, WI 54302

Document Name: Sample Condition Upon Receipt (SCUR)

Document No.:

Document Revised: 25Apr2018

F-GB-C-031-Rev.07

Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Client Name: Pace MN	Project #:
Courier: CS Logistics Fed Ex Speedee FUPS	WO#: 40171636
☐ Client ☐ Pace Other:	
Tracking #: 1760825	40171636
Custody Seal on Cooler/Box Present: Yes no Seals in	ntact: Tyes I no
Custody Seal on Samples Present: yes no Seals in	ntact: Tyes Tho
Packing Material:	None Cother
	We Blue Dry None Samples on ice, cooling process has begun
Cooler Temperature Uncorr: 3 /Corr: 5.5	
Temp Blank Present: Yes Ino Biologi Temp should be above freezing to 6°C. Biota Samples may be received at ≤ 0°C.	cal Tissue is Frozen: yes no Person examining centents Date: Initials:
	□N/A 1.
^	□N/A 2.
	DNA 3
Ţ.,	EN/A 4. IRWO
Samples Arrived within Hold Time:	5.
- VOA Samples frozen upon receipt □Yes □No	Date/Time:
Short Hold Time Analysis (<72hr):	6.
Rush Turn Around Time Requested: △Yes □No	7.
Sufficient Volume:	8.
For Analysis: ☑Yes ☐No MS/MSD: ☐Yes ☑No ☐	JN/A
Correct Containers Used: ☐Yes ☐No	9. 0007 - d. 16/5. 008 1 V. Tal. 004-20/16
-Pace Containers Used: de la la la la la la la la la la la la la	9. 007 - Links, 008 1 vind, on-Links DA incovered ture resolution a distille
-Pace IR Containers Used: ★Yes □No □	1N/A 84 929/8
Containers Intact:	10.
Filtered volume received for Dissolved tests	N/A 11.
Sample Labels match COC:	
-Includes date/time/ID/Analysis Matrix:	
Trip Blank Present:	N/A 13. MEOH
Trip Blank Custody Seals Present Д́Yes ☐No	N/A ha 1)
Pace Trip Blank Lot # (if purchased):	whether was
Client Notification/ Resolution:	If checked, see attached form for additional comments
Person Contacted: Da Comments/ Resolution:	ate/Time:
Project Manager Review:	Date 6 (28/18

Attachment B Work plan



Soil Investigation Work Plan

To: John Sager, Wisconsin Department of Natural Resources

From: Lynette Carney and Ryan Erickson

Subject: Superior Water, Light & Power Nemadji Substation Investigation Work Plan

Date: December 18, 2019

Location: Superior Refining Company, Superior, WI

Cc: Mark Darby and Matt Turner, Superior Refining Company

Mike French, LHB Contract Project Manager for MN Power

Dear Mr. Sager:

The following Work Plan is for a soil investigation at the Superior Refining Company (SRC) property that is leased by Superior Water Light & Power (SWL&P) for construction and operation of a new electrical substation (Nemadji Substation). The property is located at 2407 Stinson Ave, Superior, Wisconsin (Property; Figure 1).

Project Background

In 2018, SWL&P leased the Property from SRC to construct and operate an electrical substation. Prior to the lease, Barr Engineering Co. (Barr) had conducted a Phase I Environmental Site Assessment (2018) and a Phase II Investigation (2018) to document the condition of the Property prior to construction. No evidence of contamination was identified during these activities.

During substation construction earthwork activities in November 2019, SWL&P contractors encountered contaminated soil in two separate locations (Figure 1). SWL&P directed the excavation of the identified contaminated soil during their project work. The contaminated soil was characterized and transported offsite for disposal at Shamrock Landfill. SWL&P subsequently indicated that the identified contaminated soil had been remediated through excavation; however, no field screening or analytical confirmation samples were collected from the excavation extents to document final site conditions. SWL&P did report the discovery of contaminated soil to the Wisconsin Department of Natural Resources (WDNR).

The purpose of this proposed investigation is to document the soil conditions at the site following remedial actions through:

- determining whether residual soil impacts remain beneath the locations where impacted soil was excavated by SWL&P
- evaluating soil conditions laterally around the areas where impacted soil was excavated by SWL&P, and
- evaluating soil conditions on portions of the Property that have not been sampled to date.

To: John Sager, Wisconsin Department of Natural Resources

From: Lynette Carney and Ryan Erickson

Subject: Superior Water, Light & Power Nemadji Substation Investigation Work Plan

Date: December 18, 2019

Page: 2

Proposed Scope of Work

Borings advanced with a push-probe rig are proposed to evaluate the soil conditions at the site. The proposed soil boring locations were selected based on site features and previous boring locations (Barr, 2018), and are depicted on Figure 1.

Barr will prepare a project-specific health and safety plan (PHASP) and coordinate the investigation field work with SRC, SWL&P, and WDNR. Twenty-four (24) soil push-probe borings will be advanced to a depth of approximately 10 feet below ground surface (bgs) with continuous soil sample collection. Final boring locations and depths may vary depending on utility locations, accessibility in the field, depth to groundwater, soil conditions encountered, and the depth of identified contamination (if any). If contamination is identified, soil borings will be advanced to a minimum depth of 5 feet below the deepest level of contamination, as measured through field headspace screening. Soil will be classified as contaminated if it has a headspace reading >10 parts per million (ppm) or if clear evidence of contamination (e.g., hydrocarbon odor, sheen, free-product) is identified. All borings will be abandoned by the driller per Wisconsin regulatory requirements.

A Barr geoscientist will be on site to direct the advancement of the borings and will perform the field tasks and documentation in accordance with Barr's standard operating procedures (SOPs) applicable to the project. Soil samples will be screened for organic vapors using a photoionization detector (PID) with a 10.6 eV lamp. Soil samples will be classified in accordance with the Unified Soil Classification System (USCS) - ASTM D-2488, Standard Practice for Description and Identification of Soils (Visual/Manual Method) and any additional geologic information will be documented.

At least one confirmation/characterization analytical soil sample will be collected from insitu native soils from each boring and will be submitted to an approved certified laboratory for analysis of diesel range organic compounds (DRO), petroleum volatile organic compounds (PVOCs) and naphthalene. Soil samples submitted for laboratory analysis will be collected from 2-3 feet bgs and/or 6-7 feet bgs. The upper sample interval will be adjusted as necessary to ensure that soil is collected from below any recently placed fill or road base material. The lower soil sample interval will be adjusted based on the highest PID reading and/or interval with the most significant discoloration, odor or staining. A proposed soil sampling matrix and rationale has been provided in the attached Table 1. A duplicate sample will not be collected. One trip blank and one equipment blank will be collected.

A letter report will be prepared that summarizes investigation activities, findings and results. Recommendations for potential further actions will be included in the event that residual impacted soils are discovered at the Property.

ATTACHMENTS

Table 1 Boring and Sample Matrix Summary
Figure 1 Proposed Soil Boring Locations

TABLE 1 BORING AND SAMPLE MATRIX SUMMARY COMPLETED AND PROPOSED BORINGS / WELLS

Site Investigation Work Plan Nemadji Substation Lease Property

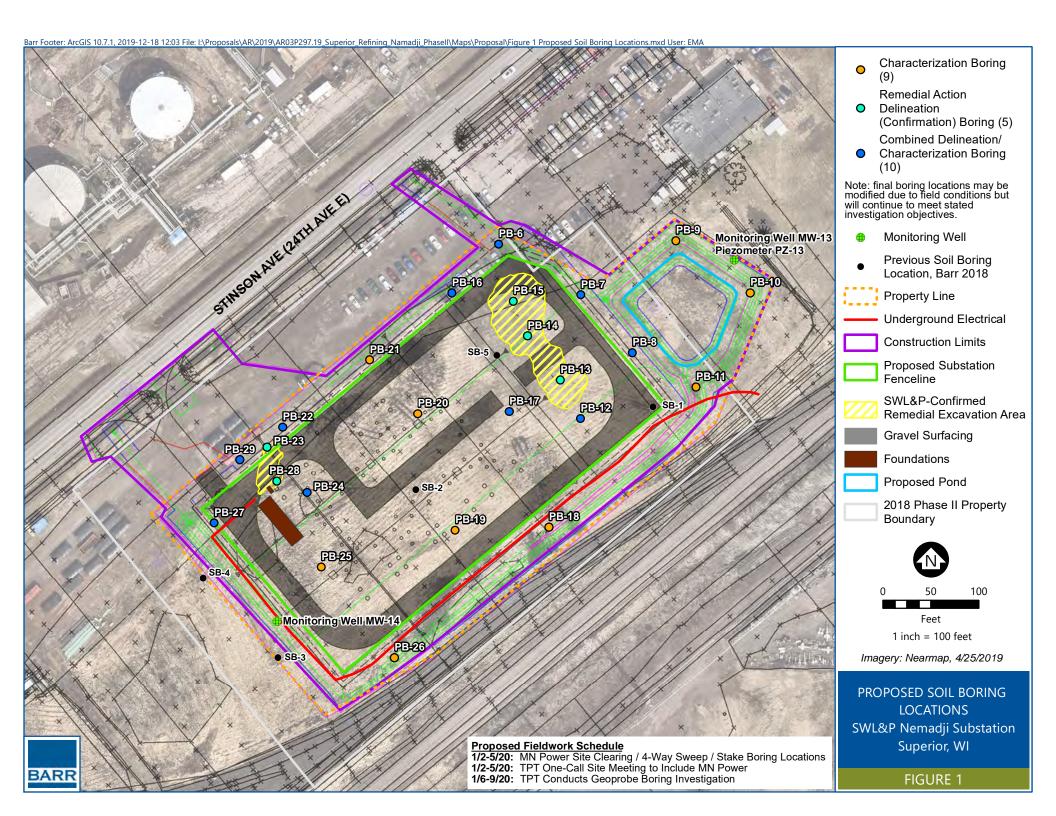
Rationale Sample Target Targeted Soil Sampling Total Soil										ing Param	eters				lwater Sa		
Boring or Well ID	Completed (C) or Proposed (P)	Characterization	Delineation	Combined	Excavation Sidewall	Below Engineered Fill	Total Depth (ft)		PVOC + Naphthalene	DRO	RCRA Metals ²	VOCs	PAHs	Anticipated Groundwater Depth (ft bgs ⁺)	PVOC + Naph	VOCs	PAHs
MW-13	С	Х					20	NA						5-10	1		
MW-14	С	Х					20	NA						5-10	1		
SB-1	С	Х			х	Х	15	2-3 12-13			2	2	2	5-10			
SB-2	С	Х				Х	15	0-1 6-7			2	2	2	5-10			
SB-3	С	Х			х	х	15	0-2 8-9			2	2	2	5-10		1	1
SB-4	С	Х			х	Х	15	0-2 6-7			2	2	2	5-10			
SB-5	С	Х				Х	15	0-1 8-9			2	2	2	5-10			
PB-6	Р			Х	х	Х	10	2-3 6-7	2	2				5-10			
PB-7	Р			х	х	Х	10	2-3 6-7	2	2				5-10			
PB-8	Р			х	х	Х	10	2-3 6-7	2	2				5-10			
PB-9	Р	Х				Х	10	6-7	1	1				5-10			
PB-10	Р	Х				Х	10	6-7	1	1				5-10			
PB-11	Р	Х				Х	10	6-7	1	1				5-10			
PB-12	Р			Х		Х	10	6-7	1	1				5-10			
PB-13	Р		х			х	10	6-7	1	1				5-10			
PB-14	Р		х			х	10	6-7	1	1				5-10			
PB-15	Р		х			х	10	6-7	1	1				5-10			
PB-16	Р			х	х	х	10	2-3 6-7	2	2				5-10			
PB-17	Р			х		х	10	6-7	1	1				5-10			
PB-18	Р	Х			х	Х	10	2-3 6-7	2	2				5-10			
PB-19	Р	Х				Х	10	6-7	1	1				5-10			
PB-20	Р	Х				Х	10	6-7	1	1				5-10			
PB-21	Р	Х			х	х	10	2-3 6-7	2	2				5-10			
PB-22	Р			Х	х	Х	10	2-3 6-7	2	2				5-10			
PB-23	Р		х			х	10	6-7	1	1				5-10			
PB-24	Р			Х		Х	10	6-7	1	1				5-10			
PB-25	Р	Х				Х	10	6-7	1	1				5-10			
PB-26	Р	Х			Х	Х	10	2-3 6-7	2	2				5-10			
PB-27	Р			Х	х	Х	10	2-3 6-7	2	2				5-10			
PB-28	Р		х			Х	10	6-7	1	1				5-10			
PB-29	Р			Х	х	Х	10	2-3 6-7	2	2				5-10			
	•								34	34	10	10	10		2	1	1
				,	n Analytical	Methods			EPA 8260B	WI MOD DRO 8015D (C10-C28)	USEPA 6010C / 7471B	EPA 8260B	EPA 8270D		EPA 8260B	EPA 8260B	EPA 8270D

¹Actual soil sampling intervals will be adjusted based on observations of fill vs. native material and/or obvious signs of contamination.

Shaded cells represent locations previously sampled.

²RCRA Metals will include arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver.

⁺ Below ground surface.



Attachment C Representative Photographs



Photo 1: Preparing to drill at SB-10 on the edge of the pond.



Photo 2: Drilling at SB-20.



Photo 3: SB-18 offset 16 feet from original location. The original boring location is on the right side of the photo and the offset location is on the left.



Photo 4: Slag like material in the 0.6-2 foot interval of SB-10.

Attachment D Soil Boring Logs

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		tion/Redevelopment ⊠		aste N	_	ement								
																	of	1
		y/Projec			D1 *** *					Monito	ring Nu	mber	-	Boring				
					Phase III Invest f crew chief (first, la			1600 e Dril				Dat	e Drillii	ag Con		B-06		ng Method
	Jim	Johns	on		r crew ciner (mst, ia	ast) and I min	Dav	C DIII	_			Dat			•			
		in Port			DNR Well ID No	. Common Well Nam	e Fins	al Stat		2020 ter Leve	1 (Surface	Elevat	1/6/20	020	Re		rect push Diameter
	WICI	inque **	ch ivo.		DIVIC WEILID IVO	. Common wen ream		ai Stat	ic vva	ici Levi		Juliace		.2 Fee	ŧ			inches
		Grid Oı	rigin	(es		Boring Location 🖂	<u> </u>	т.	16	5° 41	' 2	0.2"	Local G	rid Loc	cation			
		Plane	. 3.77			N, E S/C/N	_	Lat						_				□ E
	SW Facilit		of N	W 1	/4 of Section 36	6, T 49 N, R 14 W	Count	Long		Civil To		0.8"	illage	Feet			ŀ	Feet W
	1 dein	.y 1D			Douglas		Count	iy coc		Super		y/ O1 •	mage					
	Sar	nple												Soil	Prope	erties		
		& jin)		 	s	Soil/Rock Description												
	e	+: <u></u>	Blow Counts	Depth In Feet	An	nd Geologic Origin For						ш	Compressive Strength	1)			\ \	nts
	nber Typ	Length Att. Recovered	Č	th Ir		Each Major Unit			CS	Graphic Log	Well Diagram	(bb	npre	Moisture Content	G/S/F %	or	Plasticity Index	D/
	Number and Type	Len	Blo	Dep					Ω	Grap Log	Well Diagr	PID (ppm)	Compress Strength	Moi	G/S	Color	Plastic Index	RQD/ Comments
EOPR	OBE	60 40.8		_	Silty gravel; fine; ç	gray; moist; angular; (fill).				000								
		40.0		_					GM	PLE		0.1						
				_	Fat clay: stiff: red	-brown; moist; high plastic	ity: black	l _r	CH			0						
				-2	\discoloration; fain	t tar odor, trace wood chip		` /										
					\fibers. Fat clav: stiff: red-	-brown; moist; high plastic	itv	/										
				_		z. c,e.,g piaete	,.					0.1						
				- 4														
				_														
EOPR	OBE	60 60										0.1						
		00		-6					СН									
				_														
				_								0.2						
				- 8														
				- 0														
				_								0.2						
				_														
	ц			 10		10 feet below ground surfa	ice.											
					Analytical sample SB-6 1.5-2 ft: PV	s collected: /OC + Naphthalene, DRO												
					SB-6_5-6 ft: PVO	OC + Naphthalene, DRO ted: 1/6/2020, 1520												
					I leid blai ik collect	ied. 1/0/2020, 1320												
			fy that	the info	rmation on this form	m is true and correct to the												
	Signat	ure (pri	itin	a Q. Seh	rt Firm B	arr Eng	ginee	ring	CO								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		/Wastewater on/Redevelopment	Waste Other	_	gement								
														Pag	ge 1	of	1
		y/Projec			D1 YYY Y		License/			ring Nu	mber		Boring	Numb	er		
					Phase III Investig		8160 Date Dri				Dat	e Drilli	ng Com		B-07		ing Method
		Johns	-	· · · · · · · · · ·	or erew emer (mot, mot	, und 1 mm	Bate Bir	iiiig 5	urtea		Ju.	e Briiii	ng con	фіссо			ang memoa
	Tw	in Port	s Tes	ting	T				/2020				1/6/20	020			rect push
	WI Uı	nique W	ell No.		DNR Well ID No.	Common Well Name	Final Sta	itic Wa	iter Leve		Surface	Elevat	ion .6 Fee	ıt	Bo		Diameter inches
	Local	Grid Oı	rigin	(e:	stimated:) or I	Boring Location 🖂	1	4.	60 41		0.0"	Local G				2.3	Inches
		Plane			N,	E S/C/N		it46			9.8"			□ N			□ E
	SW Facilit		of N	W 1	1/4 of Section 36,	T 49 N, R 14 W	Lon County Co	g <u>-92</u>	2° <u>4</u> Civil Te		9.6"	/illage	Feet	□ S		I	Feet W
	raciii	y ID			Douglas		County Co	de	Super		.y/ 01 v	mage					
	Sar	nple					1						Soil	Prope	erties		
		& in)	S	t	Soi	l/Rock Description						0					
	ر و	Att.	ount	n Fe	And	Geologic Origin For				ے ا	(ma	ssive	e	\o		5	nts
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	I	Each Major Unit		SCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
	and N		Blc	De) D	Grap	Well Diagr	PII	Col	Mc	35	ပိ	Pla Ind	RQ Co
EOPR	OBE	60 41.4		F	Silty gravel; fine; gra ice/snow.	ay; moist; angular; (fill); 0	.6 feet of	GM	600								
				-	Poorly graded sand; rounded; (fill).	dense; fine; red-tan; moi	st;	SP			0.4						
				<u> </u>	Fat clay; stiff; red-bi	own; moist; high plasticit	y.										
				-							0.4						
				-							0.4						
				_4													
	 			L													
EOPR	OBE	60 60		-							0.4						
				- 6				СН									
				_							0.5						
				-							0.5						
				8													
				-							0.5						
	Ц	1		-10	End of Boring at 10	feet below ground surfac	e.										
					Analytical samples of SB-7 2-4 ft: PVOC	collected: + Naphthalene, DRO											
						+ Naphthalene, DRO											
	I herel	by certif	fy that	the info	ormation on this form i	s true and correct to the b	pest of my k	nowle	dge.	<u> </u>					<u> </u>		
	Signat	hire				Firm	rr Engine										Tel:
		(hri	stin	ıa (). Sehr	t	Luguic	-ing									Fax:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		Vastewater □ /Redevelopment ⊠	Waste I Other	_	ement					D.	1	c	1
	Facili	ty/Proje	ct Nam	e			License/I	ermit/	Monito	ring Nui	mber		Boring	Pag Numbe		of	1
					Phase III Investiga	tion	81600			8			8		B-08	;	
		-	-	Vame of	f crew chief (first, last) a	and Firm	Date Dri	ling St	arted		Dat	e Drilli	ng Com	pleted		Drilli	ng Method
		i Johns in Port		ting				1/6/	2020				1/6/20	020		Di	rect push
		nique W			DNR Well ID No.	Common Well Name	Final Sta	ic Wa	ter Leve	el S	urface	Elevat			Вс	rehole	Diameter
		~											1 Fee			2.3	inches
		Grid Or Plane	rigin	☐ (es	stimated: \square) or Bo N ,	ring Location 🖂 E S/C/N	La	46	° 41	' 19	9.1"	Local G	rid Loc				
	SW		of N	W 1	/4 of Section 36,	T 49 N, R 14 W	1	-92		 .' {	8.7"		Feet	□ N□ S		F	□ E Feet □ W
	Facili		01 11	., .	County		County Co	de	Civil To	own/City		illage	1 001				
					Douglas		-		Super	rior							
	Sar	nple											Soil	Prope	erties		
		(ii) &	, so	et	Soil/I	Rock Description						o l					
	. <u>e</u>	1 +: -	Blow Counts	Depth In Feet	And G	eologic Origin For					(II)	Compressive Strength	9	\o		\ \frac{2}{3}	nts
	nber Tyr	Length Att. Recovered	× C	th I	Ea	ch Major Unit		CS	Graphic Log	Well Diagram	PID (ppm)	npre ngth	istur itent	G/S/F %	lor	Plasticity Index	D/ nme
	Number and Type	Len	Blo	Dep				Ω	Grap Log	Well Diag	PID	Compress Strength	Moisture Content	S/S	Color	Plastic Index	RQD/ Comments
EOPR	OBE	60 34.8		_		ith silt; dark brown; moist organics; (fill); 0.5 feet o		SP-SN SP-SN									
		34.6		_	\ice/snow.			OI -OIV			0.1						
				-		ith silt and gravel; coarse	; dark				0.1						
				-2	brown; angular; (fill). Fat clay; stiff; red-brown;	wn; moist; high plasticity.											
				-	, ,	, , , , , ,											
											0.4						
				-4													
EOPR	OBE	60		-				CLI			0.6						
_0110		60		_				CH			0.6						
				 6													
				_													
											8.0						
				- 8													
				-													
				_							1.1						
				-													
	_	1		 10		et below ground surface.											
					Analytical samples co SB-8 2-4 ft: PVOC +												
					SB-8_6-8 ft: PVOC +												
	I here	by certif	fy that	the info	ormation on this form is	true and correct to the be	st of my k	nowled	lge.								
	Signa	ture	01	٠ ــــــ ٠	ıa Q. Sehrt	Firm Barr	Engine	ring (CO								Tel:
		(Mu	sun	ia Li Sent	.	\mathcal{L}	\mathcal{C}									East.

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

					Temediation	Redevelopment 🛚	Other							Pag		of 1	
		ty/Proje			Dhaga III Investica	ti a.a	License/F 81600			ring Nu	mber		Boring		er B-09	1	
					Phase III Investigated for the crew chief (first, last) a		Date Dril				Dat	e Drilli	ng Com		D- 03		ng Method
	Jim	- Johns	son		,			_									_
		in Port			DNR Well ID No.	Common Well Name	Final Sta		/2020	1 6	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Elevat	1/6/20	020	D.		ect push Diameter
	WIU	nique W	eli No.		DINK WEII ID No.	Common Well Name	rinai Sta	nc wa	ter Leve	1	surrace		ion .9 Fee	t	В		inches
•	Local	Grid O	rigin	(es		ring Location 🖂		4.0	0 41		0.3 "	Local G				2.5	inches
		Plane			,	E S/C/N	La							□ N			□Е
	SW Facilit		of N	W 1	/4 of Section 36,	T 49 N, R 14 W	Long County Co	-92	2° <u>4</u> Civil To		8.1"	Village	Feet			F	eet W
	raciii	ty ID			Douglas		Jounny Co	ıc	Super		y/ 01 v	mage					
•	Sar	nple											Soil	Prope	erties		
		& jin)	s s	t	Soil/F	Rock Description						0					
	ے و	Att.	ount	n Fe	And G	eologic Origin For		7.0		g	(m	SSIVe	e	,0		<u> </u>	nts
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Eac	ch Major Unit		SCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
			Blo	Del				\Box	Grap Log	Well Diagr	PII	Cor	Co	S/9	သ	Pla Ind	\ \ \ \ \ \ \ \ \
EOPR	OBE	60 42		-	└ Poorly graded sand wi trace organics; (fill); (th silt; fine; dark brown; r 0.4 feet of ice/snow.	moist;	SP-SN									
				-	Fat clay; stiff; red-brow	vn; moist; high plasticity.					0.3						
				- 2													
				_													
				-							0.3						
				١ ,													
				_4													
EOPR(DE	60		-				СН									
LOFIN		60		-							0.3						
				- 6													
				_							0.4						
				-							0.4						
				-8													
				_							0.4						
	Ц	-		-10	End of Boring at 10 fe	et below ground surface.											
					Analytical samples col	lected:											
					SB-9_6-8 ft: PVOC +	Napritnalene, DRO											
		-	fy that	the info	rmation on this form is t	rue and correct to the be	st of my k	nowled	dge.								
•	Signa	ture	7/	· <u> </u>	a O Salat	Firm Barr	Enginee	ring	СО								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

SW 1/4 of NW 1/4 of Section 36, T 49 N, R 14 W Long 9-92° 4' 6.9" Feet S Feet Facility ID County Douglas County Code Civil Town/City/ or Village Superior Sample Soil/Rock Description And Geologic Origin For Each Major Unit Soil Properties Soil/Rock Description And Geologic Origin For Each Major Unit Soil Properties Soil/Rock Description And Geologic Origin For Each Major Unit Soil Properties Soil/Rock Description And Geologic Origin For Each Major Unit Soil Properties Soil/Rock Description And Geologic Origin For Each Major Unit Soil Properties Soil Properties Soil/Rock Description And Geologic Origin For Each Major Unit Soil Properties Soil Pro															Pag		of	1
Boring Drilled By: Name of crew chief (first, last) and Firm Jim Johnson Twin Ports Testing Wi Unique Well No. DNR Well ID No. Common Well Name Final Static Water Level Surface Elevation Borchole Dianset 657.1 Feet 2.3 inches Sate Plane N, E S/C/N Sate Plane N, E S/C/N Facility ID County Douglas County Code Soil/Rock Description And Geologic Origin For Bach Major Unit Bach Major U		-	-			D1 1111 .:	.•				oring Nu	mber		Boring			`	
Jim Johnson Twin Ports Testing 1/6/2020 1/6/2020 Direct pt												Dat	te Drilli	ng Con				ng Method
WI Unique Well No. DNR Well ID No. Common Well Name Final Static Water Level Surface Elevation 657.1 Feet 2.3 inches		_		-	· · · · · · · · · · · · · · · · · · ·	1 010 11 01101 (11104, 1400) 4		Duit Dii						ng con	фтосо			
County C															020			
Local Grid Origin Cestimated:	W	/I Un	iique W	ell No.		DNR Well ID No.	Common Well Name	Final Sta	tic Wa	ter Lev	el	Surface			ıt.	Bo		
SW 1/4 of NW 1/4 of Section 36, T 49 N, R 14 W Long 92° 4' 6.9" Feet S Feet Facility ID County County Coun	L	ocal (Grid Or	rigin	(es	stimated: or Box	ring Location 🛛	1	1.0			0.0"					2.3	inches
Sample Soil/Rock Description Soil/Rock Description And Geologic Origin For Each Major Unit Soil/Rock Description And Geologic Origin For Each Major Unit Soil/Rock Description Soil/Rock Description Soil/Rock Description And Geologic Origin For Each Major Unit Soil/Rock Description Soil/Rock Description Soil/Rock Description And Geologic Origin For Each Major Unit Soil/Rock Description Soil/Rock Description Soil/Rock Description Soil/Rock Description And Geologic Origin For Each Major Unit Soil/Rock Description Soil/Rock Description Soil/Rock Description Soil/Rock Description And Geologic Origin For Each Major Unit Soil/Rock Description Soil/Ro						,												□Е
Douglas Superior Soil Properties Soil/Rock Description And Geologic Origin For Each Major Unit Superior Soil Properties Soil/Rock Description And Geologic Origin For Each Major Unit Superior Sup				of N	W 1								/illaga	Feet			F	Feet W
Sample Soil/Rock Description Soil/Rock Descriptio	Г	aciiii	y ID			'		County Co	ue			y/ Of V	mage					
And Geologic Origin For Each Major Unit And Geologic Origin For Each Major Unit And Geologic Origin For Each	_	San	nple			<u> </u>								Soil	Prope	erties		
Poorly graded sand with silt; dark-brown; moist; trace organics; (fill); 0.1 feet of ice/snow. Fat clay; stiff; red-brown; moist; trace organics; (fill); 0.1 feet of ice/snow. Fat clay; stiff; red-brown; moist; high plasticity. Apparent slag, vesicular, gray, metallic luster at 0.6 feet. Apparent slag, vesicular, gray, metallic luster from 1.3-2 feet. CH 0.6 CH 0.6 End of Boring at 10 feet below ground surface. Analytical samples collected: SB-10, 1-2 ft: PVOC + Naphthalene, DRO SB-10, 5-6 ft: PVOC + Naphthalene, DRO SB-10, 5-6 ft: PVOC + Naphthalene, DRO			& in)	S	et	Soil/R	Rock Description						0					
Poorty graded sand with silt; dark-brown; moist; trace organics; (fill); 0.1 feet of ice/snow. Fat clay, stiff; red-brown; moist; bigh plasticity. Apparent slag, vesicular, gray, metallic luster at 0.6 feet. Apparent slag, vesicular, gray, metallic luster from 1.3-2 feet. CH 0.6 CH 0.6 EOPROBE 60 - 6 The control of Boring at 10 feet below ground surface. Analytical samples collected: SB-10, 1-2 ft: PVOC + Naphthalene, DRO SB-10, 5-6 ft: PVOC + Naphthalene, DRO SB-10, 5-6 ft: PVOC + Naphthalene, DRO SB-10, 5-6 ft: PVOC + Naphthalene, DRO		e e	Att.	ount	n Fe	And Go	eologic Origin For					m)	SSIVe	ي و	\o		E	nts
Poorty graded sand with silt; dark-brown; moist; trace organics; (fill); 0.1 feet of ice/snow. Fat clay, stiff; red-brown; moist; bigh plasticity. Apparent slag, vesicular, gray, metallic luster at 0.6 feet. Apparent slag, vesicular, gray, metallic luster from 1.3-2 feet. CH 0.6 CH 0.6 EOPROBE 60 - 6 The control of Boring at 10 feet below ground surface. Analytical samples collected: SB-10, 1-2 ft: PVOC + Naphthalene, DRO SB-10, 5-6 ft: PVOC + Naphthalene, DRO SB-10, 5-6 ft: PVOC + Naphthalene, DRO SB-10, 5-6 ft: PVOC + Naphthalene, DRO	-		ngth	w C	pth I	Eac	ch Major Unit		U U	aphic	ıll ıgran	dd) (npre	istur	S/F %	lor	sticil ex	D/ mme
organics; (fill); 0.1 feet of ice/snow. Fat clay, stiff; red-brown; moist; high plasticity. Apparent slag, vesicular, gray, metallic luster at 0.6 feet. Aparent slag, vesicular, gray, metallic luster from 1.3-2 feet. O.7 CH 0.6 End of Boring at 10 feet below ground surface. Analytical samples collected: SB-10_1-2 ft: PVOC+ Naphthalene, DRO SB-10_5-6 ft: PVOC+ Naphthalene, DRO SB-10_5-6 ft: PVOC+ Naphthalene, DRO		anc		Blc	De				D		W W	PII	Cor	ည် သိ	3,5	చి	Pla Ind	RQ Co
Apparent slag, vesicular, gray, metallic luster at 0.6 feet. Apparent slag, vesicular, gray, metallic luster from 1.3-2 feet. CH 0.7 CH 0.6 CH 0.6 CH 0.6 CH 0.6 CH 0.6 CH 0.6 CH 0.7 End of Boring at 10 feet below ground surface. Analytical samples collected: SB-10_1-2 ft: PVOC + Naphthalene, DRO SB-10_5-6 ft: PVOC + Naphthalene, DRO SB-10_5-12 VIC PVOC + Naphthalene, DRO	OPROE	3E			_			t; trace /	SP-SN									
Feet. Apparent slag, vesicular, gray, metallic luster from 1.3-2 feet. O7 CH 0.6 CH 0.6 CH 0.6					-	Fat clay; stiff; red-brow	vn; moist; high plasticity.	t 0 6				0.6						
EOPROBE 60 60 -6 -6 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7					_2	feet.												
EOPROBE 60					_	1.3-2 feet.	ar, gray, metallic luster fi	rom										
EOPROBE 60 60 -6 -8 -10 End of Boring at 10 feet below ground surface. Analytical samples collected: SB-10_1-2 ft: PVOC + Naphthalene, DRO SB-10_5-6 ft: PVOC + Naphthalene, DRO SB-10_5-6 ft: PVOC + Naphthalene, DRO					-							0.7						
EOPROBE 60 60 -6 -8 -10 End of Boring at 10 feet below ground surface. Analytical samples collected: SB-10_1-2 ft: PVOC + Naphthalene, DRO SB-10_5-6 ft: PVOC + Naphthalene, DRO SB-10_5-6 ft: PVOC + Naphthalene, DRO																		
60 -6 -7 -8 -8 -10 End of Boring at 10 feet below ground surface. Analytical samples collected: SB-10_1-2 ft: PVOC + Naphthalene, DRO SB-10_5-6 ft: PVOC + Naphthalene, DRO					-													
60 -6 -8 -10 End of Boring at 10 feet below ground surface. Analytical samples collected: SB-10_1-2 ft: PVOC + Naphthalene, DRO SB-10_5-6 ft: PVOC + Naphthalene, DRO	OPROE	вΕЩ	60		-				СН			0.6						
End of Boring at 10 feet below ground surface. Analytical samples collected: SB-10_1-2 ft: PVOC + Naphthalene, DRO SB-10_5-6 ft: PVOC + Naphthalene, DRO					-													
End of Boring at 10 feet below ground surface. Analytical samples collected: SB-10_1-2 ft: PVOC + Naphthalene, DRO SB-10_5-6 ft: PVOC + Naphthalene, DRO					-													
End of Boring at 10 feet below ground surface. Analytical samples collected: SB-10_1-2 ft: PVOC + Naphthalene, DRO SB-10_5-6 ft: PVOC + Naphthalene, DRO					-							0.5						
End of Boring at 10 feet below ground surface. Analytical samples collected: SB-10_1-2 ft: PVOC + Naphthalene, DRO SB-10_5-6 ft: PVOC + Naphthalene, DRO					-													
End of Boring at 10 feet below ground surface. Analytical samples collected: SB-10_1-2 ft: PVOC + Naphthalene, DRO SB-10_5-6 ft: PVOC + Naphthalene, DRO					 8													
End of Boring at 10 feet below ground surface. Analytical samples collected: SB-10_1-2 ft: PVOC + Naphthalene, DRO SB-10_5-6 ft: PVOC + Naphthalene, DRO					-							0.3						
End of Boring at 10 feet below ground surface. Analytical samples collected: SB-10_1-2 ft: PVOC + Naphthalene, DRO SB-10_5-6 ft: PVOC + Naphthalene, DRO					-							0.5						
SB-10_1-2 ft: PVOC + Naphthalene, DRO SB-10_5-6 ft: PVOC + Naphthalene, DRO		ш			 10			-										
SB-10_5-6 ft: PVOC + Naphthalene, DRO SB-10_6-8 ft: PVOC + Naphthalene, DRO																		
						SB-10_5-6 ft: PVOC + SB-10_6-8 ft: PVOC +	Naphthalene, DRO											
						05 10_0 0 18.1 100	Traphiliaione, Bite											

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro			Vastewater □ Redevelopment ⊠	Waste Other	_	ement					D	1	C	1
	Facili	ty/Projec	et Nam	e				License/	Permit/	Monito	ring Nu	mber	1.	Boring	Pag Numbe		of	<u> </u>
	Ne	madji	Subst	ation	Phase III Ir	vestigat	tion	81600	9590)					S	B-11		
		_	-	Name of	f crew chief (fi	rst, last) a	nd Firm	Date Dri	lling St	arted		Dat	te Drilli	ng Com	pleted		Drilli	ng Method
		i Johns in Port		ting					1/6/	2020				1/6/20	020		Di	rect push
		nique W			DNR Well I	D No.	Common Well Name	Final Sta			el S	Surface	e Elevat	ion		Вс	rehole l	Diameter
	<u> </u>	0:10			: . 1 🗖	<u> </u>						1		.3 Fee			2.3	inches
		Grid On Plane	ngın	∐ (es	stimated:		ring Location 🖂 E S/C/N	La	t46	<u>° 41</u>	1	8.8"	Local G	ria Loc	ation N			
	SW		of N	W 1	/4 of Section	36,	T 49 N, R 14 W	Long	g <u>-92</u>	°	<u>'</u>	7.8"		Feet			F	□ E Feet □ W
	Facili	ty ID			Coun	•		County Co		Civil T	own/Cit	y/ or V	/illage					
		mnla			Dou	glas				Supe	rior			Coil I	Drone	rtioo		
	Sai	mple				C - 11/D	a da Danasintias				0	تمزره	ina		Prope	hrt	-	
		tt. & d (in	ınts	Feet			ock Description eologic Origin For						ive			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		S
	ber Iype	th A	, Cot	h In			ch Major Unit		CS	hic	ram	ppm	oress gth	ture	% E	<u> </u>	icity «	/ men
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet			J		SO	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moistures Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
EOPR	OBE	60			Poorly grade	ed sand wi	th silt; fine; dark brown;	moist;					0 01					
		30		_	(fill); 0.2 fee		ow. -brown; moist; high plas	ticity.				0.1						
				-	,,	,	, , ,	,				0.1						
				-2														
				_								0.3						
				- 4														
EOPR	OBE	60 60		_					СН			0.3						
				-6														
				_														
												0.4						
				-8														
				-														
				_								0.6						
					End of Borir Analytical sa		et below ground surface lected:	=										
							· Naphthalene, DRO · Naphthalene, DRO											
							, -											
		-	fy that	the info	rmation on thi	s form is t	rue and correct to the be	est of my k	nowled	lge.								
	Signa	ture	26.	`a+::-	<i>a</i> () <	Sohit	Firm Barr	r Engine	ering (CO								Tel

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				<u>Ro</u>		Vastewater □ Redevelopment □	Waste I Other	_	ement					D.	. 1		1
	Facili	ty/Proje	ct Nam	e			License/I	Permit/	Monitor	ring Nu	mber	[]	Boring	Pag Numb		of	<u>I</u>
					Phase III Investiga	tion	81600						Jermg		B-12	2	
					f crew chief (first, last) a		Date Dri	ling St	arted		Dat	e Drillii	ng Com	pleted		Drilli	ng Method
	Tw	n Johns in Port	ts Tes						2020				1/6/20	020			rect push
	WIU	nique W	ell No.		DNR Well ID No.	Common Well Name	Final Sta	tic Wa	ter Leve	el S	Surface	Elevat			В		Diameter
	Local	Grid O	rigin	☐ (es	stimated: or Bo	ring Location 🛛					1	657. Local G	2 Fee			2.3	inches
		Plane	iigiii	☐ (ca	N,	E S/C/N	La	t <u>46</u>	<u>°</u> 41	'1	8.5"	Local O	IIG LOC		-		□Е
	SW	1/4	of N	W 1	/4 of Section 36,	T 49 N, R 14 W	Long	-92	<u>.° 4</u>	.'	9.5"		Feet			F	Feet W
	Facili	ty ID			County Douglas		County Co	de	Civil To Super		y/ or V	illage					
	Sai	mple				<u>'</u>							Soil	Prope	erties		
		& jin)	,,	 1	Soil/F	Rock Description											
	e	Att.	ount	т Ее	And G	eologic Origin For					Ш	ssive	n	. 0			nts
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Ea	ch Major Unit		CS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	or	Plasticity Index	RQD/ Comments
	Nur	Len	Blo	Dep				S N	Grap Log	Well Diagr	PID	Con	Moi	S/S	Color	Plastic Index	RQI Con
EOPR	OBE	60 54		_	Silty gravel; fine; gray; ice/snow.	moist; angular; (fill); 0.2	feet of		300								
								GM			0.1						
				-2					500								
				-		ense; fine; red-tan; moist	t;		<u> ΟΙ Ψ</u>								
				-	rounded; (fill).			SP			0.2						
				- 4				OI .									
					Fat along atiff, and have												
EOPR	OBE	60		-	Fat clay, still, red-brow	wn; moist; high plasticity.					0.2						
		60		-													
				- -6 -													
				-				СН			0.4						
				-				СП			0						
				-8													
				-							0.4						
	L	4		-10	End of Boring at 10 fe	et below ground surface.											
					Analytical samples co	lected:											
					SB-12_6-8 ft: PVOC	r Naphthalene, DRO											
	I here	by certi	fy that	the info	ormation on this form is	true and correct to the be	est of my k	nowled	lge.								
	Signa	ture	21	. , .	0 8 / /	Firm Barr	Engine	ring	CO								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

						Redevelopment 🛚	Other							Pag		of 1			
		facility/Project Name						License/Permit/Monitoring Number						Boring Number					
		Nemadji Substation Phase III Investigation Boring Drilled By: Name of crew chief (first, last) and Firm							816009590 Date Drilling Started					pleted	B-13	Drilling Method			
	Jim Johnson												-6	T		Drining Weemed			
		Twin Ports Testing WI Unique Well No. DNR Well ID No. Common Well Name Local Grid Origin (estimated:) or Boring Location						1/6/2020 Final Static Water Level Sun					1/6/20)20		Direct push			
	WI U												ion .7 Fee	4	Bo	Borehole Diameter 2.3 inches			
	Local							46	5° 41	[]	Local G				2.3 menes				
		tate Plane N, E S/C/N					La	8.9"			□ N		□Е						
						T 49 N, R 14 W		-92			9.8"		Feet	□ S		Feet U			
	Facili	·							County Code Civil Town/City/ or Village Superior										
	Sample				Douglas				Super	101	Soil Properties								
		Τ΄	Blow Counts		Soil/R	Rock Description								ТОРО	11.00				
	0	Length Att. & Recovered (in)		Depth In Feet	And Ge					(ii)	Compressive Strength					nts			
	lber Type	Length Att. Recovered (°C °	h h		ch Major Unit		CS	hic	ram	PID (ppm)	pres ngth	sture	F %	ĭ	ticity	o/ mer		
	Number and Type	Leng	Blov	Dep				S O	Graphic Log	Well Diagram	PID	Compress Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments		
EOPR		60 40.8		_	Silty gravel; fine; gray; ice/snow.	moist; angular; (fill); 0.8	feet of		0,70										
		40.6		- 2 -	ice/silow.	i;	GM			0.1									
					large gravel clast at 1.			h.V.											
					Poorly graded sand; de rounded; (fill)														
							SP												
				4															
EOPR	OBE	60 62.4		- 6	Fat clay; stiff; red-brov					0.1									
				<u> </u>															
								СН			0.1								
				-8															
				-															
				Ĺ							0.2								
				-10															
					Analytical samples col	et below ground surface. lected:													
					SB-13_6-8 ft: PVOC +	- Naphthalene, DRO													
	I here	by certi	fy that	the info	ormation on this form is t	rue and correct to the be	st of my k	nowled	lge.										
	Signa	ture	01	٠ ــــ ،	Salat	_ Firm Barr	Engine	ring	СО								Tel:		

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		d/Wastewater □ on/Redevelopment ⊠	Waste Other	_	ement												
									Page 1 of 1												
	Facility/Project Name Nemadji Substation Phase III Investigation							License/Permit/Monitoring Number							Boring Number						
								816009590 Date Drilling Started						SB-14 Pate Drilling Completed							
		Boring Drilled By: Name of crew chief (first, last) and Firm							tarted		Dat	e Drilli	ng Com	ірієтеа		Drilling Method					
		Jim Johnson Twin Ports Testing							1/6/2020					020		Direct push					
	WI Unique Well No. DNR Well ID No. Common Well Name						Final Sta			Surface	Elevat			Во	Borehole Diameter						
												.4 Fee			2.3 inches						
		Grid Or	rigin	☐ (es	stimated:) or N	L	at <u>46</u>	5° 41	' 1	9.3"	Local C	irid Loc		_							
	State Plane N, E S/C/N SW 1/4 of NW 1/4 of Section 36, T 49 N, R 14 W								2° 4	<u> </u>	0.3 "		Feet	\square N \square S		□ E Feet □ W					
								Long <u>-92° 4' 10.3"</u> County Code Civil Town/City/ or Villag													
	Douglas							Superior													
	San	nple											Soil	Prope	erties	s					
		& (in)	s	et	So	Soil/Rock Description		CS		u	PID (ppm)	ပ									
		Length Att. & Recovered (in)	Blow Counts	Depth In Feet	And				Compressive Strength			Moisture Content	G/S/F %	Color	<u> </u>	nts					
	nber Typ	Length Att. Recovered (× C	th L			Graphic Log			Well Diagram					Plasticity Index	RQD/ Comments					
	Number and Type	Len Rec	Blo	Dep				S N	Grap Log	Well Diagr	PID	Con	Mo	S/S	သိ	Plastic Index	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				
EOPR	OBE	60 49.2 60 26.4		_	Silty gravel; fine; gr	nd; (fill).		000		0.1											
				_			GM														
				_	Poorly graded sand	moist [.]	oist:														
				-2	rounded; (fill).	moiot,															
				_				SP													
											0.1										
				<u>-</u> 4	Estable of the stable																
				-	Fat clay; soft; red-b	rown; wet; high plasticity.					0.1										
EOPR	OBE			_																	
				_																	
				 6																	
				-				СН			0.2										
				- 8																	
				_																	
				_							0.3										
	Ш			_ 10																	
	End of Boring at 10 feet below ground surface. Analytical samples collected: SB-14_6-8 ft: PVOC + Naphthalene, DRO						е.														
			y that	the info	ormation on this form	is true and correct to the b															
	Signat	ure (Mr	istin	ia J. Seh	et Firm Bar	rr Engine	ering	CO								Tel: Fax:				

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		Vastewater □ Redevelopment ⊠	Waste I Other	_	ement								
					Remediation	redevelopment Z	Other							Pag	ge 1	of .	1
	Facilit	ty/Projec	ct Nam	e			License/I			ring Nu	mber		Boring	Numbe	er		
					Phase III Investigat		81600				-	D :11:			B-15		36.1.1
		g Drilled Johns	-	Name of	f crew chief (first, last) a	nd Firm	Date Dri	ling Si	arted		Dat	e Drillii	ng Com	pleted		Drilli	ng Method
		in Port		ting				1/6/	2020				1/6/20	020		Di	rect push
		nique W			DNR Well ID No.	Common Well Name	Final Sta			el S	Surface	e Elevat			Вс		Diameter
													2 Fee			2.3	inches
		Grid On Plane	rigin	(es		ring Location 🖂 E S/C/N	La	t 46	° 41	' 1	9.6"	Local G	rid Loc	_			
	SW		of N	W / 1	/4 of Section 36,	T 49 N, R 14 W		g <u>-92</u>			0.6"		Foot	□ N □ S		г	□ E Feet □ W
	Facilit		01 11	VV 1	County		County Co		Civil To			illage	reet	<u> </u>		Г	reet 🗀 w
		,			Douglas		J		Super		,	J					
	Sar	nple			1	•							Soil I	Prope	erties		
		& (in)		 	Soil/R	lock Description											
	o	Att.	ount	т Ее	And Ge	eologic Origin For					m)	SSIVE	0			<u> </u>	nts
	ober Typ	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Eac	ch Major Unit		CS	ohic	l gran	PID (ppm)	npres ngth	sture	Έ%	or	ticit)/ Ime
	Number and Type	Leng	Blov	Dep				S O	Graphic Log	Well Diagram	PID	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
EOPR	OBE	60			Silty gravel; fine; gray;	moist; angular; (fill)		014	P.K.								
		42		_				GM			0.4						
				_	Poorly graded sand; de	ense; fine; red-tan; moist	t;				0.1						
				-2	rounded; (fill)												
				-													
								SP			0.1						
				<u>-4</u>													
				-													
EOPR	OBE	60		_	Fat clay; soft; red-brov	vn; moist; high plasticity.					0.1						
		56.4		_													
				 6 													
				-							0.2						
				_				СН			0.2						
				- 8													
											0.2						
	Ц	-		-10	Find of Doning at 40 fo	-											
					Analytical samples coll	et below ground surface. lected:											
					SB-15_6-8 ft: PVOC +	- Naphthalene, DRO											
	Lhara	by corti	fiz that	the info	rmation on this form is t	rue and correct to the be	set of my 1	novile	lae	I						I .	
	Signa	h			_	[Fi											
	مانودد		hou	itin	a O. Sohnt.	. arr	Enginee	ering	CO								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

													Pag		of I	1
	ty/Proje			Dl III I	4:	License/P			ring Nu	mber		Boring		er B-16		
				Phase III Investigated for the crew chief (first, last) a		81600 Date Dril				Dat	e Drillii	ng Con		D-10		ng Method
Jin	Johns	son		· · · · · · · · · · · · · · · · · · ·			_					_				
	rin Port			DNR Well ID No.	Common Well Name	Final Stat		2020	.1 (Sumfo o o	Elevat	1/6/20	020	D.		rect push Diameter
WIU	mque w	eli No.		DINK WEII ID NO.	Common well Name	rinai Stat	ic wa	ter Leve	1	Suriace		ion .5 Fee	t	В		inches
	Grid O	rigin	[] (es		ring Location 🛛		46	5° 41	' 1	9.7"	Local G					
State SW	Plane	.c N	X 1	· · · · · · · · · · · · · · · · · · ·	E S/C/N	Lat Long				1.5 "		F4				□ E
Facili		of N	VV 1.	/4 of Section 36,	T 49 N, R 14 W	County Cod		Civil To			illage	Feet	□ S		F	eet W
	,			Douglas		,		Super		J	υ					
Sa	mple											Soil	Prope	erties		
	% (ii)	ıts	set		Rock Description),e					
er De	Att ered	Cour	In Fe		eologic Origin For		S	္ပ	띮	(md	essiv	ıre ıt	%		ity	ents
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Eac	ch Major Unit		$_{\rm S}$	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
<u>Ž</u> ä DPROBE	60	B	Ď	Silty gravel: dense: fin	e; gray; moist; angular; (fill)	n	1 0 1 4 0	M Q	<u> </u>	St C	Σŭ	Ď	С	F I	జై ర
JI NOBE	42		-	enty graver, derice, ini	o, gray, moiot, angalar, ().	GM	500								
						(6.11)		, Dt		0.4						
			-2	Poorly graded sand; d	ense; fine; red-tan; moist	i; (fill).										
			-													
							SP			0.5						
			<u> </u>													
			-													
PROBE	60 60									1.2						
			-6	Fat clay; very stiff; red	-brown; moist; high plast	icity.										
			-													
										1.7						
			-8				CH									
			-													
										1.8						
	Ц		-10	End of Daring at 10 fo	at halous ground as of ac											
				Analytical samples col	et below ground surface. lected:											
				SB-16_6-8 ft: PVOC -	⊦ Naphthalene, DRO											
		i .	1					1			1				1	

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		Vastewater □ Redevelopment ⊠	Waste 1 Other	_	ement								
					Remediation	redevelopment Z	Other							Pag	ge 1	of .	1
	Facilit	y/Proje	ct Nam	e			License/I	Permit/	Monito	ring Nu	mber		Boring	Numbe	er		
					Phase III Investigat		81600								B-17		
		_	-	Vame of	f crew chief (first, last) a	nd Firm	Date Dri	lling St	arted		Dat	e Drilli	ng Com	pleted		Drilli	ng Method
		tt Carl in Port		ting				1/7/	2020				1/7/20	020		Dia	rect push
		nique W			DNR Well ID No.	Common Well Name	Final Sta	tic Wa	ter Leve	el S	Surface	Elevat	ion		Bo	rehole l	Diameter
													9 Fee			2.3	inches
		Grid O	rigin	(es		ring Location 🖂	La	t 46	° 41	' 1	8.5"	Local G	rid Loc	ation			
		Plane	. 3.7		,	E S/C/N											□ E
	SW		of N	W 1	/4 of Section 36,	T 49 N, R 14 W		g <u>-92</u>			0.6"	7:11	Feet	□ S		F	eet W
	Facilit	IY ID			County Douglas		County Co	ae	Civil To Super		y/ or v	illage					
	Sar	nple											Soil I	Prope	erties		
		T			Soil/R	lock Description											
		tt. & d (in	ınts	Feet		eologic Origin For						ive					įχ ο
	er ype	h A	Col	면		ch Major Unit		S	ic	am	udc	ress	ure	%		city	nent
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Fect	Eac	in Major Onit		SC	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
	Ź 8		Bl	Ŏ	0.00			D	27	ĭ Ž	PI	St	Σŭ	Ò	Č	P I	<u> </u>
EOPR	OBF	60 48		-	Silty gravel; fine; gray;	moist; angular; (fill).		GM									
				-	5 1 1 1 1 6	1.4					0.2						
				-	Poorly graded sand; fir	ne; red-tan; rounded; (fill).										
				-2													
				-				SP									
											0.3						
				_4													
				_	Fat clay; medium stiff; plasticity.	red-brown; moist; high											
-000	ا م			_	plasticity.												
EOPR	OBE	60 60		_							0.2						
				-6													
				-													
				-				CH			0.4						
				-													
				-8													
				-													
											0.3						
				_10													
				10		et below ground surface.	=										
					Analytical samples coll SB-17 6-8 ft: PVOC +	· Naphthalene, DRO											
					_	•											
	<u> </u>	<u> </u>	0.1					<u> </u>									
			ty that	the info	rmation on this form is t												
	Signa	ture /	1601	itin	a O. Sohnt.	- Firm Barı	Engine	ering (CO								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

T 11	· /D :	. 37				T · /r		.		1	T:		Pag		of .	1
	ty/Proje madii			Phase III Investigat	tion	License/I 81600			ng Nu	mber		Boring		er B-18	2	
				Crew chief (first, last) a		Date Dri				Dat	e Drilli	ng Com				ng Method
Tw	tt Carl in Por	ts Tes						2020				1/7/20	020			rect push
WI U	nique W	/ell No.		DNR Well ID No.	Common Well Name	Final Sta	tic Wa	ter Leve	1 S	Surface	Elevat	ion .4 Fee	+	В		Diameter inches
Local	Grid O	rigin	(es		ring Location 🛛	<u> </u>	4.6	0 41	, 1	7.5"	Local G				2.3	inches
SW		of N	W 1/	N, 4 of Section 36,	E S/C/N T 49 N, R 14 W	La Long	g <u>-92</u>	2° 4	<u>'</u> 1	0.1"		Feet	□ N □ S		F	E E W
Facili	ty ID			County Douglas		County Co	de	Civil To Super		y/ or V	illage					
Sar	mple			1	1							Soil	Prope	erties		
Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	And Ge	cock Description cologic Origin For ch Major Unit		CS	hic	ram	PID (ppm)	Compressive Strength	ture	%	ı	Plasticity Index	RQD/ Comments
Num and T	Leng	Blow	Deptl	Luc	on major one		OS O	Graphic Log	Well Diagram	PID (Compress Strength	Moisture Content	G/S/F %	Color	Plast	RQD Comi
PROBE	60 42		-	Silty gravel; fine to coa (fill).	rse; gray; dry to moist; a	angular;	GM			0.7	0 01					
			- 2	Poorly graded sand: de	ense; fine; red-tan; mois	t:	SP									
			_	rounded; (fill).	vn; moist; high plasticity.		01									
			- 4							1.0						
PROBE	60 60		- -							1.1						
			- 6				СН									
			_ 8							1.1						
			- -							1.1						
			 10 -	End of Boring at 10 fe Analytical samples col SB-18_2-4 ft: PVOC + SB-18_6-8 ft: PVOC +	· Naphthalene, DRO											

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		√astewater □ Redevelopment ⊠	Waste 1 Other	_	ement								
					Remediation	redevelopment 23	Other							Pag	e 1	of	1
	Facilit	y/Proje	ct Nam	e			License/I	Permit/	Monito	ring Nu	mber]	Boring	Numbe	er		
					Phase III Investigat		81600								B-19		
		_	-	Name of	f crew chief (first, last) a	nd Firm	Date Dri	lling St	arted		Dat	e Drillii	ng Com	pleted		Drilli	ng Method
		tt Carl in Port		ting				1/7/	2020				1/7/20	020		Di	rect push
		nique W			DNR Well ID No.	Common Well Name	Final Sta			el S	Surface	Elevat	ion		Вс	rehole l	Diameter
				_									2 Fee			2.3	inches
		Grid Or Plane	rigin	∐ (es		ring Location 🖂 E S/C/N	La	t 46	5° 41	<u>'</u> _ 1	7.3 "	Local G	rid Loc	_			
	SW		of N	W 1	/4 of Section 36,	T 49 N, R 14 W	I	g -92	.° 4	<u> </u>	1.3 "		Feet	□ N □ S		F	□ E Feet □ W
	Facilit		01 11	*** 1	County		County Co	de	Civil To			illage	1 000				<u> </u>
					Douglas				Super	ior							
	Sar	nple											Soil I	Prope	rties		
		(E) &	ts	et	Soil/R	ock Description						စ					
	r.	Att.	uno	n Fe	And Ge	eologic Origin For		N		я	(mc	SSSiv	e _	0		<u>\$</u>	snts
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Eac	ch Major Unit		C)	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
	an N		BIc	De				S U	Grap Log	Well Diagr	PII	Col	Σ _O	G/S	<u> చ</u>	Pla Ind	RQ Co
EOPR	OBE	60 45.6		_	Silty gravel; fine to coa	rse; gray; moist; angula	r; (fill).	GM									
				-		ense; fine; red-tan; mois	t;				0.6						
				-	rounded; (fill).												
				_2				SP									
				_							0.7						
				_							0.7						
				 4	Fat clay; very stiff; red	-brown; moist; high plast	ticity.										
							•										
EOPR	OBE	60 60									0.7						
		00		-6													
				_													
				_				CH			0.5						
				- 8													
				_ 0													
				-							0.7						
				_													
	Ц	1		 10		et below ground surface.											
					Analytical samples coll SB-19_6-8 ft: PVOC +	ected: · Naphthalene, DRO											
					_	,											
			fy that	the info	rmation on this form is t		est of my k	nowled	ige.								
	Signa	ture	260	intin	a O. Sohnt.	_ Firm Barr	Engine	ering	СО								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		√astewater □	Waste I	_	ement								
					Remediation/l	Redevelopment 🛚	Other										
7	Facilit	y/Projec	ct Nam	e			License/I	ermit/	Monito	ring Nu	mber		Boring	Pag Numbe		of	l
	Nei	madji	Subst	ation	Phase III Investigat		81600	9590)	0				S	B-20		
Ī		_	-	Name of	f crew chief (first, last) a	nd Firm	Date Dril	ling St	arted		Dat	e Drilli	ng Com	pleted		Drilli	ng Method
		tt Carl in Port		tina				1/7/	2020				1/7/20	020		Di	rect push
7		nique W			DNR Well ID No.	Common Well Name	Final Sta			el S	Surface	Elevat		020	Вс		Diameter
_													4 Fee			2.3	inches
		Grid Oı Plane	rigin	☐ (es		ring Location 🖂 E S/C/N	La	46	° 41	<u>'</u> 1	8.5"	Local G	rid Loc	_			
	SW		of N	W 1.	/4 of Section 36,	T 49 N, R 14 W	Long		. 4	' 1	1.9"		Feet	□ N □ S		F	□ E Teet □ W
	Facilit				County		County Co		Civil To		y/ or V	illage					
_					Douglas				Super	ior		1					
-	Sar	nple											Soil	Prope	erties		
		Length Att. & Recovered (in)	nts	eet		ock Description					_	ve					
	er	h Atr rered	Cou	In F		eologic Origin For		S	ic	am	(mdc	ressi th	ure nt	%	_	city	nents
	Number and Type	Length Att. Recovered (Blow Counts	Depth In Feet	Eac	ch Major Unit		SC	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
EOPRO	ਟ ਫ਼ BE∏	60	В	Д	Silty gravel: fine: grav:	dry to moist; angular; (fi	II).	n	100 T	≱ D	Ь	S C	C N	9		P II	<u> </u>
		50.4			, , , , , , , , , , , , , , , , , , , ,	, , ,	,	GM	5/1								
									J. O.		0.3						
				-2	rounded; (fill).	ense; fine; red-tan; moist	;										
				-				SP									
											0.4						
				<u> </u>	Fat along atiffy rad brown	vn; moist; high plasticity.											
				_	rat clay, Still, red-blow	m, moist, nigh piasticity.											
EOPRO	BE	60		_							0.6						
		60		_6													
				-													
				-				СН			0.6						
				- 8													
				-							0.6						
				-													
				-10		et below ground surface.											
					Analytical samples coll SB-20_6-8 ft: PVOC +	· Naphthalene, DRO											
- 1	here	by certif	fy that	the info	rmation on this form is t	rue and correct to the be	st of mv k	nowled	lge.	<u> </u>		I		<u> </u>	<u> </u>		
	Signa	-		·.+		Firm -	Enginee										Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		d/Wastewater ☐ on/Redevelopment ⊠	Waste Other		gement								
					Remediation	on redevelopment	omer							Pag	ge 1	of	1
	Facilit	y/Projec	et Nam	ie					/Monito	ring Nu	mber		Boring	Numb	er		
					Phase III Investig			09590			-	D :11:			B-21		36.1.1
		_	-	Name o	f crew chief (first, last	t) and Firm	Date Di	rilling S	tarted		Dat	te Drilli	ng Com	npleted		Drilli	ng Method
		Johns in Port		ting				1/6	/2020				1/6/20	020		Di	rect push
		nique W			DNR Well ID No.	Common Well Name	e Final St			el	Surface	e Elevat			В		Diameter
													.4 Fee			2.3	inches
		Grid Or Plane	rigin	(es	stimated: \square) or N ,	Boring Location 🖂	1	at4	6° 41	' 1	9.0"	Local C	irid Loc	_			
	Sw		of N	W 1	1/4 of Section 36,		I	ng <u>-92</u>			2.7"		Feet	\square N \square S		F	□ E Feet □ W
	Facilit		01 11	., .	County	1 17 11,10 11	County C		Civil To			/illage	1 001				
					Douglas				Super	ior							
	Sar	nple											Soil	Prope	erties		
		& (ii)	S	et	So	il/Rock Description						ပ					
	ے و	Att. red (oun	n Fe	And	Geologic Origin For				ے ا	(mi	ssiv	e	\ 0		<u> </u>	nts
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	:	Each Major Unit		CS	Graphic Log	Well Diagram	PID (ppm)	npre	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
	and Nu		Blo	Dep				S U	Grap Log	Well Diagr	PIL	Compressive Strength	Mo	3/5	သိ	Plastic Index	RQ Coi
EOPR	OBE	60 38.4		-	Silty gravel; dense;	fine; gray; moist; angular	; (fill).	GM									
				_ _ 2	Poorly graded sand (fill).	; dense; fine; red-brown;	moist;	SP			0.4						
					Fat clay; stiff; red-b	rown; moist; high plasticit	ty.										
				- 4							0.3						
EOPR:	OBE	60		-							0.4						
		60		- 6				СН									
				-							0.4						
				 8													
				-							0.4						
	Ц			 10	Analytical samples		ce.										
					SB-21_6-8 ft: PVO	C + Naphthalene, DRO C + Naphthalene, DRO											
			y that	the info	ormation on this form	is true and correct to the	best of my	knowle	dge.								
	Signat	ure	Phri	istin	ia J. Sehr	et Firm Ba	arr Engine	eering	СО								Tel: Fax:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Kol		Vastewater □ Redevelopment □	Waste I Other		ement					Dag	ge 1	of 1	
	Facili	ty/Proje	ct Nam	e			License/I	Permit/	Monito	ing Nu	mber		Boring	Pag Numbe		01 1	
	Ne	madji	Subst	ation 1	Phase III Investiga		81600			J			J		B-22		
		-	-	Name of	crew chief (first, last) a	nd Firm	Date Dri	lling St	arted		Dat	e Drillii	ng Com	pleted		Drillii	ng Method
		ett Carl in Por		ti				1 /7 /	2020				1/7/20	20		Dia	aat muala
		nique W			DNR Well ID No.	Common Well Name	Final Sta			1 5	Surface	Elevat)20	Во		ect push Diameter
		1											.4 Fee	t			inches
		Grid O	rigin	(es		ring Location 🛛	,	t 46	° 41	' 1	8.3 "	Local G	rid Loc	ation			
		Plane			· · · · · · · · · · · · · · · · · · ·	E S/C/N	La							□ N	-	_	Ε
	SW Facili		of N	W 1	/4 of Section 36,	T 49 N, R 14 W	Long	g <u>-92</u>	Civil To		4.0"	Village	Feet	□ s		F	eet W
	1 aciii	ty ID			Douglas		county Co	ac	Super		y/ O1 V	mage					
	Sai	mple							<u> </u>				Soil I	Prope	erties		
			,,		Soil/R	lock Description											
	(b)	± 0	Blow Counts	Depth In Feet		eologic Origin For					n	sive					ıts
	Typ.	Length Att. Recovered (CC &	th In	Eac	ch Major Unit		CS	ohic	l gram	ıdd)	pres	sture	¥%	i.	Plasticity Index)/ imei
	Number and Type	Leng	Blov	Dep				S O	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plastic Index	RQD/ Comments
EOPF		60 52.8			Silty gravel; fine to me	dium; gray; dry; angular;	(fill).	GM	070								
		32.0		-	Poorly graded sand wi angular; (fill).	th silt; dark brown; dry to	moist;	SP-SM			0.4						
				<u></u> 2	Fat clay; stiff; red-brow	vn; moist; high plasticity.											
				- - 4							0.4						
EOPF	ROBE	60 60		-							0.6						
				6 - -				CH			0.5						
				8 - -							0.4						
				- 10	Analytical samples col												
					SB-22_2-4 ft: PVOC + SB-22_6-8 ft: PVOC +												
	I here	by certi	fy that	the info	rmation on this form is t	rue and correct to the be	st of my k	nowled	lge.								
	Signa	ture	26.	· <u> </u>	a O Salat	Firm Barr	Engine	ring	CO								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

					remediation	Redevelopment 🛚	Other							Pag		of 1	
		ty/Proje			DI IIII .'	,•	License/P			ing Nu	mber		Boring				
					Phase III Investigate forew chief (first, last) a		81600 Date Dril				Dat	e Drillii	ng Com		B-23		ng Method
		ett Carl	-					8					-6	T			
		in Por							2020				1/7/20)20			ect push
	WI U	nique W	ell No.		DNR Well ID No.	Common Well Name	Final Stat	ic Wa	ter Leve	el S	Surface	Elevat	ion .0 Fee	+	Bo		Diameter inches
	Local	Grid O	rigin	(es	timated:) or Box	ring Location 🛛	1]	Local G				2.3	ilicites
		Plane			N,	E S/C/N	Lat				8.1"			□ N			□Е
	SW Facili		of N	W 1.	/4 of Section 36,	T 49 N, R 14 W	Long				4.2"	7:11	Feet	□ S		F	eet W
	raciii	ty ID			County Douglas		County Coo	ie	Civil To Super		y/ or v	illage					
	Saı	mple			[Soil I	Prope	rties		
		& jin)	s	et	Soil/R	lock Description						0					
	. e	Att.	ount	n Fe	And Go	eologic Origin For				u	(m)	ssive	e .	, 0		<u> </u>	nts
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Eac	ch Major Unit		SCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
			Blc	De				S D	Grap Log	Well Diagr	PII	Cor	Co Mo	G/S	ပိ	Plastic Index	RQ Co
EOPR	OBE	60 45.6		-	Silty gravel; fine to me angular; (fill).	dium; gray; dry to moist;		GM									
				-							0.1						
				_2	Poorly graded sand; de rounded (fill).	ense; red-tan; dry to mois	st;										
				-	rounded (IIII).												
				-				SP			0.1						
				_4													
				·													
EOPR	OBE	60			Fat clay; medium stiff;	red-brown; dry to moist;	high				0.2						
		60		- -6	plasticity.												
				-													
				-							0.2						
				_。				СН									
				 8 													
				-							0.3						
				-													
				-10	End of Boring at 10 fe Analytical samples col	et below ground surface.											
					SB-23_6-8 ft: PVOC +	- Naphthalene, DRO											
	I here	by certi	fy that	the info	rmation on this form is t	rue and correct to the be	st of my kı	nowled	lge.								
	Signa	ture	26.	·+:	a O Sahat	. Firm Barr	Enginee	ring	CO								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		Vastewater	Waste I	_	ement								
					Remediation/	Redevelopment 🛚	Other	Ш									
	Facilit	ty/Projec	et Nam	0			License/I	Permit/	Monitor	ring Nu	mher	la la	Boring	Pag Numb	ge 1	of	1
		-			Phase III Investiga	tion	81600			illig ivu	inoci	ľ	Dornig		B-24		
	Borin	g Drilleo	l By: 1		f crew chief (first, last) a		Date Dri				Dat	e Drillii	ng Con				ng Method
		tt Carl in Port		ting				1/7/	2020				1/7/2	020		Di	rect push
		nique W			DNR Well ID No.	Common Well Name	Final Sta			el S	Surface	Elevat		020	Вс		Diameter
													7 Fee			2.3	inches
		Grid On Plane	rigin	☐ (es	stimated: \square) or Bo	ring Location 🖂 E S/C/N	La	t 46	° 41	' 1	7.6"	Local G	rid Lo		_		
	SW		of N	W 1	./4 of Section 36,	T 49 N, R 14 W		g <u>-92</u>	.° 4	' 1	3.6"		Feet	N □ S		F	☐ E Feet ☐ W
	Facilit				County		County Co	de	Civil To		y/ or V	illage					
					Douglas				Super	rior		1	0 "				
	Sar	nple											Soil	Prope	erties		
		t. & 1 (in)	nts	eet		Rock Description						ive					100
	er ype	h At	Cou	l In I		eologic Origin For ch Major Unit		S	nic	am	mdd	ressi	ure	%		city	nent
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Eac	ch Major Offit		SC	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
EOPR	OBE	60	В	Д	Silty gravel; fine; gray;	moist; angular; (fill).		D	140 170	20	Ь	S C	20	9		P II	<u> </u>
		50.4				,		GM	546								
				_							0.6						
				-2		th silt; fine; red-brown; m	noist;										
				_	subrounded to rounde	α; (τιιι).											
								SP-SM	1		0.7						
				<u>–</u> 4													
				_	Fat clay; very stiff; red	-brown; moist to wet; hig	ıh										
EOPR	OBE	60			plasticity.						0.9						
		48		- 6													
				_				СН			0.9						
				- 8													
				-													
				L							1.0						
				- 10													
				_10	End of Boring at 10 fe Analytical samples col	et below ground surface.	•										
					SB-24_6-8 ft: PVOC -	Naphthalene, DRO											
	I here	by certif	fy that 1	the info	ormation on this form is t	true and correct to the be	est of my k	nowled	lge.					•	•		
	Signa	ture	26	·.+'	Salat	_ Firm Barr	Enginee	ering	СО								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		/astewater □	Waste 1	_	ement								
					Remediation/	Redevelopment 🛚	Other							D	1	C	1
	Facilit	ty/Proje	ct Nam	e			License/I	Permit/	Monito	ring Nu	mber	[]	Boring	Pag Numb		of	l
	Nei	madji	Subst	ation	Phase III Investigat		81600	9590)	Ü			_	S	B-25		
		-	-	Name o	f crew chief (first, last) a	nd Firm	Date Dri	lling St	arted		Dat	e Drillii	ng Com	npleted		Drilli	ng Method
		tt Carl in Port		ting				1/7/	2020				1/7/20	020		Di	rect push
		nique W			DNR Well ID No.	Common Well Name	Final Sta			el S	Surface	Elevat		<u></u>	Во		Diameter
													9 Fee			2.3	inches
		Grid Or Plane	rigin	☐ (es		ring Location 🖂 E S/C/N	La	t46	° 41	<u>'</u> 1	6.9"	Local G	rid Loc				
	SW		of N	W 1	1/4 of Section 36,	T 49 N, R 14 W	I	-92		.' 1	3.3 "		Feet			I	☐ E Feet ☐ W
	Facilit				County		County Co		Civil To	own/Cit	y/ or V	illage					
				1	Douglas				Super	rior		1					
	Sar	mple 											Soil	Prope	erties	1	
		% : &	nts	eet		lock Description					_	ve					
	er /pe	Att ered	Cour	In F		eologic Origin For		S	.c	un un	(md	ressi	ure nt	%		ity	ents
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Eac	ch Major Unit		SC	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
EOPR	Z ä OBF∏	60	В	Ω	Silty gravel: fine: grav:	dry to moist; angular; (f	ill)	D	140 740	≱ O	<u> </u>	SC	CZ	Ü	0	P] Ir	¥ 0
20111		54		_	only graver, rine, gray,	ary to molot, angular, (r	,	GM	500								
								0			0.9						
				-2	Poorly graded sand wi	th silt; fine; red-brown; c	Iry to										
				-	moist (fill).												
								SP-SM			1.1						
				-4													
				F	Fat clay, stiff, red-brow	vn, moist, high plasticity	:										
EOPR	OBE	60		-							1.2						
		60		_ 6													
				L Č													
				-				СН			1.1						
				 8													
				F							1.2						
				-													
	Ц			 10		et below ground surface	.< <cr></cr>										
					Analytical samples col Analytical samples col	lected:											
					SB-25_6-8 ft: PVOC +	· Naphthalene, DRO											
	I here	by certit	fy that	the info	ormation on this form is t	rue and correct to the be	est of mv k	nowlea	lge.						<u> </u>		
	Signa	tura	-		_	Firm -	r Engine										Tel:
	_	(ho	istis	ıa Q. Sehrt	- Dai	Ligino	amg '									1el:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		Vastewater Dedovatement	Waste I	_	ement								
					Remediation/	Redevelopment 🛚	Other	Ш						D	. 1	ع.	1
	Facili	ty/Proje	ct Nam	e			License/l	Permit/	Monito	ring Nu	mber]	Boring	Pag Numb		of	1
	Ne	madji	Subst	ation	Phase III Investigat	tion	81600								B-26		
		_	-	Vame o	of crew chief (first, last) a	and Firm	Date Dri	ling St	arted		Dat	e Drillii	ng Com	pleted		Drilli	ng Method
		tt Carl in Por		ting				1/7/	2020				1/7/20	020		Di	rect push
		nique W			DNR Well ID No.	Common Well Name	Final Sta			el S	Surface	Elevat		<u></u>	Во	rehole	Diameter
		~									- 1		9 Fee			2.3	inches
		Grid On Plane	rıgın	∐ (es		ring Location 🖂 E S/C/N	La	t46	° 41	<u>'</u> 1	6.1"	Local G	rid Loc				
	SW		of N	W 1	1/4 of Section 36,	T 49 N, R 14 W		<u>-92</u>		<u>'</u> 1	2.4"		Feet	\square N \square S		I	☐ E Feet ☐ W
	Facili				County		County Co		Civil To	own/Cit		illage					
					Douglas				Super	rior		ı					
	Sar	nple											Soil	Prope	erties		
		%. (in)	ıts	eet		Rock Description						, e					
	er /pe	Att ered	Cour	In F		eologic Origin For		S	ic.	띮	(md	ressi	ure nt	%		ity	ents
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Eac	ch Major Unit		SC	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
EOPR	Z ä OBF∏	60	B	Q	Silty gravel: fine: grav:	dry to moist; angular; (fi	II)· 0 5	GM	1 C	≱ ∩		S C	ΣŬ	Ğ	0	Pl	<u> </u>
_0110		40.8		_	feet of ice/snow.			GIVI									
					Fat clay; stiff; red-brov	wn; dry to moist; high pla	sticity.				1.0						
				-2													
				_													
				_							1.0						
				4													
				ļ .													
EOPR	OBE H	60		_				CH			1.1						
		60						0									
				 6 -													
				_							1.0						
				_													
				 8													
				_							1.1						
				_							1.1						
	Ц	1		 10		et below ground surface	=										
					Analytical samples col Analytical samples col												
					SB-26_2-4 ft: PVOC + SB-26_6-8 ft: PVOC +	⊦ Naphthalene, DRO											
					35-20_0-011.1 VOC 1	Naprilialerie, Di											
	T.1	<u> </u>	C .1	1					1								
	I here Signa	-	ry that	the info	ormation on this form is t	In:											
	Signa	iure /	Chr.	intis	na O. Sohnt	Firm Barr	Engine	ring	CO								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro		Vastewater	Waste 1	_	ement								
					Remediation/	Redevelopment 🛛	Other										
														Pag	ge 1	of	1
		ty/Projec			Dl III I	4:	License/I			ring Nu	mber		Boring		er B-27	7	
					Phase III Investigated for crew chief (first, last) a		81600 Date Dri				Dat	te Drilli	ng Com				ing Method
		tt Carl	-	varrie o	r orew emer (mst, kast) a	1 11111	Date Dir	ining or	artea		Du	о Бини	ng con	рисса	•		ing weined
	Tw	in Port	s Tes						2020				1/7/20	020			rect push
•	WI U	nique W	ell No.		DNR Well ID No.	Common Well Name	Final Sta	tic Wa	ter Leve	el S	Surface	e Elevat			В		Diameter
	Local	Grid Oı	igin		stimated: or Bor	ring Location 🛛						658 Local G	.7 Fee			2.3	inches
		Plane	ıgııı	☐ (c:		E S/C/N	La	t <u>46</u>	<u>°</u> 41		7.3 "	Local	nia Loc		ī		□ Е
	SW		of N	W 1	1/4 of Section 36,	T 49 N, R 14 W	Long	g <u>-92</u>	<u>° 4</u>	<u>'</u> 1	4.9"		Feet]	Feet W
•	Facili	ty ID			County		County Co	de	Civil To		y/ or V	/illage					
					Douglas				Super	ior							T
	Sar	nple											Soil	Prope	erties		
		(in)	ıts	eet		Rock Description						e e					
	r pe	Att.	uno;	ln Fe	And Ge	eologic Origin For		N N	ပ	я	(mc	essiv	r e	%		Ę.	ents
	Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Eac	ch Major Unit		SCS	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
	anc Dr		Ble	De				Ď	Grap Log	Well Diagr	PII	Str	S M	J/D	ပိ	Pla	RC Co
EOPR) DBE	60 48		L	Silty gravel; fine; gray;	moist; angular; (fill).		GM									
				-				GIVI	96		1.2						
				- 2	Poorly graded sand; fire	ne; red-tan; moist; round	led; (fill).	SP	<u> </u>								
				_	Fat clay; very stiff; red	-brown; moist; high plast	ticity.										
				-							1.2						
				4 -													
EOPR	OBE	60 60		-							1.5						
				 6 				СН									
				-							1.5						
				- 8													
				_	Wet from 9-10 feet.						1.4						
				-10													
					Analytical samples col	et below ground surface. lected:	-										
					SB-27_2-4 ft: PVOC + SB-27_6-8 ft: PVOC +	Naphthalene, DRO Naphthalene, DRO											
					02 20 0												
•	I here	by certif	fy that	the info	ormation on this form is t	rue and correct to the be	est of mv k	nowled	lge.	ı		1	ı		1	1	1
	Signa			. , .		171	Engine										Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro			Vastewater □ Redevelopment ⊠	Waste :	_	ement								
	Facili	ty/Projec	ot Nom					License/	Darmit	Monito	ring Nu	mhar	1	Boring	Pag		of	1
					Phase III	I Investiga	tion	81600			ilig Nu	moer	-	Doring		B-28	}	
						f (first, last) a		Date Dri				Dat	e Drilli	ng Con				ng Method
	Tw	tt Carl in Port	s Tes							2020				1/7/20	020			rect push
	WI U	nique W	ell No.		DNR We	ell ID No.	Common Well Name	Final Sta	tic Wa	ter Leve	el S	Surface	Elevat			Во		Diameter
	Lasal	Ci 1 O.	.;;		timatad. [7) ar Da	ring Lagation 🔽					1	658. Local G	.5 Fee			2.3	inches
		Grid On Plane	ngin	∐ (es	stimated:	_) ог во N,	ring Location 🖂 E S/C/N	La	t46	<u>°</u> 41	' 1	7.7"	Local G	rria Loc	ation N	r		Пг
	SW		of N	W 1	/4 of Section		T 49 N, R 14 W	Long	g <u>-92</u>	<u>.° 4</u>	·' <u>1</u>	4.0"		Feet			F	□ E Feet □ W
	Facili				Co	ounty		County Co		Civil To		y/ or V	illage					
					D	Oouglas				Super	rior			Cail	Drana	. wti a a		
	Sai	nple				~ 44.00								2011	Prope	lies		
		Length Att. & Recovered (in)	nts	eet			Rock Description						ive					100
	er ype	h At	Cou	In F			eologic Origin For		S	ic	am) Dimo	ressi th	ure	%		city	nents
	Number and Type	Length Att. Recovered (Blow Counts	Depth In Feet		Ea	ch Major Unit		SC	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
EOPR	OBE II	60	В	D	Silty gray	el: fine: arav	moist; angular; (fill).		GM	149 149	≱ വ	[A	St C	Z Ü	Ŋ	0	P H	¥ 0
_0110		51.6		-	Poorly gr	aded sand wi	th silt; fine; red-brown; v	vet;	J									
					rounded;	(fill).						0.6						
				-2														
				-														
				_					SP-SN	1		0.9						
				-														
				- 4														
	Ц																	
EOPR	OBE	60 60		_	Fat clay;	soft; red-brov	wn; moist; high plasticity	-				1.1						
				-6														
				_														
												1.2						
				8					CH									
				-								1.0						
				-														
	Ц	1		 10			et below ground surface	l <u>.</u>										
					Analytica SB-28 6	ıl samples col -8 ft: PVOC -	llected: + Naphthalene, DRO											
					52 25_5		raprimaiorio, 2. to											
	I here	by certif	fy that	the info	rmation on	this form is	true and correct to the bo	est of my k	nowled	lge.					_			
	Signa	ture	<u> </u>	. , .		S / /	Firm Bar	r Engine	ering	CO								Tel:

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

				Ro			Vastewater □ /Redevelopment ⊠	Wast Other		gement								
					Kem	iculation/	Redevelopment 23	Other							Pag	ge 1	of	1
	Facilit	y/Projec	et Nam	ie						/Monito	ring Nu	mber		Boring	Numb	er		1
					Phase III Inv				00959			15	D :11:			B-29		36.1.1
		g Drilled tt Carl	-	Name o	f crew chief (fir	st, last) a	and Firm	Date D	rilling S	started		Dat	te Drilli	ng Com	pleted		Drilli	ng Method
		in Port		ting					1/7	/2020				1/7/20	020		Di	rect push
		nique W			DNR Well ID	No.	Common Well Name	e Final S	tatic W	ater Lev	el	Surface	e Elevat			Во	orehole l	Diameter
	T 1	C::10:				D.						1		.8 Fee			2.3	inches
	State	Grid Or Plane	ngın	(es	stimated:)	or Bo	ring Location 🖂 E S/C/N	I	at <u>4</u>	6° 41	<u>.'</u> 1	7.9"	Local C	iria Loc	_	r		Пв
	SW		of N	W 1	/4 of Section	36,	T 49 N, R 14 W	, _{Lo}	ng <u>-9</u>	2°	<u>' 1</u>	4.6"		Feet	\square N \square S		F	□ E Feet □ W
	Facilit	y ID			County			County C	Code	Civil T		y/ or V	/illage					
					Doug	glas				Supe	rior		T	0 "				
	Sar	nple												Soil	Prope	erties		
		Length Att. & Recovered (in)	nts	eet			Rock Description					_	s v					
	er ype	λ Ατ ered	Cour	In F			eologic Origin For		N N	.c	HI HI	(uudo	ressi th	ure	%		ity	ents
	Number and Type	Length Att. Recovered (Blow Counts	Depth In Feet		Ea	ch Major Unit		SC	Graphic Log	Well Diagram	PID (ppm)	Compressive Strength	Moisture Content	G/S/F %	Color	Plasticity Index	RQD/ Comments
EOPR		09 L	B	Ã	Silty gravel w	ith cand:	fine; gray; dry; angula	r: /fill\	D	<u>1 0 1</u>	ĭ Ď	PI	<u>2</u> 2	Σŏ	Ğ	0	P d	<u> </u>
_0110		49.2		-	Only graver w	itii Saiiu,	ille, gray, dry, arigula	i, (iiii <i>)</i> .	GM	80]							
				Ĺ								0.9						
				-2	Fat clay; stiff;	; red-brov	wn; moist; high plastici	ty.										
				-														
				-								0.8						
				<u>ا</u> ا														
				4 -														
EOPR	OBE H	60		-														
IOPK		60		-					СН			8.0						
				- 6					CH									
				_								1.0						
				8														
				_														
												0.9						
	Ш			-10														
							et below ground surfac + Naphthalene, DRO	ce.										
					SB-29_6-8 ft:	: PVOC ·	+ Naphthalene, DRO											
	I herel	by certif	y that	the info	ormation on this	form is	true and correct to the	best of my	knowle	dge.	•							
	Signat	ure	_				Firm D	arr Engin										Tel:
		(MI	stin	ra (j. 5	enrt		8	8									Fax:

Attachment E Soil Laboratory Analytical Reports



January 24, 2020

Jim Taraldsen Barr Engineering Company 325 S Lake Ave Duluth, MN 55802

RE: Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Dear Jim Taraldsen:

Enclosed are the analytical results for sample(s) received by the laboratory on January 10, 2020. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Amanda Albrecht amanda.albrecht@pacelabs.com

(612)607-6382 Project Manager

amanda & albeecht

Enclosures

cc: BarrDM, Barr Engineering Company Data Management, Barr Engineering Accounts Payable, Barr Engineering







CERTIFICATIONS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Pace Analytical Services Minneapolis

A2LA Certification #: 2926.01 Alabama Certification #: 40770

Alaska Contaminated Sites Certification #: 17-009

Alaska DW Certification #: MN00064 Arizona Certification #: AZ0014 Arkansas DW Certification #: MN00064 Arkansas WW Certification #: 88-0680

California Certification #: 2929 CNMI Saipan Certification #: MP0003 Colorado Certification #: MN00064 Connecticut Certification #: PH-0256

EPA Region 8+Wyoming DW Certification #: via MN 027-

053-137

Florida Certification #: E87605 Georgia Certification #: 959 Guam EPA Certification #: MN00064 Hawaii Certification #: MN00064 Idaho Certification #: MN00064

Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064

Maine Certification #: MN00064 Maryland Certification #: 322

Massachusetts Certification #: M-MN064

Massachusetts DWP Certification #: via MN 027-053-137

Michigan Certification #: 9909

Minnesota Certification #: 027-053-137

Minnesota Dept of Ag Certifcation #: via MN 027-053-137

Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647

North Carolina DW Certification #: 27700 North Carolina WW Certification #: 530 North Dakota Certification #: R-036 Ohio DW Certification #: 41244 Ohio VAP Certification #: CL101 Oklahoma Certification #: 9507

Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Vermont Certification #: VT-027053137
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C

Wyoming UST Certification #: via A2LA 2926.01

Wisconsin Certification #: 999407970



SAMPLE SUMMARY

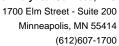
Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10504984001	SB-14_6-8	Solid	01/06/20 10:50	01/10/20 08:50
10504984002	SB-15_6-8	Solid	01/06/20 11:10	01/10/20 08:50
10504984003	SB-13_6-8	Solid	01/06/20 11:40	01/10/20 08:50
10504984004	SB-12_6-8	Solid	01/06/20 12:10	01/10/20 08:50
10504984005	SB-8_2-4	Solid	01/06/20 12:20	01/10/20 08:50
10504984006	SB-8_6-8	Solid	01/06/20 12:40	01/10/20 08:50
10504984007	SB-11_2-4	Solid	01/06/20 13:05	01/10/20 08:50
10504984008	SB-11_6-8	Solid	01/06/20 13:10	01/10/20 08:50
10504984009	SB-10_6-8	Solid	01/06/20 13:20	01/10/20 08:50
10504984010	SB-10_5-6	Solid	01/06/20 13:40	01/10/20 08:50
10504984011	SB-10_1-2	Solid	01/06/20 13:45	01/10/20 08:50
10504984012	SB-9_6-8	Solid	01/06/20 14:00	01/10/20 08:50
10504984013	SB-7_2-4	Solid	01/06/20 14:30	01/10/20 08:50
10504984014	SB-7_6-8	Solid	01/06/20 14:40	01/10/20 08:50
10504984015	SB-16_6-8	Solid	01/06/20 14:55	01/10/20 08:50
10504984016	SB-6_1.5-2	Solid	01/06/20 15:10	01/10/20 08:50
10504984017	SB-6_5-6	Solid	01/06/20 15:15	01/10/20 08:50
10504984018	SB-21_2-4	Solid	01/06/20 15:40	01/10/20 08:50
10504984019	SB-21_6-8	Solid	01/06/20 15:50	01/10/20 08:50
10504984020	Field Blank	Solid	01/06/20 15:20	01/10/20 08:50
10504984021	SB-22_2-4	Solid	01/07/20 09:15	01/10/20 08:50
10504984022	SB-22_6-8	Solid	01/07/20 09:25	01/10/20 08:50
10504984023	SB-23_6-8	Solid	01/07/20 09:50	01/10/20 08:50
10504984024	SB-29_2-4	Solid	01/07/20 10:20	01/10/20 08:50
10504984025	SB-29_6-8	Solid	01/07/20 10:25	01/10/20 08:50
10504984026	SB-27_2-4	Solid	01/07/20 10:40	01/10/20 08:50
10504984027	SB-27_6-8	Solid	01/07/20 10:45	01/10/20 08:50
10504984028	SB-28_6-8	Solid	01/07/20 11:00	01/10/20 08:50
10504984029	SB-24_6-8	Solid	01/07/20 11:20	01/10/20 08:50
10504984030	SB-25_6-8	Solid	01/07/20 11:45	01/10/20 08:50
10504984031	SB-26_2-4	Solid	01/07/20 12:35	01/10/20 08:50
10504984032	SB-26_6-8	Solid	01/07/20 12:45	01/10/20 08:50
10504984033	SB-19_6-8	Solid	01/07/20 13:10	01/10/20 08:50
10504984034	SB-18_2-4	Solid	01/07/20 13:30	01/10/20 08:50
10504984035	SB-18_6-8	Solid	01/07/20 13:40	01/10/20 08:50
10504984036	SB-17_6-8	Solid	01/07/20 14:05	01/10/20 08:50

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.





SAMPLE SUMMARY

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10504984038	Trip Blank	Solid	01/07/20 00:00	01/10/20 08:50



SAMPLE ANALYTE COUNT

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10504984001	SB-14_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984002	SB-15_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984003	SB-13_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984004	SB-12_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984005	SB-8_2-4	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984006	SB-8_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984007	SB-11_2-4	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984008	SB-11_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984009	SB-10_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984010	SB-10_5-6	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984011	SB-10_1-2	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984012	SB-9_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M



SAMPLE ANALYTE COUNT

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
10504984014	SB-7_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984015	SB-16_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984016	SB-6_1.5-2	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984017	SB-6_5-6	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984018	SB-21_2-4	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984019	SB-21_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984020	Field Blank	EPA 8260B	AB2	11	PASI-M
0504984021	SB-22_2-4	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	CD2	11	PASI-M
0504984022	SB-22_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	CD2	11	PASI-M
0504984023	SB-23_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	CD2	11	PASI-M
0504984024	SB-29_2-4	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	CD2	11	PASI-M
0504984025	SB-29_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	CD2	11	PASI-M
10504984026	SB-27_2-4	WI MOD DRO	JVM	2	PASI-M



SAMPLE ANALYTE COUNT

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		ASTM D2974	JDL		PASI-M
		EPA 8260B	CD2	11	PASI-M
0504984027	SB-27_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	CD2	11	PASI-M
0504984028	SB-28_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	CD2	11	PASI-M
0504984029	SB-24_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	CD2	11	PASI-M
0504984030	SB-25_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2	11	PASI-M
0504984031	SB-26_2-4	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2, CD2	11	PASI-M
0504984032	SB-26_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2, CD2	11	PASI-M
0504984033	SB-19_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2, CD2	11	PASI-M
0504984034	SB-18_2-4	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2, CD2	11	PASI-M
0504984035	SB-18_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2, CD2	11	PASI-M
0504984036	SB-17_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2, CD2	11	PASI-M
0504984037	SB-20_6-8	WI MOD DRO	JVM	2	PASI-M
		ASTM D2974	JDL	1	PASI-M
		EPA 8260B	AB2, CD2	11	PASI-M
10504984038	Trip Blank	EPA 8260B	CD2	11	PASI-M



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-14_6-8 Lab ID: 10504984001 Collected: 01/06/20 10:50 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	6.0J	mg/kg	17.9	5.4	1	01/10/20 15:03	01/12/20 16:47		
n-Triacontane (S)	86	%.	50-150		1	01/10/20 15:03	01/12/20 16:47	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974						
Percent Moisture	33.9	%	0.10	0.10	1		01/14/20 12:27		N2
8260B MSV UST	Analytical	Method: EPA	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<4.9	ug/kg	16.3	4.9	1	01/10/20 19:00	01/14/20 06:46	71-43-2	
Ethylbenzene	<4.7	ug/kg	15.7	4.7	1	01/10/20 19:00	01/14/20 06:46	100-41-4	
Methyl-tert-butyl ether	<10.3	ug/kg	34.4	10.3	1	01/10/20 19:00	01/14/20 06:46	1634-04-4	
Naphthalene	<81.2	ug/kg	270	81.2	1	01/10/20 19:00	01/14/20 06:46	91-20-3	
Toluene	<21.2	ug/kg	70.5	21.2	1	01/10/20 19:00	01/14/20 06:46	108-88-3	
1,2,4-Trimethylbenzene	<17.4	ug/kg	57.8	17.4	1	01/10/20 19:00	01/14/20 06:46	95-63-6	
1,3,5-Trimethylbenzene	<13.8	ug/kg	46.0	13.8	1	01/10/20 19:00	01/14/20 06:46	108-67-8	
Xylene (Total)	<20.1	ug/kg	67.0	20.1	1	01/10/20 19:00	01/14/20 06:46	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	104	%.	75-125		1	01/10/20 19:00	01/14/20 06:46	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/10/20 19:00	01/14/20 06:46	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/10/20 19:00	01/14/20 06:46	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-15_6-8 Lab ID: 10504984002 Collected: 01/06/20 11:10 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.0	mg/kg	16.6	5.0	1	01/10/20 15:03	01/12/20 16:54		
n-Triacontane (S)	85	%.	50-150		1	01/10/20 15:03	01/12/20 16:54	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974						
Percent Moisture	35.5	%	0.10	0.10	1		01/14/20 12:28		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<4.4	ug/kg	14.6	4.4	1	01/10/20 19:00	01/14/20 07:05	71-43-2	
Ethylbenzene	<4.2	ug/kg	14.0	4.2	1	01/10/20 19:00	01/14/20 07:05	100-41-4	
Methyl-tert-butyl ether	<9.2	ug/kg	30.7	9.2	1	01/10/20 19:00	01/14/20 07:05	1634-04-4	
Naphthalene	<72.6	ug/kg	242	72.6	1	01/10/20 19:00	01/14/20 07:05	91-20-3	
Toluene	<18.9	ug/kg	63.0	18.9	1	01/10/20 19:00	01/14/20 07:05	108-88-3	
1,2,4-Trimethylbenzene	<15.5	ug/kg	51.6	15.5	1	01/10/20 19:00	01/14/20 07:05	95-63-6	
1,3,5-Trimethylbenzene	<12.4	ug/kg	41.2	12.4	1	01/10/20 19:00	01/14/20 07:05	108-67-8	
Xylene (Total)	<18.0	ug/kg	59.9	18.0	1	01/10/20 19:00	01/14/20 07:05	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	105	%.	75-125		1	01/10/20 19:00	01/14/20 07:05	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/10/20 19:00	01/14/20 07:05	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/10/20 19:00	01/14/20 07:05	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-13_6-8 Lab ID: 10504984003 Collected: 01/06/20 11:40 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO P	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<4.8	mg/kg	15.8	4.8	1	01/10/20 15:03	01/12/20 17:01		
n-Triacontane (S)	87	%.	50-150		1	01/10/20 15:03	01/12/20 17:01	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974						
Percent Moisture	24.7	%	0.10	0.10	1		01/14/20 12:28		N2
8260B MSV UST	Analytical	Method: EPA	A 8260B Prep	aration Met	hod: El	PA 5035/5030B			
Benzene	<3.9	ug/kg	12.9	3.9	1	01/10/20 19:00	01/14/20 04:34	71-43-2	
Ethylbenzene	<3.7	ug/kg	12.4	3.7	1	01/10/20 19:00	01/14/20 04:34	100-41-4	
Methyl-tert-butyl ether	<8.1	ug/kg	27.1	8.1	1	01/10/20 19:00	01/14/20 04:34	1634-04-4	
Naphthalene	<64.0	ug/kg	213	64.0	1	01/10/20 19:00	01/14/20 04:34	91-20-3	
Toluene	<16.7	ug/kg	55.6	16.7	1	01/10/20 19:00	01/14/20 04:34	108-88-3	
1,2,4-Trimethylbenzene	<13.7	ug/kg	45.6	13.7	1	01/10/20 19:00	01/14/20 04:34	95-63-6	
1,3,5-Trimethylbenzene	<10.9	ug/kg	36.3	10.9	1	01/10/20 19:00	01/14/20 04:34	108-67-8	
Xylene (Total)	<15.9	ug/kg	52.9	15.9	1	01/10/20 19:00	01/14/20 04:34	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	105	%.	75-125		1	01/10/20 19:00	01/14/20 04:34	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/10/20 19:00	01/14/20 04:34	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125		1	01/10/20 19:00	01/14/20 04:34	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-12_6-8 Lab ID: 10504984004 Collected: 01/06/20 12:10 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.0	mg/kg	16.6	5.0	1	01/10/20 15:03	01/12/20 17:08		
n-Triacontane (S)	85	%.	50-150		1	01/10/20 15:03	01/12/20 17:08	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	23.9	%	0.10	0.10	1		01/14/20 12:28		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.9	ug/kg	12.8	3.9	1	01/13/20 10:56	01/14/20 08:40	71-43-2	
Ethylbenzene	<3.7	ug/kg	12.4	3.7	1	01/13/20 10:56	01/14/20 08:40	100-41-4	
Methyl-tert-butyl ether	<8.1	ug/kg	27.1	8.1	1	01/13/20 10:56	01/14/20 08:40	1634-04-4	
Naphthalene	<63.9	ug/kg	213	63.9	1	01/13/20 10:56	01/14/20 08:40	91-20-3	
Toluene	<16.7	ug/kg	55.5	16.7	1	01/13/20 10:56	01/14/20 08:40	108-88-3	
1,2,4-Trimethylbenzene	<13.7	ug/kg	45.5	13.7	1	01/13/20 10:56	01/14/20 08:40	95-63-6	
1,3,5-Trimethylbenzene	<10.9	ug/kg	36.2	10.9	1	01/13/20 10:56	01/14/20 08:40	108-67-8	
Xylene (Total)	<15.8	ug/kg	52.7	15.8	1	01/13/20 10:56	01/14/20 08:40	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	104	%.	75-125		1	01/13/20 10:56	01/14/20 08:40	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/13/20 10:56	01/14/20 08:40	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125		1	01/13/20 10:56	01/14/20 08:40	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-8_2-4 Lab ID: 10504984005 Collected: 01/06/20 12:20 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	8.2J	mg/kg	15.6	4.7	1	01/10/20 15:03	01/12/20 16:33		
n-Triacontane (S)	86	%.	50-150		1	01/10/20 15:03	01/12/20 16:33	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	26.6	%	0.10	0.10	1		01/14/20 12:28		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<4.0	ug/kg	13.3	4.0	1	01/13/20 10:56	01/14/20 08:59	71-43-2	
Ethylbenzene	<3.9	ug/kg	12.8	3.9	1	01/13/20 10:56	01/14/20 08:59	100-41-4	
Methyl-tert-butyl ether	<8.4	ug/kg	28.1	8.4	1	01/13/20 10:56	01/14/20 08:59	1634-04-4	
Naphthalene	<66.3	ug/kg	221	66.3	1	01/13/20 10:56	01/14/20 08:59	91-20-3	
Toluene	<17.3	ug/kg	57.6	17.3	1	01/13/20 10:56	01/14/20 08:59	108-88-3	
1,2,4-Trimethylbenzene	<14.2	ug/kg	47.2	14.2	1	01/13/20 10:56	01/14/20 08:59	95-63-6	
1,3,5-Trimethylbenzene	<11.3	ug/kg	37.6	11.3	1	01/13/20 10:56	01/14/20 08:59	108-67-8	
Xylene (Total)	<16.4	ug/kg	54.7	16.4	1	01/13/20 10:56	01/14/20 08:59	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	104	%.	75-125		1	01/13/20 10:56	01/14/20 08:59	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/13/20 10:56	01/14/20 08:59	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125		1	01/13/20 10:56	01/14/20 08:59	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-8_6-8 Lab ID: 10504984006 Collected: 01/06/20 12:40 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual		
WIDRO GCS	Analytical	Method: WI I	MOD DRO P	reparation N	/lethod	: WI MOD DRO					
WDRO C10-C28 Surrogates	<4.8	mg/kg	15.9	4.8	1	01/10/20 15:03	01/12/20 17:15				
n-Triacontane (S)	81	%.	50-150		1	01/10/20 15:03	01/12/20 17:15	638-68-6			
Dry Weight / %M by ASTM D2974	Analytical	Method: AST	M D2974								
Percent Moisture	27.3	%	0.10	0.10	1		01/14/20 12:28		N2		
8260B MSV UST	Analytical Method: EPA 8260B Preparation Method: EPA 5035/5030B										
Benzene	<3.9	ug/kg	12.8	3.9	1	01/13/20 10:56	01/14/20 09:18	71-43-2			
Ethylbenzene	<3.7	ug/kg	12.4	3.7	1	01/13/20 10:56	01/14/20 09:18	100-41-4			
Methyl-tert-butyl ether	<8.1	ug/kg	27.1	8.1	1	01/13/20 10:56	01/14/20 09:18	1634-04-4			
Naphthalene	<63.9	ug/kg	213	63.9	1	01/13/20 10:56	01/14/20 09:18	91-20-3			
Toluene	<16.7	ug/kg	55.5	16.7	1	01/13/20 10:56	01/14/20 09:18	108-88-3			
1,2,4-Trimethylbenzene	<13.7	ug/kg	45.5	13.7	1	01/13/20 10:56	01/14/20 09:18	95-63-6			
1,3,5-Trimethylbenzene	<10.9	ug/kg	36.3	10.9	1	01/13/20 10:56	01/14/20 09:18	108-67-8			
Xylene (Total)	<15.8	ug/kg	52.8	15.8	1	01/13/20 10:56	01/14/20 09:18	1330-20-7			
Surrogates											
1,2-Dichloroethane-d4 (S)	105	%.	75-125		1	01/13/20 10:56	01/14/20 09:18	17060-07-0			
Toluene-d8 (S)	102	%.	75-125		1	01/13/20 10:56	01/14/20 09:18	2037-26-5			
4-Bromofluorobenzene (S)	97	%.	75-125		1	01/13/20 10:56	01/14/20 09:18	460-00-4			



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-11_2-4 Lab ID: 10504984007 Collected: 01/06/20 13:05 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	19.5J	mg/kg	20.5	6.2	1	01/10/20 15:03	01/12/20 16:40		T6
n-Triacontane (S)	101	%.	50-150		1	01/10/20 15:03	01/12/20 16:40	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	36.3	%	0.10	0.10	1		01/14/20 12:28		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<5.3	ug/kg	17.7	5.3	1	01/13/20 10:56	01/14/20 14:23	71-43-2	
Ethylbenzene	<5.1	ug/kg	17.1	5.1	1	01/13/20 10:56	01/14/20 14:23	100-41-4	
Methyl-tert-butyl ether	<11.2	ug/kg	37.4	11.2	1	01/13/20 10:56	01/14/20 14:23	1634-04-4	
Naphthalene	<88.4	ug/kg	294	88.4	1	01/13/20 10:56	01/14/20 14:23	91-20-3	
Toluene	<23.0	ug/kg	76.7	23.0	1	01/13/20 10:56	01/14/20 14:23	108-88-3	
1,2,4-Trimethylbenzene	<18.9	ug/kg	62.9	18.9	1	01/13/20 10:56	01/14/20 14:23	95-63-6	
1,3,5-Trimethylbenzene	<15.0	ug/kg	50.1	15.0	1	01/13/20 10:56	01/14/20 14:23	108-67-8	
Xylene (Total)	<21.9	ug/kg	72.9	21.9	1	01/13/20 10:56	01/14/20 14:23	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	103	%.	75-125		1	01/13/20 10:56	01/14/20 14:23	17060-07-0	
Toluene-d8 (S)	99	%.	75-125		1	01/13/20 10:56	01/14/20 14:23	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	75-125		1	01/13/20 10:56	01/14/20 14:23	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-11_6-8 Lab ID: 10504984008 Collected: 01/06/20 13:10 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.3	mg/kg	17.8	5.3	1	01/10/20 15:03	01/12/20 17:22		
n-Triacontane (S)	85	%.	50-150		1	01/10/20 15:03	01/12/20 17:22	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	27.7	%	0.10	0.10	1		01/14/20 12:28		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.9	ug/kg	13.0	3.9	1	01/13/20 10:56	01/14/20 14:41	71-43-2	
Ethylbenzene	<3.8	ug/kg	12.5	3.8	1	01/13/20 10:56	01/14/20 14:41	100-41-4	
Methyl-tert-butyl ether	<8.2	ug/kg	27.3	8.2	1	01/13/20 10:56	01/14/20 14:41	1634-04-4	
Naphthalene	<64.6	ug/kg	215	64.6	1	01/13/20 10:56	01/14/20 14:41	91-20-3	
Toluene	<16.8	ug/kg	56.1	16.8	1	01/13/20 10:56	01/14/20 14:41	108-88-3	
1,2,4-Trimethylbenzene	<13.8	ug/kg	46.0	13.8	1	01/13/20 10:56	01/14/20 14:41	95-63-6	
1,3,5-Trimethylbenzene	<11.0	ug/kg	36.6	11.0	1	01/13/20 10:56	01/14/20 14:41	108-67-8	
Xylene (Total)	<16.0	ug/kg	53.3	16.0	1	01/13/20 10:56	01/14/20 14:41	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 14:41	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/13/20 10:56	01/14/20 14:41	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	75-125		1	01/13/20 10:56	01/14/20 14:41	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-10_6-8 Lab ID: 10504984009 Collected: 01/06/20 13:20 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.3	mg/kg	17.7	5.3	1	01/10/20 15:03	01/12/20 17:29		
n-Triacontane (S)	82	%.	50-150		1	01/10/20 15:03	01/12/20 17:29	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	26.4	%	0.10	0.10	1		01/14/20 12:29		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.9	ug/kg	13.1	3.9	1	01/13/20 10:56	01/14/20 15:00	71-43-2	
Ethylbenzene	<3.8	ug/kg	12.7	3.8	1	01/13/20 10:56	01/14/20 15:00	100-41-4	
Methyl-tert-butyl ether	<8.3	ug/kg	27.7	8.3	1	01/13/20 10:56	01/14/20 15:00	1634-04-4	
Naphthalene	<65.5	ug/kg	218	65.5	1	01/13/20 10:56	01/14/20 15:00	91-20-3	
Toluene	<17.1	ug/kg	56.9	17.1	1	01/13/20 10:56	01/14/20 15:00	108-88-3	
1,2,4-Trimethylbenzene	<14.0	ug/kg	46.6	14.0	1	01/13/20 10:56	01/14/20 15:00	95-63-6	
1,3,5-Trimethylbenzene	<11.2	ug/kg	37.1	11.2	1	01/13/20 10:56	01/14/20 15:00	108-67-8	
Xylene (Total)	<16.2	ug/kg	54.1	16.2	1	01/13/20 10:56	01/14/20 15:00	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 15:00	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 15:00	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 15:00	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-10_5-6 Lab ID: 10504984010 Collected: 01/06/20 13:40 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.4	mg/kg	18.1	5.4	1	01/10/20 15:03	01/12/20 17:36		
n-Triacontane (S)	86	%.	50-150		1	01/10/20 15:03	01/12/20 17:36	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	27.7	%	0.10	0.10	1		01/14/20 12:29		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<4.0	ug/kg	13.3	4.0	1	01/13/20 10:56	01/14/20 15:19	71-43-2	
Ethylbenzene	<3.9	ug/kg	12.9	3.9	1	01/13/20 10:56	01/14/20 15:19	100-41-4	
Methyl-tert-butyl ether	<8.5	ug/kg	28.1	8.5	1	01/13/20 10:56	01/14/20 15:19	1634-04-4	
Naphthalene	<66.5	ug/kg	221	66.5	1	01/13/20 10:56	01/14/20 15:19	91-20-3	
Toluene	<17.3	ug/kg	57.7	17.3	1	01/13/20 10:56	01/14/20 15:19	108-88-3	
1,2,4-Trimethylbenzene	<14.2	ug/kg	47.3	14.2	1	01/13/20 10:56	01/14/20 15:19	95-63-6	
1,3,5-Trimethylbenzene	<11.3	ug/kg	37.7	11.3	1	01/13/20 10:56	01/14/20 15:19	108-67-8	
Xylene (Total)	<16.5	ug/kg	54.9	16.5	1	01/13/20 10:56	01/14/20 15:19	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	103	%.	75-125		1	01/13/20 10:56	01/14/20 15:19	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 15:19	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 15:19	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-10_1-2 Lab ID: 10504984011 Collected: 01/06/20 13:45 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual		
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	Method	I: WI MOD DRO					
WDRO C10-C28 Surrogates	121J	mg/kg	149	44.8	10	01/10/20 15:03	01/12/20 16:12		T6		
n-Triacontane (S)	0	%.	50-150		10	01/10/20 15:03	01/12/20 16:12	638-68-6	S4		
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974								
Percent Moisture	23.1	%	0.10	0.10	1		01/14/20 12:29		N2		
8260B MSV UST	Analytical	Analytical Method: EPA 8260B Preparation Method: EPA 5035/5030B									
Benzene	<3.7	ug/kg	12.3	3.7	1	01/13/20 10:56	01/14/20 15:38	71-43-2			
Ethylbenzene	<3.6	ug/kg	11.9	3.6	1	01/13/20 10:56	01/14/20 15:38	100-41-4			
Methyl-tert-butyl ether	<7.8	ug/kg	26.1	7.8	1	01/13/20 10:56	01/14/20 15:38	1634-04-4			
Naphthalene	<61.5	ug/kg	205	61.5	1	01/13/20 10:56	01/14/20 15:38	91-20-3			
Toluene	<16.0	ug/kg	53.4	16.0	1	01/13/20 10:56	01/14/20 15:38	108-88-3			
1,2,4-Trimethylbenzene	<13.2	ug/kg	43.8	13.2	1	01/13/20 10:56	01/14/20 15:38	95-63-6			
1,3,5-Trimethylbenzene	<10.5	ug/kg	34.9	10.5	1	01/13/20 10:56	01/14/20 15:38	108-67-8			
Xylene (Total) Surrogates	<15.3	ug/kg	50.8	15.3	1	01/13/20 10:56	01/14/20 15:38	1330-20-7			
1,2-Dichloroethane-d4 (S)	103	%.	75-125		1	01/13/20 10:56	01/14/20 15:38	17060-07-0			
Toluene-d8 (S)	101	%.	75-125		1	01/13/20 10:56	01/14/20 15:38	2037-26-5			
4-Bromofluorobenzene (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 15:38	460-00-4			



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-9_6-8 Lab ID: 10504984012 Collected: 01/06/20 14:00 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	I: WI MOD DRO				
WDRO C10-C28 Surrogates	<5.1	mg/kg	16.9	5.1	1	01/10/20 15:03	01/12/20 17:43			
n-Triacontane (S)	95	%.	50-150		1	01/10/20 15:03	01/12/20 17:43	638-68-6		
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974							
Percent Moisture	27.3	%	0.10	0.10	1		01/14/20 12:29		N2	
8260B MSV UST	Analytical Method: EPA 8260B Preparation Method: EPA 5035/5030B									
Benzene	<4.0	ug/kg	13.4	4.0	1	01/13/20 10:56	01/14/20 16:17	71-43-2		
Ethylbenzene	<3.9	ug/kg	12.9	3.9	1	01/13/20 10:56	01/14/20 16:17	100-41-4		
Methyl-tert-butyl ether	<8.5	ug/kg	28.3	8.5	1	01/13/20 10:56	01/14/20 16:17	1634-04-4		
Naphthalene	<66.8	ug/kg	222	66.8	1	01/13/20 10:56	01/14/20 16:17	91-20-3		
Toluene	<17.4	ug/kg	58.0	17.4	1	01/13/20 10:56	01/14/20 16:17	108-88-3		
1,2,4-Trimethylbenzene	<14.3	ug/kg	47.5	14.3	1	01/13/20 10:56	01/14/20 16:17	95-63-6		
1,3,5-Trimethylbenzene	<11.4	ug/kg	37.9	11.4	1	01/13/20 10:56	01/14/20 16:17	108-67-8		
Xylene (Total)	<16.6	ug/kg	55.1	16.6	1	01/13/20 10:56	01/14/20 16:17	1330-20-7		
Surrogates										
1,2-Dichloroethane-d4 (S)	104	%.	75-125		1	01/13/20 10:56	01/14/20 16:17	17060-07-0		
Toluene-d8 (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 16:17	2037-26-5		
4-Bromofluorobenzene (S)	99	%.	75-125		1	01/13/20 10:56	01/14/20 16:17	460-00-4		



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-7_2-4 Lab ID: 10504984013 Collected: 01/06/20 14:30 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual	
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO				
WDRO C10-C28 Surrogates	<4.8	mg/kg	15.8	4.8	1	01/10/20 15:03	01/12/20 17:50			
n-Triacontane (S)	84	%.	50-150		1	01/10/20 15:03	01/12/20 17:50	638-68-6		
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974							
Percent Moisture	23.0	%	0.10	0.10	1		01/14/20 12:29		N2	
8260B MSV UST	Analytical Method: EPA 8260B Preparation Method: EPA 5035/5030B									
Benzene	<3.7	ug/kg	12.3	3.7	1	01/13/20 10:56	01/14/20 15:58	71-43-2		
Ethylbenzene	<3.6	ug/kg	11.9	3.6	1	01/13/20 10:56	01/14/20 15:58	100-41-4		
Methyl-tert-butyl ether	<7.8	ug/kg	26.0	7.8	1	01/13/20 10:56	01/14/20 15:58	1634-04-4		
Naphthalene	<61.3	ug/kg	204	61.3	1	01/13/20 10:56	01/14/20 15:58	91-20-3		
Toluene	<16.0	ug/kg	53.2	16.0	1	01/13/20 10:56	01/14/20 15:58	108-88-3		
1,2,4-Trimethylbenzene	<13.1	ug/kg	43.6	13.1	1	01/13/20 10:56	01/14/20 15:58	95-63-6		
1,3,5-Trimethylbenzene	<10.4	ug/kg	34.8	10.4	1	01/13/20 10:56	01/14/20 15:58	108-67-8		
Xylene (Total)	<15.2	ug/kg	50.6	15.2	1	01/13/20 10:56	01/14/20 15:58	1330-20-7		
Surrogates										
1,2-Dichloroethane-d4 (S)	103	%.	75-125		1	01/13/20 10:56	01/14/20 15:58	17060-07-0		
Toluene-d8 (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 15:58	2037-26-5		
4-Bromofluorobenzene (S)	101	%.	75-125		1	01/13/20 10:56	01/14/20 15:58	460-00-4		



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-7_6-8 Lab ID: 10504984014 Collected: 01/06/20 14:40 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO P	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.1	mg/kg	16.9	5.1	1	01/10/20 15:03	01/12/20 17:57		
n-Triacontane (S)	84	%.	50-150		1	01/10/20 15:03	01/12/20 17:57	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974						
Percent Moisture	27.2	%	0.10	0.10	1		01/14/20 12:30		N2
8260B MSV UST	Analytical	Method: EPA	N 8260B Prep	aration Met	hod: El	PA 5035/5030B			
Benzene	<4.0	ug/kg	13.4	4.0	1	01/13/20 10:56	01/14/20 16:35	71-43-2	
Ethylbenzene	<3.9	ug/kg	13.0	3.9	1	01/13/20 10:56	01/14/20 16:35	100-41-4	
Methyl-tert-butyl ether	<8.5	ug/kg	28.4	8.5	1	01/13/20 10:56	01/14/20 16:35	1634-04-4	
Naphthalene	<67.0	ug/kg	223	67.0	1	01/13/20 10:56	01/14/20 16:35	91-20-3	
Toluene	<17.5	ug/kg	58.2	17.5	1	01/13/20 10:56	01/14/20 16:35	108-88-3	
1,2,4-Trimethylbenzene	<14.3	ug/kg	47.7	14.3	1	01/13/20 10:56	01/14/20 16:35	95-63-6	
1,3,5-Trimethylbenzene	<11.4	ug/kg	38.0	11.4	1	01/13/20 10:56	01/14/20 16:35	108-67-8	
Xylene (Total)	<16.6	ug/kg	55.3	16.6	1	01/13/20 10:56	01/14/20 16:35	1330-20-7	
Surrogates		- •							
1,2-Dichloroethane-d4 (S)	105	%.	75-125		1	01/13/20 10:56	01/14/20 16:35	17060-07-0	
Toluene-d8 (S)	102	%.	75-125		1	01/13/20 10:56	01/14/20 16:35	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 16:35	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-16_6-8 Lab ID: 10504984015 Collected: 01/06/20 14:55 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	26.5	mg/kg	16.9	5.1	1	01/10/20 15:03	01/12/20 16:26		T6
n-Triacontane (S)	90	%.	50-150		1	01/10/20 15:03	01/12/20 16:26	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	25.4	%	0.10	0.10	1		01/14/20 12:30		N2
8260B MSV UST	Analytical	Method: EPA	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.9	ug/kg	13.1	3.9	1	01/13/20 10:56	01/14/20 16:54	71-43-2	
Ethylbenzene	<3.8	ug/kg	12.6	3.8	1	01/13/20 10:56	01/14/20 16:54	100-41-4	
Methyl-tert-butyl ether	<8.3	ug/kg	27.6	8.3	1	01/13/20 10:56	01/14/20 16:54	1634-04-4	
Naphthalene	<65.2	ug/kg	217	65.2	1	01/13/20 10:56	01/14/20 16:54	91-20-3	
Toluene	<17.0	ug/kg	56.6	17.0	1	01/13/20 10:56	01/14/20 16:54	108-88-3	
1,2,4-Trimethylbenzene	<13.9	ug/kg	46.4	13.9	1	01/13/20 10:56	01/14/20 16:54	95-63-6	
1,3,5-Trimethylbenzene	<11.1	ug/kg	37.0	11.1	1	01/13/20 10:56	01/14/20 16:54	108-67-8	
Xylene (Total)	<16.2	ug/kg	53.8	16.2	1	01/13/20 10:56	01/14/20 16:54	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	104	%.	75-125		1	01/13/20 10:56	01/14/20 16:54	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/13/20 10:56	01/14/20 16:54	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 16:54	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-6_1.5-2 Lab ID: 10504984016 Collected: 01/06/20 15:10 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	23.6	mg/kg	17.9	5.4	1	01/10/20 15:03	01/12/20 16:19		T6
n-Triacontane (S)	85	%.	50-150		1	01/10/20 15:03	01/12/20 16:19	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	24.1	%	0.10	0.10	1		01/14/20 12:56		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	39.9	ug/kg	12.5	3.8	1	01/13/20 10:56	01/14/20 17:13	71-43-2	
Ethylbenzene	<3.6	ug/kg	12.1	3.6	1	01/13/20 10:56	01/14/20 17:13	100-41-4	
Methyl-tert-butyl ether	<7.9	ug/kg	26.4	7.9	1	01/13/20 10:56	01/14/20 17:13	1634-04-4	
Naphthalene	166J	ug/kg	208	62.4	1	01/13/20 10:56	01/14/20 17:13	91-20-3	
Toluene	51.2J	ug/kg	54.1	16.3	1	01/13/20 10:56	01/14/20 17:13	108-88-3	
1,2,4-Trimethylbenzene	<13.3	ug/kg	44.4	13.3	1	01/13/20 10:56	01/14/20 17:13	95-63-6	
1,3,5-Trimethylbenzene	<10.6	ug/kg	35.4	10.6	1	01/13/20 10:56	01/14/20 17:13	108-67-8	
Xylene (Total)	<15.5	ug/kg	51.5	15.5	1	01/13/20 10:56	01/14/20 17:13	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	103	%.	75-125		1	01/13/20 10:56	01/14/20 17:13	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/13/20 10:56	01/14/20 17:13	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/13/20 10:56	01/14/20 17:13	460-00-4	



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-6_5-6 Lab ID: 10504984017 Collected: 01/06/20 15:15 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI I	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<4.9	mg/kg	16.3	4.9	1	01/10/20 15:03	01/12/20 18:19		
n-Triacontane (S)	83	%.	50-150		1	01/10/20 15:03	01/12/20 18:19	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AST	M D2974						
Percent Moisture	26.4	%	0.10	0.10	1		01/14/20 12:57		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: El	PA 5035/5030B			
Benzene	<4.0	ug/kg	13.2	4.0	1	01/14/20 10:02	01/15/20 14:30	71-43-2	
Ethylbenzene	<3.8	ug/kg	12.7	3.8	1	01/14/20 10:02	01/15/20 14:30	100-41-4	
Methyl-tert-butyl ether	<8.4	ug/kg	27.9	8.4	1	01/14/20 10:02	01/15/20 14:30	1634-04-4	
Naphthalene	<65.8	ug/kg	219	65.8	1	01/14/20 10:02	01/15/20 14:30	91-20-3	
Toluene	<17.2	ug/kg	57.2	17.2	1	01/14/20 10:02	01/15/20 14:30	108-88-3	
1,2,4-Trimethylbenzene	<14.1	ug/kg	46.9	14.1	1	01/14/20 10:02	01/15/20 14:30	95-63-6	
1,3,5-Trimethylbenzene	<11.2	ug/kg	37.3	11.2	1	01/14/20 10:02	01/15/20 14:30	108-67-8	
Xylene (Total)	<16.3	ug/kg	54.3	16.3	1	01/14/20 10:02	01/15/20 14:30	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	98	%.	75-125		1	01/14/20 10:02	01/15/20 14:30	17060-07-0	
Toluene-d8 (S)	99	%.	75-125		1	01/14/20 10:02	01/15/20 14:30	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	75-125		1	01/14/20 10:02	01/15/20 14:30	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-21_2-4 Lab ID: 10504984018 Collected: 01/06/20 15:40 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	I: WI MOD DRO			
WDRO C10-C28 Surrogates	<6.0	mg/kg	19.9	6.0	1	01/10/20 15:03	01/12/20 18:05		
n-Triacontane (S)	86	%.	50-150		1	01/10/20 15:03	01/12/20 18:05	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	24.8	%	0.10	0.10	1		01/14/20 12:57		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.6	ug/kg	12.1	3.6	1	01/14/20 10:02	01/17/20 04:57	71-43-2	
Ethylbenzene	<3.5	ug/kg	11.7	3.5	1	01/14/20 10:02	01/17/20 04:57	100-41-4	
Methyl-tert-butyl ether	<7.7	ug/kg	25.6	7.7	1	01/14/20 10:02	01/17/20 04:57	1634-04-4	
Naphthalene	<60.5	ug/kg	201	60.5	1	01/14/20 10:02	01/17/20 04:57	91-20-3	
Toluene	<15.8	ug/kg	52.5	15.8	1	01/14/20 10:02	01/17/20 04:57	108-88-3	
1,2,4-Trimethylbenzene	<12.9	ug/kg	43.0	12.9	1	01/14/20 10:02	01/17/20 04:57	95-63-6	
1,3,5-Trimethylbenzene	<10.3	ug/kg	34.3	10.3	1	01/14/20 10:02	01/17/20 04:57	108-67-8	
Xylene (Total)	<15.0	ug/kg	49.9	15.0	1	01/14/20 10:02	01/17/20 04:57	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	104	%.	75-125		1	01/14/20 10:02	01/17/20 04:57	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/14/20 10:02	01/17/20 04:57	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125		1	01/14/20 10:02	01/17/20 04:57	460-00-4	



Project: 49161477.00 Nemadji PH II

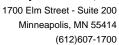
Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-21_6-8 Lab ID: 10504984019 Collected: 01/06/20 15:50 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<4.9	mg/kg	16.2	4.9	1	01/10/20 15:03	01/12/20 18:12		
n-Triacontane (S)	89	%.	50-150		1	01/10/20 15:03	01/12/20 18:12	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	25.2	%	0.10	0.10	1		01/14/20 12:57		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.8	ug/kg	12.8	3.8	1	01/14/20 10:02	01/17/20 04:38	71-43-2	
Ethylbenzene	<3.7	ug/kg	12.3	3.7	1	01/14/20 10:02	01/17/20 04:38	100-41-4	
Methyl-tert-butyl ether	<8.1	ug/kg	26.9	8.1	1	01/14/20 10:02	01/17/20 04:38	1634-04-4	
Naphthalene	<63.6	ug/kg	212	63.6	1	01/14/20 10:02	01/17/20 04:38	91-20-3	
Toluene	<16.6	ug/kg	55.2	16.6	1	01/14/20 10:02	01/17/20 04:38	108-88-3	
1,2,4-Trimethylbenzene	<13.6	ug/kg	45.3	13.6	1	01/14/20 10:02	01/17/20 04:38	95-63-6	
1,3,5-Trimethylbenzene	<10.8	ug/kg	36.1	10.8	1	01/14/20 10:02	01/17/20 04:38	108-67-8	
Xylene (Total)	<15.8	ug/kg	52.5	15.8	1	01/14/20 10:02	01/17/20 04:38	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	102	%.	75-125		1	01/14/20 10:02	01/17/20 04:38	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/14/20 10:02	01/17/20 04:38	2037-26-5	
4-Bromofluorobenzene (S)	101	%.	75-125		1	01/14/20 10:02	01/17/20 04:38	460-00-4	





Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: Field Blank Lab ID: 10504984020 Collected: 01/06/20 15:20 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qua
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	nod: E	PA 5035/5030B			
Benzene	<2.8	ug/kg	9.4	2.8	1	01/14/20 10:02	01/15/20 06:26	71-43-2	
Ethylbenzene	<2.7	ug/kg	9.1	2.7	1	01/14/20 10:02	01/15/20 06:26	100-41-4	
Methyl-tert-butyl ether	<6.0	ug/kg	19.8	6.0	1	01/14/20 10:02	01/15/20 06:26	1634-04-4	
Naphthalene	<46.8	ug/kg	156	46.8	1	01/14/20 10:02	01/15/20 06:26	91-20-3	
Toluene	<12.2	ug/kg	40.6	12.2	1	01/14/20 10:02	01/15/20 06:26	108-88-3	
1,2,4-Trimethylbenzene	<10.0	ug/kg	33.3	10.0	1	01/14/20 10:02	01/15/20 06:26	95-63-6	
1,3,5-Trimethylbenzene	<8.0	ug/kg	26.5	8.0	1	01/14/20 10:02	01/15/20 06:26	108-67-8	
Xylene (Total)	<11.6	ug/kg	38.6	11.6	1	01/14/20 10:02	01/15/20 06:26	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	75-125		1	01/14/20 10:02	01/15/20 06:26	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/14/20 10:02	01/15/20 06:26	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125		1	01/14/20 10:02	01/15/20 06:26	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-22_2-4 Lab ID: 10504984021 Collected: 01/07/20 09:15 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<4.5	mg/kg	14.9	4.5	1	01/10/20 15:03	01/12/20 18:26		
n-Triacontane (S)	88	%.	50-150		1	01/10/20 15:03	01/12/20 18:26	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	24.3	%	0.10	0.10	1		01/14/20 12:57		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.7	ug/kg	12.2	3.7	1	01/15/20 11:36	01/18/20 02:41	71-43-2	
Ethylbenzene	<3.5	ug/kg	11.8	3.5	1	01/15/20 11:36	01/18/20 02:41	100-41-4	
Methyl-tert-butyl ether	<7.7	ug/kg	25.8	7.7	1	01/15/20 11:36	01/18/20 02:41	1634-04-4	
Naphthalene	<60.9	ug/kg	203	60.9	1	01/15/20 11:36	01/18/20 02:41	91-20-3	
Toluene	<15.9	ug/kg	52.9	15.9	1	01/15/20 11:36	01/18/20 02:41	108-88-3	
1,2,4-Trimethylbenzene	<13.0	ug/kg	43.3	13.0	1	01/15/20 11:36	01/16/20 02:08	95-63-6	
1,3,5-Trimethylbenzene	<10.4	ug/kg	34.5	10.4	1	01/15/20 11:36	01/18/20 02:41	108-67-8	
Xylene (Total)	<15.1	ug/kg	50.3	15.1	1	01/15/20 11:36	01/18/20 02:41	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 02:41	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 02:41	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/15/20 11:36	01/18/20 02:41	460-00-4	



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-22_6-8 Lab ID: 10504984022 Collected: 01/07/20 09:25 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.6	mg/kg	18.8	5.6	1	01/10/20 15:42	01/12/20 13:53		
n-Triacontane (S)	83	%.	50-150		1	01/10/20 15:42	01/12/20 13:53	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	25.2	%	0.10	0.10	1		01/14/20 12:57		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.7	ug/kg	12.4	3.7	1	01/15/20 11:36	01/18/20 03:00	71-43-2	
Ethylbenzene	<3.6	ug/kg	11.9	3.6	1	01/15/20 11:36	01/18/20 03:00	100-41-4	
Methyl-tert-butyl ether	<7.8	ug/kg	26.1	7.8	1	01/15/20 11:36	01/18/20 03:00	1634-04-4	
Naphthalene	<61.7	ug/kg	206	61.7	1	01/15/20 11:36	01/18/20 03:00	91-20-3	
Toluene	<16.1	ug/kg	53.6	16.1	1	01/15/20 11:36	01/18/20 03:00	108-88-3	
1,2,4-Trimethylbenzene	<13.2	ug/kg	43.9	13.2	1	01/15/20 11:36	01/16/20 02:27	95-63-6	
1,3,5-Trimethylbenzene	<10.5	ug/kg	35.0	10.5	1	01/15/20 11:36	01/18/20 03:00	108-67-8	
Xylene (Total)	<15.3	ug/kg	51.0	15.3	1	01/15/20 11:36	01/18/20 03:00	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	102	%.	75-125		1	01/15/20 11:36	01/18/20 03:00	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 03:00	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/15/20 11:36	01/18/20 03:00	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-23_6-8 Lab ID: 10504984023 Collected: 01/07/20 09:50 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<4.4	mg/kg	14.7	4.4	1	01/10/20 15:42	01/12/20 13:39		
n-Triacontane (S)	85	%.	50-150		1	01/10/20 15:42	01/12/20 13:39	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	23.4	%	0.10	0.10	1		01/14/20 12:57		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.7	ug/kg	12.5	3.7	1	01/15/20 11:36	01/18/20 03:19	71-43-2	
Ethylbenzene	<3.6	ug/kg	12.0	3.6	1	01/15/20 11:36	01/18/20 03:19	100-41-4	
Methyl-tert-butyl ether	<7.9	ug/kg	26.3	7.9	1	01/15/20 11:36	01/18/20 03:19	1634-04-4	
Naphthalene	<62.1	ug/kg	207	62.1	1	01/15/20 11:36	01/18/20 03:19	91-20-3	
Toluene	<16.2	ug/kg	53.9	16.2	1	01/15/20 11:36	01/18/20 03:19	108-88-3	
1,2,4-Trimethylbenzene	<13.3	ug/kg	44.2	13.3	1	01/15/20 11:36	01/16/20 02:46	95-63-6	
1,3,5-Trimethylbenzene	<10.6	ug/kg	35.2	10.6	1	01/15/20 11:36	01/18/20 03:19	108-67-8	
Xylene (Total)	<15.4	ug/kg	51.3	15.4	1	01/15/20 11:36	01/18/20 03:19	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	102	%.	75-125		1	01/15/20 11:36	01/18/20 03:19	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 03:19	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/15/20 11:36	01/18/20 03:19	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-29_2-4 Lab ID: 10504984024 Collected: 01/07/20 10:20 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	14.0J	mg/kg	15.4	4.6	1	01/10/20 15:42	01/12/20 13:46		
n-Triacontane (S)	84	%.	50-150		1	01/10/20 15:42	01/12/20 13:46	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	24.0	%	0.10	0.10	1		01/14/20 12:57		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.6	ug/kg	12.0	3.6	1	01/15/20 11:36	01/18/20 03:38	71-43-2	
Ethylbenzene	<3.5	ug/kg	11.6	3.5	1	01/15/20 11:36	01/18/20 03:38	100-41-4	
Methyl-tert-butyl ether	<7.6	ug/kg	25.4	7.6	1	01/15/20 11:36	01/18/20 03:38	1634-04-4	
Naphthalene	<60.0	ug/kg	200	60.0	1	01/15/20 11:36	01/18/20 03:38	91-20-3	
Toluene	<15.6	ug/kg	52.1	15.6	1	01/15/20 11:36	01/18/20 03:38	108-88-3	
1,2,4-Trimethylbenzene	<12.8	ug/kg	42.7	12.8	1	01/15/20 11:36	01/16/20 03:24	95-63-6	
1,3,5-Trimethylbenzene	<10.2	ug/kg	34.0	10.2	1	01/15/20 11:36	01/18/20 03:38	108-67-8	
Xylene (Total)	<14.9	ug/kg	49.5	14.9	1	01/15/20 11:36	01/18/20 03:38	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	102	%.	75-125		1	01/15/20 11:36	01/18/20 03:38	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 03:38	2037-26-5	
4-Bromofluorobenzene (S)	99	%.	75-125		1	01/15/20 11:36	01/18/20 03:38	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-29_6-8 Lab ID: 10504984025 Collected: 01/07/20 10:25 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO P	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.3	mg/kg	17.7	5.3	1	01/10/20 15:42	01/12/20 14:00		
n-Triacontane (S)	88	%.	50-150		1	01/10/20 15:42	01/12/20 14:00	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974						
Percent Moisture	29.3	%	0.10	0.10	1		01/14/20 12:57		N2
8260B MSV UST	Analytical	Method: EPA	A 8260B Prep	aration Met	hod: El	PA 5035/5030B			
Benzene	<3.9	ug/kg	12.9	3.9	1	01/15/20 11:36	01/18/20 03:57	71-43-2	
Ethylbenzene	<3.7	ug/kg	12.4	3.7	1	01/15/20 11:36	01/18/20 03:57	100-41-4	
Methyl-tert-butyl ether	<8.2	ug/kg	27.1	8.2	1	01/15/20 11:36	01/18/20 03:57	1634-04-4	
Naphthalene	<64.1	ug/kg	213	64.1	1	01/15/20 11:36	01/18/20 03:57	91-20-3	
Toluene	<16.7	ug/kg	55.7	16.7	1	01/15/20 11:36	01/18/20 03:57	108-88-3	
1,2,4-Trimethylbenzene	<13.7	ug/kg	45.6	13.7	1	01/15/20 11:36	01/16/20 03:05	95-63-6	
1,3,5-Trimethylbenzene	<10.9	ug/kg	36.4	10.9	1	01/15/20 11:36	01/18/20 03:57	108-67-8	
Xylene (Total)	<15.9	ug/kg	52.9	15.9	1	01/15/20 11:36	01/18/20 03:57	1330-20-7	
Surrogates		- -							
1,2-Dichloroethane-d4 (S)	102	%.	75-125		1	01/15/20 11:36	01/18/20 03:57	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 03:57	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125		1	01/15/20 11:36	01/18/20 03:57	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-27_2-4 Lab ID: 10504984026 Collected: 01/07/20 10:40 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.0	mg/kg	16.8	5.0	1	01/10/20 15:42	01/12/20 14:07		
n-Triacontane (S)	91	%.	50-150		1	01/10/20 15:42	01/12/20 14:07	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	25.8	%	0.10	0.10	1		01/14/20 12:58		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.7	ug/kg	12.3	3.7	1	01/15/20 11:36	01/18/20 04:16	71-43-2	
Ethylbenzene	<3.6	ug/kg	11.9	3.6	1	01/15/20 11:36	01/18/20 04:16	100-41-4	
Methyl-tert-butyl ether	<7.8	ug/kg	26.0	7.8	1	01/15/20 11:36	01/18/20 04:16	1634-04-4	
Naphthalene	<61.3	ug/kg	204	61.3	1	01/15/20 11:36	01/18/20 04:16	91-20-3	
Toluene	<16.0	ug/kg	53.2	16.0	1	01/15/20 11:36	01/18/20 04:16	108-88-3	
1,2,4-Trimethylbenzene	<13.1	ug/kg	43.6	13.1	1	01/15/20 11:36	01/16/20 03:43	95-63-6	
1,3,5-Trimethylbenzene	<10.4	ug/kg	34.8	10.4	1	01/15/20 11:36	01/18/20 04:16	108-67-8	
Xylene (Total)	<15.2	ug/kg	50.6	15.2	1	01/15/20 11:36	01/18/20 04:16	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 04:16	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 04:16	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125		1	01/15/20 11:36	01/18/20 04:16	460-00-4	



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-27_6-8 Lab ID: 10504984027 Collected: 01/07/20 10:45 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO P	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<4.8	mg/kg	16.1	4.8	1	01/10/20 15:42	01/12/20 14:14		
n-Triacontane (S)	85	%.	50-150		1	01/10/20 15:42	01/12/20 14:14	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AST	ΓM D2974						
Percent Moisture	26.4	%	0.10	0.10	1		01/14/20 12:58		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: El	PA 5035/5030B			
Benzene	<3.8	ug/kg	12.5	3.8	1	01/15/20 11:36	01/18/20 04:35	71-43-2	
Ethylbenzene	<3.6	ug/kg	12.1	3.6	1	01/15/20 11:36	01/18/20 04:35	100-41-4	
Methyl-tert-butyl ether	<7.9	ug/kg	26.4	7.9	1	01/15/20 11:36	01/18/20 04:35	1634-04-4	
Naphthalene	<62.4	ug/kg	208	62.4	1	01/15/20 11:36	01/18/20 04:35	91-20-3	
Toluene	<16.3	ug/kg	54.2	16.3	1	01/15/20 11:36	01/18/20 04:35	108-88-3	
1,2,4-Trimethylbenzene	<13.3	ug/kg	44.4	13.3	1	01/15/20 11:36	01/16/20 04:02	95-63-6	
1,3,5-Trimethylbenzene	<10.6	ug/kg	35.4	10.6	1	01/15/20 11:36	01/18/20 04:35	108-67-8	
Xylene (Total)	<15.5	ug/kg	51.5	15.5	1	01/15/20 11:36	01/18/20 04:35	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	102	%.	75-125		1	01/15/20 11:36	01/18/20 04:35	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 04:35	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/15/20 11:36	01/18/20 04:35	460-00-4	



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-28_6-8 Lab ID: 10504984028 Collected: 01/07/20 11:00 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.1	mg/kg	17.0	5.1	1	01/10/20 15:42	01/12/20 14:21		
n-Triacontane (S)	84	%.	50-150		1	01/10/20 15:42	01/12/20 14:21	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	27.1	%	0.10	0.10	1		01/14/20 12:58		N2
8260B MSV UST	Analytical	Method: EPA	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.7	ug/kg	12.3	3.7	1	01/15/20 11:36	01/18/20 04:54	71-43-2	
Ethylbenzene	<3.6	ug/kg	11.8	3.6	1	01/15/20 11:36	01/18/20 04:54	100-41-4	
Methyl-tert-butyl ether	<7.8	ug/kg	25.9	7.8	1	01/15/20 11:36	01/18/20 04:54	1634-04-4	
Naphthalene	<61.2	ug/kg	204	61.2	1	01/15/20 11:36	01/18/20 04:54	91-20-3	
Toluene	<16.0	ug/kg	53.1	16.0	1	01/15/20 11:36	01/18/20 04:54	108-88-3	
1,2,4-Trimethylbenzene	<13.1	ug/kg	43.5	13.1	1	01/15/20 11:36	01/16/20 04:21	95-63-6	
1,3,5-Trimethylbenzene	<10.4	ug/kg	34.7	10.4	1	01/15/20 11:36	01/18/20 04:54	108-67-8	
Xylene (Total)	<15.2	ug/kg	50.5	15.2	1	01/15/20 11:36	01/18/20 04:54	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 04:54	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 04:54	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/15/20 11:36	01/18/20 04:54	460-00-4	



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-24_6-8 Lab ID: 10504984029 Collected: 01/07/20 11:20 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<4.9	mg/kg	16.4	4.9	1	01/10/20 15:42	01/12/20 13:10		
n-Triacontane (S)	84	%.	50-150		1	01/10/20 15:42	01/12/20 13:10	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AST	TM D2974						
Percent Moisture	23.6	%	0.10	0.10	1		01/14/20 12:58		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: El	PA 5035/5030B			
Benzene	<3.7	ug/kg	12.4	3.7	1	01/15/20 11:36	01/18/20 05:13	71-43-2	
Ethylbenzene	<3.6	ug/kg	12.0	3.6	1	01/15/20 11:36	01/18/20 05:13	100-41-4	
Methyl-tert-butyl ether	<7.9	ug/kg	26.2	7.9	1	01/15/20 11:36	01/18/20 05:13	1634-04-4	
Naphthalene	<62.0	ug/kg	206	62.0	1	01/15/20 11:36	01/18/20 05:13	91-20-3	
Toluene	<16.2	ug/kg	53.8	16.2	1	01/15/20 11:36	01/18/20 05:13	108-88-3	
1,2,4-Trimethylbenzene	<13.2	ug/kg	44.1	13.2	1	01/15/20 11:36	01/16/20 04:39	95-63-6	
1,3,5-Trimethylbenzene	<10.6	ug/kg	35.1	10.6	1	01/15/20 11:36	01/18/20 05:13	108-67-8	
Xylene (Total)	<15.4	ug/kg	51.1	15.4	1	01/15/20 11:36	01/18/20 05:13	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	102	%.	75-125		1	01/15/20 11:36	01/18/20 05:13	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 05:13	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125		1	01/15/20 11:36	01/18/20 05:13	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-25_6-8 Lab ID: 10504984030 Collected: 01/07/20 11:45 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	15.5J	mg/kg	18.4	5.5	1	01/10/20 15:42	01/12/20 13:32		
n-Triacontane (S)	79	%.	50-150		1	01/10/20 15:42	01/12/20 13:32	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974						
Percent Moisture	34.5	%	0.10	0.10	1		01/14/20 12:58		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<4.6	ug/kg	15.2	4.6	1	01/17/20 09:57	01/18/20 05:32	71-43-2	
Ethylbenzene	<4.4	ug/kg	14.7	4.4	1	01/17/20 09:57	01/18/20 05:32	100-41-4	
Methyl-tert-butyl ether	<9.7	ug/kg	32.1	9.7	1	01/17/20 09:57	01/18/20 05:32	1634-04-4	
Naphthalene	<75.9	ug/kg	253	75.9	1	01/17/20 09:57	01/18/20 05:32	91-20-3	
Toluene	<19.8	ug/kg	65.9	19.8	1	01/17/20 09:57	01/18/20 05:32	108-88-3	
1,2,4-Trimethylbenzene	<16.2	ug/kg	54.0	16.2	1	01/17/20 09:57	01/18/20 05:32	95-63-6	
1,3,5-Trimethylbenzene	<12.9	ug/kg	43.1	12.9	1	01/17/20 09:57	01/18/20 05:32	108-67-8	
Xylene (Total)	<18.8	ug/kg	62.7	18.8	1	01/17/20 09:57	01/18/20 05:32	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	102	%.	75-125		1	01/17/20 09:57	01/18/20 05:32	17060-07-0	
Toluene-d8 (S)	99	%.	75-125		1	01/17/20 09:57	01/18/20 05:32	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125		1	01/17/20 09:57	01/18/20 05:32	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-26_2-4 Lab ID: 10504984031 Collected: 01/07/20 12:35 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<4.8	mg/kg	16.1	4.8	1	01/10/20 15:42	01/12/20 14:28		
n-Triacontane (S)	85	%.	50-150		1	01/10/20 15:42	01/12/20 14:28	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	25.5	%	0.10	0.10	1		01/14/20 12:58		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.9	ug/kg	13.0	3.9	1	01/15/20 11:36	01/18/20 05:50	71-43-2	
Ethylbenzene	<3.8	ug/kg	12.6	3.8	1	01/15/20 11:36	01/18/20 05:50	100-41-4	
Methyl-tert-butyl ether	<8.3	ug/kg	27.5	8.3	1	01/15/20 11:36	01/18/20 05:50	1634-04-4	
Naphthalene	<64.9	ug/kg	216	64.9	1	01/15/20 11:36	01/18/20 05:50	91-20-3	
Toluene	<16.9	ug/kg	56.4	16.9	1	01/15/20 11:36	01/18/20 05:50	108-88-3	
1,2,4-Trimethylbenzene	<13.9	ug/kg	46.2	13.9	1	01/15/20 11:36	01/16/20 05:17	95-63-6	
1,3,5-Trimethylbenzene	<11.1	ug/kg	36.8	11.1	1	01/15/20 11:36	01/18/20 05:50	108-67-8	
Xylene (Total)	<16.1	ug/kg	53.6	16.1	1	01/15/20 11:36	01/18/20 05:50	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 05:50	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 05:50	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/15/20 11:36	01/18/20 05:50	460-00-4	



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-26_6-8 Lab ID: 10504984032 Collected: 01/07/20 12:45 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO P	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.3	mg/kg	17.6	5.3	1	01/10/20 15:42	01/12/20 14:35		
n-Triacontane (S)	89	%.	50-150		1	01/10/20 15:42	01/12/20 14:35	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical I	Method: AS	ΓM D2974						
Percent Moisture	29.5	%	0.10	0.10	1		01/14/20 12:59		N2
8260B MSV UST	Analytical I	Method: EPA	A 8260B Prep	aration Met	hod: El	PA 5035/5030B			
Benzene	<3.9	ug/kg	13.0	3.9	1	01/15/20 11:36	01/18/20 06:09	71-43-2	
Ethylbenzene	<3.8	ug/kg	12.5	3.8	1	01/15/20 11:36	01/18/20 06:09	100-41-4	
Methyl-tert-butyl ether	<8.2	ug/kg	27.4	8.2	1	01/15/20 11:36	01/18/20 06:09	1634-04-4	
Naphthalene	<64.7	ug/kg	215	64.7	1	01/15/20 11:36	01/18/20 06:09	91-20-3	
Toluene	<16.9	ug/kg	56.2	16.9	1	01/15/20 11:36	01/18/20 06:09	108-88-3	
1,2,4-Trimethylbenzene	<13.8	ug/kg	46.0	13.8	1	01/15/20 11:36	01/16/20 05:36	95-63-6	
1,3,5-Trimethylbenzene	<11.0	ug/kg	36.7	11.0	1	01/15/20 11:36	01/18/20 06:09	108-67-8	
Xylene (Total)	<16.0	ug/kg	53.4	16.0	1	01/15/20 11:36	01/18/20 06:09	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 06:09	17060-07-0	
Toluene-d8 (S)	99	%.	75-125		1	01/15/20 11:36	01/18/20 06:09	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/15/20 11:36	01/18/20 06:09	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-19_6-8 Lab ID: 10504984033 Collected: 01/07/20 13:10 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.0	mg/kg	16.7	5.0	1	01/10/20 15:42	01/12/20 14:56		
n-Triacontane (S)	82	%.	50-150		1	01/10/20 15:42	01/12/20 14:56	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	24.5	%	0.10	0.10	1		01/14/20 12:59		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.9	ug/kg	12.9	3.9	1	01/15/20 11:36	01/18/20 06:28	71-43-2	
Ethylbenzene	<3.7	ug/kg	12.5	3.7	1	01/15/20 11:36	01/18/20 06:28	100-41-4	
Methyl-tert-butyl ether	<8.2	ug/kg	27.3	8.2	1	01/15/20 11:36	01/18/20 06:28	1634-04-4	
Naphthalene	<64.4	ug/kg	214	64.4	1	01/15/20 11:36	01/18/20 06:28	91-20-3	
Toluene	<16.8	ug/kg	55.9	16.8	1	01/15/20 11:36	01/18/20 06:28	108-88-3	
1,2,4-Trimethylbenzene	<13.8	ug/kg	45.8	13.8	1	01/15/20 11:36	01/16/20 05:55	95-63-6	
1,3,5-Trimethylbenzene	<11.0	ug/kg	36.5	11.0	1	01/15/20 11:36	01/18/20 06:28	108-67-8	
Xylene (Total)	<16.0	ug/kg	53.1	16.0	1	01/15/20 11:36	01/18/20 06:28	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 06:28	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 06:28	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125		1	01/15/20 11:36	01/18/20 06:28	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-18_2-4 Lab ID: 10504984034 Collected: 01/07/20 13:30 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI I	MOD DRO P	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.1	mg/kg	16.9	5.1	1	01/10/20 15:42	01/12/20 15:03		
n-Triacontane (S)	88	%.	50-150		1	01/10/20 15:42	01/12/20 15:03	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AST	M D2974						
Percent Moisture	24.8	%	0.10	0.10	1		01/14/20 12:59		N2
8260B MSV UST	Analytical	Method: EPA	8260B Prep	aration Met	hod: El	PA 5035/5030B			
Benzene	<3.8	ug/kg	12.6	3.8	1	01/15/20 11:36	01/18/20 06:47	71-43-2	
Ethylbenzene	<3.6	ug/kg	12.2	3.6	1	01/15/20 11:36	01/18/20 06:47	100-41-4	
Methyl-tert-butyl ether	<8.0	ug/kg	26.6	8.0	1	01/15/20 11:36	01/18/20 06:47	1634-04-4	
Naphthalene	<62.8	ug/kg	209	62.8	1	01/15/20 11:36	01/18/20 06:47	91-20-3	
Toluene	<16.4	ug/kg	54.5	16.4	1	01/15/20 11:36	01/18/20 06:47	108-88-3	
1,2,4-Trimethylbenzene	<13.4	ug/kg	44.7	13.4	1	01/15/20 11:36	01/16/20 06:13	95-63-6	
1,3,5-Trimethylbenzene	<10.7	ug/kg	35.6	10.7	1	01/15/20 11:36	01/18/20 06:47	108-67-8	
Xylene (Total)	<15.6	ug/kg	51.8	15.6	1	01/15/20 11:36	01/18/20 06:47	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 06:47	17060-07-0	
Toluene-d8 (S)	99	%.	75-125		1	01/15/20 11:36	01/18/20 06:47	2037-26-5	
4-Bromofluorobenzene (S)	97	%.	75-125		1	01/15/20 11:36	01/18/20 06:47	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-18_6-8 Lab ID: 10504984035 Collected: 01/07/20 13:40 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.1	mg/kg	17.1	5.1	1	01/10/20 15:42	01/12/20 15:10		
n-Triacontane (S)	85	%.	50-150		1	01/10/20 15:42	01/12/20 15:10	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	27.2	%	0.10	0.10	1		01/14/20 12:59		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.9	ug/kg	12.9	3.9	1	01/15/20 11:36	01/18/20 07:06	71-43-2	
Ethylbenzene	<3.7	ug/kg	12.5	3.7	1	01/15/20 11:36	01/18/20 07:06	100-41-4	
Methyl-tert-butyl ether	<8.2	ug/kg	27.3	8.2	1	01/15/20 11:36	01/18/20 07:06	1634-04-4	
Naphthalene	<64.4	ug/kg	214	64.4	1	01/15/20 11:36	01/18/20 07:06	91-20-3	
Toluene	<16.8	ug/kg	55.9	16.8	1	01/15/20 11:36	01/18/20 07:06	108-88-3	
1,2,4-Trimethylbenzene	<13.8	ug/kg	45.8	13.8	1	01/15/20 11:36	01/16/20 06:32	95-63-6	
1,3,5-Trimethylbenzene	<11.0	ug/kg	36.5	11.0	1	01/15/20 11:36	01/18/20 07:06	108-67-8	
Xylene (Total)	<16.0	ug/kg	53.2	16.0	1	01/15/20 11:36	01/18/20 07:06	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	99	%.	75-125		1	01/15/20 11:36	01/18/20 07:06	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 07:06	2037-26-5	
4-Bromofluorobenzene (S)	96	%.	75-125		1	01/15/20 11:36	01/18/20 07:06	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-17_6-8 Lab ID: 10504984036 Collected: 01/07/20 14:05 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO Pi	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<5.1	mg/kg	17.1	5.1	1	01/10/20 15:42	01/12/20 15:17		
n-Triacontane (S)	88	%.	50-150		1	01/10/20 15:42	01/12/20 15:17	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	TM D2974						
Percent Moisture	26.2	%	0.10	0.10	1		01/15/20 10:12		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.8	ug/kg	12.8	3.8	1	01/15/20 11:36	01/18/20 07:25	71-43-2	
Ethylbenzene	<3.7	ug/kg	12.4	3.7	1	01/15/20 11:36	01/18/20 07:25	100-41-4	
Methyl-tert-butyl ether	<8.1	ug/kg	27.0	8.1	1	01/15/20 11:36	01/18/20 07:25	1634-04-4	
Naphthalene	<63.9	ug/kg	213	63.9	1	01/15/20 11:36	01/18/20 07:25	91-20-3	
Toluene	<16.7	ug/kg	55.5	16.7	1	01/15/20 11:36	01/18/20 07:25	108-88-3	
1,2,4-Trimethylbenzene	<13.6	ug/kg	45.5	13.6	1	01/15/20 11:36	01/16/20 06:51	95-63-6	
1,3,5-Trimethylbenzene	<10.9	ug/kg	36.2	10.9	1	01/15/20 11:36	01/18/20 07:25	108-67-8	
Xylene (Total)	<15.8	ug/kg	52.7	15.8	1	01/15/20 11:36	01/18/20 07:25	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 07:25	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 07:25	2037-26-5	
4-Bromofluorobenzene (S)	96	%.	75-125		1	01/15/20 11:36	01/18/20 07:25	460-00-4	



ANALYTICAL RESULTS

Project: 49161477.00 Nemadji PH II

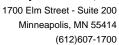
Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: SB-20_6-8 Lab ID: 10504984037 Collected: 01/07/20 14:20 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
WIDRO GCS	Analytical	Method: WI	MOD DRO PI	reparation N	/lethod	: WI MOD DRO			
WDRO C10-C28 Surrogates	<4.9	mg/kg	16.4	4.9	1	01/10/20 15:42	01/12/20 14:42		
n-Triacontane (S)	82	%.	50-150		1	01/10/20 15:42	01/12/20 14:42	638-68-6	
Dry Weight / %M by ASTM D2974	Analytical	Method: AS	ΓM D2974						
Percent Moisture	25.7	%	0.10	0.10	1		01/15/20 10:12		N2
8260B MSV UST	Analytical	Method: EP/	A 8260B Prep	aration Met	hod: E	PA 5035/5030B			
Benzene	<3.7	ug/kg	12.4	3.7	1	01/15/20 11:36	01/18/20 07:44	71-43-2	
Ethylbenzene	<3.6	ug/kg	11.9	3.6	1	01/15/20 11:36	01/18/20 07:44	100-41-4	
Methyl-tert-butyl ether	<7.8	ug/kg	26.1	7.8	1	01/15/20 11:36	01/18/20 07:44	1634-04-4	
Naphthalene	<61.7	ug/kg	205	61.7	1	01/15/20 11:36	01/18/20 07:44	91-20-3	
Toluene	<16.1	ug/kg	53.5	16.1	1	01/15/20 11:36	01/18/20 07:44	108-88-3	
1,2,4-Trimethylbenzene	<13.2	ug/kg	43.9	13.2	1	01/15/20 11:36	01/16/20 07:10	95-63-6	
1,3,5-Trimethylbenzene	<10.5	ug/kg	35.0	10.5	1	01/15/20 11:36	01/18/20 07:44	108-67-8	
Xylene (Total)	<15.3	ug/kg	50.9	15.3	1	01/15/20 11:36	01/18/20 07:44	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 07:44	17060-07-0	
Toluene-d8 (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 07:44	2037-26-5	
4-Bromofluorobenzene (S)	98	%.	75-125		1	01/15/20 11:36	01/18/20 07:44	460-00-4	





Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Sample: Trip Blank Lab ID: 10504984038 Collected: 01/07/20 00:00 Received: 01/10/20 08:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260B MSV UST	Analytical	Method: EPA	\ 8260B Prep	aration Metl	nod: E	PA 5035/5030B			
Benzene	<2.8	ug/kg	9.4	2.8	1	01/15/20 11:36	01/18/20 02:04	71-43-2	
Ethylbenzene	<2.7	ug/kg	9.1	2.7	1	01/15/20 11:36	01/18/20 02:04	100-41-4	
Methyl-tert-butyl ether	<6.0	ug/kg	19.8	6.0	1	01/15/20 11:36	01/18/20 02:04	1634-04-4	
Naphthalene	<46.8	ug/kg	156	46.8	1	01/15/20 11:36	01/18/20 02:04	91-20-3	
Toluene	<12.2	ug/kg	40.6	12.2	1	01/15/20 11:36	01/18/20 02:04	108-88-3	
1,2,4-Trimethylbenzene	<10.0	ug/kg	33.3	10.0	1	01/15/20 11:36	01/16/20 01:49	95-63-6	
1,3,5-Trimethylbenzene	<8.0	ug/kg	26.5	8.0	1	01/15/20 11:36	01/18/20 02:04	108-67-8	
Xylene (Total)	<11.6	ug/kg	38.6	11.6	1	01/15/20 11:36	01/18/20 02:04	1330-20-7	
Surrogates									
1,2-Dichloroethane-d4 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 02:04	17060-07-0	
Toluene-d8 (S)	101	%.	75-125		1	01/15/20 11:36	01/18/20 02:04	2037-26-5	
4-Bromofluorobenzene (S)	100	%.	75-125		1	01/15/20 11:36	01/18/20 02:04	460-00-4	





49161477.00 Nemadji PH II Project:

Pace Project No.: 10504984

QC Batch: 654419 Analysis Method: **ASTM D2974**

%

QC Batch Method: **ASTM D2974** Analysis Description: Dry Weight / %M by ASTM D2974

10504984001, 10504984002, 10504984003, 10504984004, 10504984005, 10504984006, 10504984007, Associated Lab Samples:

10504984008, 10504984009, 10504984010, 10504984011, 10504984012, 10504984013, 10504984014,

10504984015

SAMPLE DUPLICATE: 3518067

Parameter

10504984015 Dup Max RPD **RPD** Units Result Result Qualifiers 25.4 25.0 2 30 N2

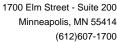
SAMPLE DUPLICATE: 3518350

Date: 01/24/2020 03:21 PM

Percent Moisture

10504967006 Dup Max Parameter Units Result Result **RPD** RPD Qualifiers Percent Moisture % 16.3 16.2 0 30 N2

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

QC Batch: 654420 Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974 Analysis Description: Dry Weight / %M by ASTM D2974

Associated Lab Samples: 10504984016, 10504984017, 10504984018, 10504984019, 10504984021, 10504984022, 10504984023,

10504984024, 10504984025, 10504984026, 10504984027, 10504984028, 10504984029, 10504984030,

 $10504984031,\, 10504984032,\, 10504984033,\, 10504984034,\, 10504984035$

SAMPLE DUPLICATE: 3518069

Parameter

10504984016 Dup Max
Units Result Result RPD RPD Qualifiers

Percent Moisture % 24.1 26.0 7 30 N2

SAMPLE DUPLICATE: 3518070

Date: 01/24/2020 03:21 PM

10504984035 Dup Max Parameter Units Result Result **RPD** RPD Qualifiers Percent Moisture % 27.2 25.9 30 N2 5

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALITY CONTROL DATA

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

QC Batch: 654665 Analysis Method: ASTM D2974

QC Batch Method: ASTM D2974 Analysis Description: Dry Weight / %M by ASTM D2974

Associated Lab Samples: 10504984036, 10504984037

SAMPLE DUPLICATE: 3519132

 Percent Moisture
 Units
 10505286001 Result
 Dup Result
 Max Result
 RPD
 Qualifiers

 16.8
 17.4
 4
 30 N2

SAMPLE DUPLICATE: 3519254

Date: 01/24/2020 03:21 PM

10504984037 Dup Max RPD RPD Parameter Units Result Result Qualifiers Percent Moisture % 25.7 27.4 7 30 N2

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

QC Batch: 654083 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035/5030B Analysis Description: 8260B MSV UST

Associated Lab Samples: 10504984001, 10504984002, 10504984003

METHOD BLANK: 3516236 Matrix: Solid

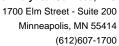
Associated Lab Samples: 10504984001, 10504984002, 10504984003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<10.0	33.3	01/13/20 14:24	
1,3,5-Trimethylbenzene	ug/kg	<8.0	26.5	01/13/20 14:24	
Benzene	ug/kg	<2.8	9.4	01/13/20 14:24	
Ethylbenzene	ug/kg	<2.7	9.1	01/13/20 14:24	
Methyl-tert-butyl ether	ug/kg	<6.0	19.8	01/13/20 14:24	
Naphthalene	ug/kg	<46.8	156	01/13/20 14:24	
Toluene	ug/kg	<12.2	40.6	01/13/20 14:24	
Xylene (Total)	ug/kg	<11.6	38.6	01/13/20 14:24	
1,2-Dichloroethane-d4 (S)	%.	103	75-125	01/13/20 14:24	
4-Bromofluorobenzene (S)	%.	100	75-125	01/13/20 14:24	
Toluene-d8 (S)	%.	101	75-125	01/13/20 14:24	

LABORATORY CONTROL SAMPLE:	3516237					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	652	65	63-126	
1,3,5-Trimethylbenzene	ug/kg	1000	652	65	64-125	
Benzene	ug/kg	1000	609	61	59-125	
Ethylbenzene	ug/kg	1000	670	67	62-125	
Methyl-tert-butyl ether	ug/kg	1000	651	65	58-125	
Naphthalene	ug/kg	1000	588	59	57-125	
Toluene	ug/kg	1000	629	63	59-125	
Xylene (Total)	ug/kg	3000	1950	65	65-125	
1,2-Dichloroethane-d4 (S)	%.			98	75-125	
4-Bromofluorobenzene (S)	%.			101	75-125	
Toluene-d8 (S)	%.			100	75-125	

MATRIX SPIKE & MATRIX S	SPIKE DUPLIC	CATE: 3516	238 MS	MSD	3516239							
Parameter	1 Units	0504908001 Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/kg	ND	1080	1080	969	996	90	92	53-150	3	30	
1,3,5-Trimethylbenzene	ug/kg	ND	1080	1080	960	985	89	91	60-150	3	30	
Benzene	ug/kg	ND	1080	1080	839	811	78	75	46-150	3	30	
Ethylbenzene	ug/kg	ND	1080	1080	950	952	88	88	59-150	0	30	
Methyl-tert-butyl ether	ug/kg	ND	1080	1080	937	921	87	85	50-150	2	30	
Naphthalene	ug/kg	ND	1080	1080	982	1030	91	96	50-150	5	30	
Toluene	ug/kg	ND	1080	1080	858	865	80	80	55-150	1	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

MATRIX SPIKE & MATRIX SF	PIKE DUPL	.ICATE: 3516			3516239							
		10504908001	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	% Rec	RPD	RPD	Qual
												- Quai
Xylene (Total)	ug/kg	ND	3230	3240	2810	2840	87	88	60-150	1	30	
1,2-Dichloroethane-d4 (S)	%.						100	98	75-125			
4-Bromofluorobenzene (S)	%.						99	100	75-125			
Toluene-d8 (S)	%.						100	100	75-125			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

QC Batch: 654110 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035/5030B Analysis Description: 8260B MSV UST

Associated Lab Samples: 10504984004, 10504984005, 10504984006, 10504984007, 10504984008, 10504984009, 10504984010,

10504984011, 10504984012, 10504984013, 10504984014, 10504984015, 10504984016

METHOD BLANK: 3516647 Matrix: Solid

Associated Lab Samples: 10504984004, 10504984005, 10504984006, 10504984007, 10504984008, 10504984009, 10504984010,

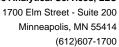
10504984011, 10504984012, 10504984013, 10504984014, 10504984015, 10504984016

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<10.0	33.3	01/14/20 00:29	
1,3,5-Trimethylbenzene	ug/kg	<8.0	26.5	01/14/20 00:29	
Benzene	ug/kg	<2.8	9.4	01/14/20 00:29	
Ethylbenzene	ug/kg	<2.7	9.1	01/14/20 00:29	
Methyl-tert-butyl ether	ug/kg	<6.0	19.8	01/14/20 00:29	
Naphthalene	ug/kg	<46.8	156	01/14/20 00:29	
Toluene	ug/kg	<12.2	40.6	01/14/20 00:29	
Xylene (Total)	ug/kg	<11.6	38.6	01/14/20 00:29	
1,2-Dichloroethane-d4 (S)	%.	101	75-125	01/14/20 00:29	
4-Bromofluorobenzene (S)	%.	100	75-125	01/14/20 00:29	
Toluene-d8 (S)	%.	101	75-125	01/14/20 00:29	

LABORATORY CONTROL SAMPLE:	3516648					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	891	89	63-126	
1,3,5-Trimethylbenzene	ug/kg	1000	885	89	64-125	
Benzene	ug/kg	1000	752	75	59-125	
Ethylbenzene	ug/kg	1000	879	88	62-125	
Methyl-tert-butyl ether	ug/kg	1000	864	86	58-125	
Naphthalene	ug/kg	1000	915	92	57-125	
Toluene	ug/kg	1000	794	79	59-125	
Xylene (Total)	ug/kg	3000	2590	86	65-125	
1,2-Dichloroethane-d4 (S)	%.			99	75-125	
4-Bromofluorobenzene (S)	%.			97	75-125	
Toluene-d8 (S)	%.			100	75-125	

MATRIX SPIKE & MATRIX S	PIKE DUPL	ICATE: 3516	649		3516650							
		1050505007	MS	MSD					0/ D			
		10505053007	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
1,2,4-Trimethylbenzene	ug/kg	ND	1310	1320	1830	1440	140	110	53-150	24	30	
1,3,5-Trimethylbenzene	ug/kg	ND	1310	1320	1790	1430	137	108	60-150	23	30	
Benzene	ug/kg	ND	1310	1320	1440	1090	110	82	46-150	28	30	
Ethylbenzene	ug/kg	ND	1310	1320	1720	1320	132	100	59-150	27	30	
Methyl-tert-butyl ether	ug/kg	ND	1310	1320	1640	1290	125	98	50-150	24	30	
Naphthalene	ug/kg	ND	1310	1320	2010	1600	154	121	50-150	23	30	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

MATRIX SPIKE & MATRIX SF		CATE: 3516	MS	MSD	3516650							
	1	0505053007	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Toluene	ug/kg	ND	1310	1320	1500	1150	115	87	55-150	26	30	
Xylene (Total)	ug/kg	ND	3910	3950	5080	3900	130	99	60-150	26	30	
1,2-Dichloroethane-d4 (S)	%.						99	97	75-125			
4-Bromofluorobenzene (S)	%.						99	100	75-125			
Toluene-d8 (S)	%.						100	101	75-125			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

QC Batch: 654411 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035/5030B Analysis Description: 8260B MSV UST

Associated Lab Samples: 10504984017, 10504984018, 10504984019, 10504984020

METHOD BLANK: 3518038 Matrix: Solid

Associated Lab Samples: 10504984017, 10504984018, 10504984019, 10504984020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<10.0	33.3	01/15/20 02:01	
1,3,5-Trimethylbenzene	ug/kg	<8.0	26.5	01/15/20 02:01	
Benzene	ug/kg	<2.8	9.4	01/15/20 02:01	
Ethylbenzene	ug/kg	<2.7	9.1	01/15/20 02:01	
Methyl-tert-butyl ether	ug/kg	<6.0	19.8	01/15/20 02:01	
Naphthalene	ug/kg	<46.8	156	01/15/20 02:01	
Toluene	ug/kg	<12.2	40.6	01/15/20 02:01	
Xylene (Total)	ug/kg	<11.6	38.6	01/15/20 02:01	
1,2-Dichloroethane-d4 (S)	%.	98	75-125	01/15/20 02:01	
4-Bromofluorobenzene (S)	%.	99	75-125	01/15/20 02:01	
Toluene-d8 (S)	%.	100	75-125	01/15/20 02:01	

LABORATORY	CONTROL	SAMPLE.	3518039

Date: 01/24/2020 03:21 PM

ENDOTORIO CONTINO E ONIMI EE	. 0010000					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	203	167	82	63-126	
1,3,5-Trimethylbenzene	ug/kg	203	164	80	64-125	
Benzene	ug/kg	203	161	79	59-125	
Ethylbenzene	ug/kg	203	167	82	62-125	
Methyl-tert-butyl ether	ug/kg	203	155	76	58-125	
Naphthalene	ug/kg	203	165	81	57-125	
Toluene	ug/kg	203	160	79	59-125	
Xylene (Total)	ug/kg	610	493	81	65-125	
1,2-Dichloroethane-d4 (S)	%.			99	75-125	
4-Bromofluorobenzene (S)	%.			100	75-125	
Toluene-d8 (S)	%.			100	75-125	

MATRIX SPIKE & MATRIX S	PIKE DUPLIC	CATE: 3518	040		3518041							
Parameter	1 Units	0504962001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2,4-Trimethylbenzene	ug/kg	16000	1160	1150	17200	20700	102	410	53-150	18	30	E,M1
1,3,5-Trimethylbenzene	ug/kg	4640	1160	1150	6380	7830	149	278	60-150	20	30	M1
Benzene	ug/kg	ND	1160	1150	1190	1280	102	112	46-150	7	30	
Ethylbenzene	ug/kg	8320	1160	1150	10100	12500	158	365	59-150	21	30	M1
Methyl-tert-butyl ether	ug/kg	ND	1160	1150	1140	1230	98	107	50-150	8	30	
Naphthalene	ug/kg	3970	1160	1150	5940	7330	170	293	50-150	21	30	M1
Toluene	ug/kg	287	1160	1150	1480	1730	103	126	55-150	16	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

QUALITY CONTROL DATA

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

MATRIX SPIKE & MATRIX SP	PIKE DUPL	ICATE: 3518	040		3518041							
		10504962001	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Xylene (Total)	ug/kg	31100	3480	3430	36700	44600	162	395	60-150	19	30	ES,MS
1,2-Dichloroethane-d4 (S)	%.						100	104	75-125			
4-Bromofluorobenzene (S)	%.						99	100	75-125			
Toluene-d8 (S)	%.						100	100	75-125			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALITY CONTROL DATA

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

QC Batch: 654717 Analysis Method: EPA 8260B
QC Batch Method: EPA 5035/5030B Analysis Description: 8260B MSV UST

Associated Lab Samples: 10504984021, 10504984022, 10504984023, 10504984024, 10504984025, 10504984026, 10504984027,

10504984028, 10504984029, 10504984030, 10504984031, 10504984032, 10504984033, 10504984034,

10504984035, 10504984036, 10504984037, 10504984038

METHOD BLANK: 3519456 Matrix: Solid

Associated Lab Samples: 10504984021, 10504984022, 10504984023, 10504984024, 10504984025, 10504984026, 10504984027,

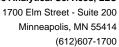
10504984035, 10504984036, 10504984037, 10504984038

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	<10.0	33.3	01/16/20 01:31	
1,3,5-Trimethylbenzene	ug/kg	<8.0	26.5	01/18/20 01:45	
Benzene	ug/kg	<2.8	9.4	01/18/20 01:45	
Ethylbenzene	ug/kg	<2.7	9.1	01/18/20 01:45	
Methyl-tert-butyl ether	ug/kg	<6.0	19.8	01/18/20 01:45	
Naphthalene	ug/kg	<46.8	156	01/18/20 01:45	
Toluene	ug/kg	<12.2	40.6	01/18/20 01:45	
Xylene (Total)	ug/kg	<11.6	38.6	01/18/20 01:45	
1,2-Dichloroethane-d4 (S)	%.	100	75-125	01/18/20 01:45	
4-Bromofluorobenzene (S)	%.	97	75-125	01/18/20 01:45	
Toluene-d8 (S)	%.	101	75-125	01/18/20 01:45	

LABORATORY CONTROL SAMPLE:	3519457					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,2,4-Trimethylbenzene	ug/kg	1000	868	87	63-126	
1,3,5-Trimethylbenzene	ug/kg	1000	894	89	64-125	
Benzene	ug/kg	1000	587	59	59-125	
Ethylbenzene	ug/kg	1000	754	75	62-125	
Methyl-tert-butyl ether	ug/kg	1000	696	70	58-125	
Naphthalene	ug/kg	1000	939	94	57-125	
Toluene	ug/kg	1000	628	63	59-125	
Xylene (Total)	ug/kg	3000	2330	78	65-125	
1,2-Dichloroethane-d4 (S)	%.			97	75-125	
4-Bromofluorobenzene (S)	%.			101	75-125	
Toluene-d8 (S)	%.			99	75-125	

MATRIX SPIKE & MATRIX S		3519459										
		10504984021	MS Spike	MSD Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
1,2,4-Trimethylbenzene	ug/kg	<13.0	1270	1270	1530	1430	120	112	53-150	7	30	
1,3,5-Trimethylbenzene	ug/kg	<10.4	1270	1270	1220	1240	96	97	60-150	2	30	
Benzene	ug/kg	<3.7	1270	1270	1100	1120	86	88	46-150	2	30	
Ethylbenzene	ug/kg	<3.5	1270	1270	1160	1170	91	92	59-150	2	30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





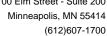
Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

MATRIX SPIKE & MATRIX SF	PIKE DUPL	ICATE: 3519	458 MS	MSD	3519459							
		10504984021	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Methyl-tert-butyl ether	ug/kg	<7.7	1270	1270	1000	969	79	76	50-150	4	30	
Naphthalene	ug/kg	<60.9	1270	1270	1040	1060	82	83	50-150	2	30	
Toluene	ug/kg	<15.9	1270	1270	1090	1090	85	86	55-150	0	30	
Xylene (Total)	ug/kg	<15.1	3820	3820	3620	3650	95	96	60-150	1	30	
1,2-Dichloroethane-d4 (S)	%.						98	98	75-125			
4-Bromofluorobenzene (S)	%.						100	98	75-125			
Toluene-d8 (S)	%.						99	99	75-125			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





QUALITY CONTROL DATA

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

QC Batch: 654058 Analysis Method: WI MOD DRO
QC Batch Method: WI MOD DRO Analysis Description: WIDRO GCS

Associated Lab Samples: 10504984001, 10504984002, 10504984003, 10504984004, 10504984005, 10504984006, 10504984007,

10504984008, 10504984009, 10504984010, 10504984011, 10504984012, 10504984013, 10504984014,

10504984015, 10504984016, 10504984017, 10504984018, 10504984019, 10504984021

METHOD BLANK: 3515985 Matrix: Solid

Associated Lab Samples: 10504984001, 10504984002, 10504984003, 10504984004, 10504984005, 10504984006, 10504984007,

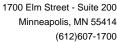
10504984008, 10504984009, 10504984010, 10504984011, 10504984012, 10504984013, 10504984014,

10504984015, 10504984016, 10504984017, 10504984018, 10504984019, 10504984021

Blank Reporting Parameter Units Result Limit Qualifiers Analyzed **WDRO C10-C28** <3.9 01/12/20 15:58 mg/kg 106 50-150 01/12/20 15:58 n-Triacontane (S) %.

LABORATORY CONTROL SAMPLE & I	LCSD: 3515986		35	15987						
		Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	
Parameter	Units	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qualifiers
WDRO C10-C28 n-Triacontane (S)	mg/kg %.	80	69.0	86.3	86 93	108	70-120 50-150	22	20	R1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





QUALITY CONTROL DATA

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

QC Batch: 654060 Analysis Method: WI MOD DRO
QC Batch Method: WI MOD DRO Analysis Description: WIDRO GCS

Associated Lab Samples: 10504984022, 10504984023, 10504984024, 10504984025, 10504984026, 10504984027, 10504984028,

10504984029, 10504984030, 10504984031, 10504984032, 10504984033, 10504984034, 10504984035,

10504984036, 10504984037

METHOD BLANK: 3515988 Matrix: Solid

Associated Lab Samples: 10504984022, 10504984023, 10504984024, 10504984025, 10504984026, 10504984027, 10504984028,

10504984029, 10504984030, 10504984031, 10504984032, 10504984033, 10504984034, 10504984035,

10504984036, 10504984037

Blank Reporting Parameter Units Result Limit Qualifiers Analyzed **WDRO C10-C28** <3.9 01/12/20 12:49 mg/kg 50-150 01/12/20 12:49 n-Triacontane (S) %. 85

LABORATORY CONTROL SAMPLE &	LCSD: 3515989		35	515990						
		Spike	LCS	LCSD	LCS	LCSD	% Rec		Max	
Parameter	Units	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qualifiers
WDRO C10-C28	mg/kg	80	67.0	62.9	84	79	70-120	6	20	
n-Triacontane (S)	%.				89	83	50-150			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALIFIERS

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above LOD.

J - Estimated concentration at or above the LOD and below the LOQ.

LOD - Limit of Detection adjusted for dilution factor, percent moisture, initial weight and final volume.

LOQ - Limit of Quantitation adjusted for dilution factor, percent moisture, initial weight and final volume.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected at or above the adjusted LOD.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

Date: 01/24/2020 03:21 PM

E	Analyte concentration exceeded the calibration range. The reported result is estimated.
ES	The reported result is estimated because one or more of the constituent results are qualified as such.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MS	Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
R1	RPD value was outside control limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.
T6	High boiling point hydrocarbons are present in the sample.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

ab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch		
0504984001	SB-14_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984002	SB-15_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984003	SB-13_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984004	SB-12_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984005	SB-8_2-4	WI MOD DRO	654058				
0504984006	SB-8_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984007	SB-11 2-4	WI MOD DRO	654058	WI MOD DRO	654166		
0504984008	SB-11_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984009	SB-10_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984010	SB-10_5-6	WI MOD DRO	654058	WI MOD DRO	654166		
0504984011	SB-10_1-2	WI MOD DRO	654058	WI MOD DRO	654166		
0504984012	SB-9_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984013	SB-7_2-4	WI MOD DRO	654058	WI MOD DRO	654166		
0504984014	SB-7_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984015	SB-16_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984016	SB-6_1.5-2	WI MOD DRO	654058	WI MOD DRO	654166		
0504984017	SB-6 5-6	WI MOD DRO	654058	WI MOD DRO	654166		
0504984018	SB-21 2-4	WI MOD DRO	654058	WI MOD DRO	654166		
0504984019	SB-21_6-8	WI MOD DRO	654058	WI MOD DRO	654166		
0504984021	SB-21_0-0 SB-22_2-4	WI MOD DRO	654058	WI MOD DRO	654166		
	_						
0504984022	SB-22_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984023	SB-23_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984024	SB-29_2-4	WI MOD DRO	654060	WI MOD DRO	654165		
0504984025	SB-29_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984026	SB-27_2-4	WI MOD DRO	654060	WI MOD DRO	654165		
0504984027	SB-27_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984028	SB-28_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984029	SB-24_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984030	SB-25_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984031	SB-26_2-4	WI MOD DRO	654060	WI MOD DRO	654165		
0504984032	SB-26_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984033	SB-19_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984034	SB-18_2-4	WI MOD DRO	654060	WI MOD DRO	654165		
0504984035	SB-18_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984036	SB-17_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984037	SB-20_6-8	WI MOD DRO	654060	WI MOD DRO	654165		
0504984001	SB-14_6-8	ASTM D2974	654419				
0504984002	SB-15_6-8	ASTM D2974	654419				
0504984003	SB-13_6-8	ASTM D2974	654419				
0504984004	SB-12_6-8	ASTM D2974	654419				
504984005	SB-8_2-4	ASTM D2974	654419				
504984006	SB-8_6-8	ASTM D2974	654419				
504984007	SB-11_2-4	ASTM D2974	654419				
0504984008	SB-11_6-8	ASTM D2974	654419				
0504984009	SB-10_6-8	ASTM D2974	654419				
0504984010	SB-10_5-6	ASTM D2974	654419				
)504984011	SB-10_3-0 SB-10_1-2	ASTM D2974 ASTM D2974	654419				
/JU4304U I I	SB-9_6-8	ASTM D2974 ASTM D2974	654419				

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytica Batch
10504984013	SB-7_2-4	ASTM D2974	654419	_	
0504984014	SB-7_6-8	ASTM D2974	654419		
0504984015	SB-16_6-8	ASTM D2974	654419		
0504984016	SB-6_1.5-2	ASTM D2974	654420		
0504984017	SB-6_5-6	ASTM D2974	654420		
0504984018	SB-21 2-4	ASTM D2974	654420		
0504984019	SB-21_6-8	ASTM D2974	654420		
0504984021	SB-22_2-4	ASTM D2974	654420		
0504984022	SB-22_6-8	ASTM D2974	654420		
0504984023	SB-23_6-8	ASTM D2974	654420		
0504984024	SB-29_2-4	ASTM D2974	654420		
0504984025	SB-29_6-8	ASTM D2974	654420		
0504984026	SB-27_2-4	ASTM D2974	654420		
0504984027	SB-27_6-8	ASTM D2974	654420		
0504984028	SB-28_6-8	ASTM D2974	654420		
0504984029	SB-24_6-8	ASTM D2974	654420		
0504984030	SB-25_6-8	ASTM D2974	654420		
0504984031	SB-26_2-4	ASTM D2974	654420		
0504984032	SB-26 6-8	ASTM D2974	654420		
0504984033	SB-19_6-8	ASTM D2974	654420		
0504984034	SB-18_2-4	ASTM D2974	654420		
0504984035	SB-18_6-8	ASTM D2974	654420		
0504984036	SB-17_6-8	ASTM D2974	654665		
0504984037	SB-20_6-8	ASTM D2974	654665		
0504984001	SB-14_6-8	EPA 5035/5030B	654083	EPA 8260B	654097
0504984002	SB-15_6-8	EPA 5035/5030B	654083	EPA 8260B	654097
0504984003	SB-13_6-8	EPA 5035/5030B	654083	EPA 8260B	654097
0504984004	SB-12_6-8	EPA 5035/5030B	654110	EPA 8260B	654264
0504984005	SB-8_2-4	EPA 5035/5030B	654110	EPA 8260B	654264
0504984006	SB-8_6-8	EPA 5035/5030B	654110	EPA 8260B	654264
0504984007	SB-11_2-4	EPA 5035/5030B	654110	EPA 8260B	654264
0504984008	SB-11_6-8	EPA 5035/5030B	654110	EPA 8260B	654264
0504984009	SB-10_6-8	EPA 5035/5030B	654110	EPA 8260B	654264
0504984010	SB-10_5-6	EPA 5035/5030B	654110	EPA 8260B	654264
0504984011	SB-10_1-2	EPA 5035/5030B	654110	EPA 8260B	654264
0504984012	SB-9_6-8	EPA 5035/5030B	654110	EPA 8260B	654264
0504984013	SB-7_2-4	EPA 5035/5030B	654110	EPA 8260B	654264
0504984014	SB-7_6-8	EPA 5035/5030B	654110	EPA 8260B	654264
0504984015	SB-16_6-8	EPA 5035/5030B	654110	EPA 8260B	654264
0504984016	SB-6_1.5-2	EPA 5035/5030B	654110	EPA 8260B	654264
0504984017	SB-6_5-6	EPA 5035/5030B	654411	EPA 8260B	654476
0504984018	SB-21_2-4	EPA 5035/5030B	654411	EPA 8260B	654476
0504984019	SB-21_6-8	EPA 5035/5030B	654411	EPA 8260B	654476
0504984020	Field Blank	EPA 5035/5030B	654411	EPA 8260B	654476
0504984021	SB-22_2-4	EPA 5035/5030B	654717	EPA 8260B	654743
0504984022	SB-22_6-8	EPA 5035/5030B	654717	EPA 8260B	654743

REPORT OF LABORATORY ANALYSIS

This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, LLC.

(612)607-1700



QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 49161477.00 Nemadji PH II

Pace Project No.: 10504984

Date: 01/24/2020 03:21 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10504984023	SB-23_6-8	EPA 5035/5030B	654717	EPA 8260B	654743
10504984024	SB-29_2-4	EPA 5035/5030B	654717	EPA 8260B	654743
10504984025	SB-29_6-8	EPA 5035/5030B	654717	EPA 8260B	654743
10504984026	SB-27_2-4	EPA 5035/5030B	654717	EPA 8260B	654743
10504984027	SB-27_6-8	EPA 5035/5030B	654717	EPA 8260B	654743
10504984028	SB-28_6-8	EPA 5035/5030B	654717	EPA 8260B	654743
10504984029	SB-24_6-8	EPA 5035/5030B	654717	EPA 8260B	654743
10504984030	SB-25_6-8	EPA 5035/5030B	654717	EPA 8260B	654743
10504984031	SB-26_2-4	EPA 5035/5030B	654717	EPA 8260B	654743
10504984032	SB-26_6-8	EPA 5035/5030B	654717	EPA 8260B	654743
10504984033	SB-19_6-8	EPA 5035/5030B	654717	EPA 8260B	654743
10504984034	SB-18_2-4	EPA 5035/5030B	654717	EPA 8260B	654743
10504984035	SB-18_6-8	EPA 5035/5030B	654717	EPA 8260B	654743
10504984036	SB-17_6-8	EPA 5035/5030B	654717	EPA 8260B	654743
10504984037	SB-20_6-8	EPA 5035/5030B	654717	EPA 8260B	654743
10504984038	Trip Blank	EPA 5035/5030B	654717	EPA 8260B	654743

Barr Engineering Co. (Chain	of	Cust	odv Samp	ole Origination	State:				Analysis Reque	ctod		ſ		
] Hibbing	,	☐ Minr	□ KS] UT { WI er:			W	ater.	Soil			nber: 56	
REPORT TO				INVOICE T			1							Code:	Preservative Code:
Company: Barr Engineering		Comp	pany:	same .			1_				Mol thalong	2	GW = Gro	oundwater face Water	A = None B = HCl
Address: 325 5 Lake Ave Duly	tn MN	Addre	ess:		JO#:1	USU) 4	9	84		7		WW = Wa	ste Water nking Wate	C = HNO ₃
Name: Lynette Carney		Name	e:							1			S = Soi	l/Solid	E = NaOH
email: LCarney & barr-com		email	l:		0504984						2		SD = Sec O = Otl	liment ner	F = MeOH G = NaHSO₄
Copy to: datamgt@barr.com		P.O.		V 1	0504984					1 1	4	-			$H = Na_2S_2O_3$ I = Ascorbic Acid
Project Name: Namadii PH TT				No: 4916147	7.00	Matrix Code	MS,	mpe				DRO Solids			J ≈ NH₄CI
Location	San	iple De		Collection	Collection	Matrix	L L	z				, 28 s			K = Zn Acetate O = Other
Location	Start	Stop	Unit (m./ft.	Date (mm/dd/yyyy)	Time (hh:mm)	Code	erfo	otal				AA			
1.			or in.)	(IIII)/dd/yyyy)	(111.11111)	<u> </u>	١٩	ĭ			Ņ	NN	Field Filter	ed Y/N	
SB - 14	S	8	47	01/06/2020	1050	S	N	5			2	2 1			601
SB-15	6	03		\	1110)				1	1			007
3. SB-13	6	8			1140			\parallel							063
4 SB-12	6	ક			1210			\parallel				$\dagger \dagger \dagger \dagger$			504
5. SB-8	2	4			(220			H							
6. SB-8		6										$\frac{\parallel \parallel \parallel}{\parallel}$			605
7.	6	8			1240		Ш	\coprod							D05
7. SB-11 8.	2	4			1305										807
SB-11	6	છ			1310										068
9. SB-10	6	8			1320			\parallel							009
10. SB-10	5	6	1		1346	1		\parallel							00 b
BARR USE ONLY		Relina	uished b		, On I	re? D	ate	4	Time	Bassi Ot 14			10000		l é
Sampled by: C353 / MAB				Uhrestin S.	eut 0			,]	1500	Received		riNO	MACE	1/8/	Date 0 15:00
Barr Proj. Manager: LMC		Relinqu	uished by	y:	On Id		ate		Time	Received by	<i>/</i> :		24.5		Date Time
Barr DQ Manager: SET		Sample	s Shippe	ed VIA: 🗌 Cou		eral Expr	ess		Sampler	Air Bill Nun	∽	(<u> PACE</u>		0/20 8:56
Lab Name: Pace				Othe				. 					I		ested Due Date: rd Turn Around Time
Lab Location: Minneufolis		Lab W	O:	Te	emperature on	Receipt (°C):		Custo	ody Seal Intact?	Y	ΠN	None	□ Rush	l S/S
stribution - White-Original: Accompanies	s Shipme	ent to i	ahorato	ry: Vellow Copy:	Include in Tield	Da				- 1			<u></u>		(mm/dd/yyyy)⊅age 63 of 103 🛱

hite-Original: Accompanies Shipment to Laboratory; Yellow Copy: Include in Field Documents; Pink Copy: Send to Data Management Administrators.

0.862.6,4.463.2 C

T=6.2,2.0,2.0,2.1,0.5

Barr Engineering Co. (Chain	of	Cust	ody	Sampl	e Origination		П			Ana	alysis Re	quest	ed		П	COC Numb	er E	6080		\neg
☐ Ann Arbor ☐ Duluth ☐ BARR ☐ Bismarck ☐ Grand Rapids ☐] Hibbing] Jefferso) on City	☐ Minr	neapolis Lake City	□ KS □ MI □ MN		UT WI er:				Water			Soil			coc <u>2</u>				
REPORT TO				IN'	VOICE TO)		1									Matrix (rvative Co	de:
Company: Barr Engineering	le	Comp	any:	same				1	er s					ene			SW = Surf	ace Wate	er B =	: None : HCl	l
Address: 325 & Lake Ave Dulu	th, MN	Addre	ess:	1				z	aine					بالم			WW = Was			: HNO₃ : H₂SO₄	
Name: Lynette Carney		Name	:	1				>	Container					ap hthale			S = Soil/ SD = Sedi	Solid	E =	NaOH MeOH	
email: LCarney & barr. com		email:				· ·		Δ						Ž			O = Other		G =	: NaHSO₄	
Copy to: datamgt@barr.com		P.O.		V		-		/MSD	er					+		s			I =	: Na ₂ S ₂ O ₃ : Ascorbic	
Project Name: Namadji Substation				No: 4	916147	7.00	Matrix Code	MS.	qui					PVoc	DRO	olid				: NH₄Cl : Zn Aceta	ate
	Sam	ple De			ction	Collection	Matrix	٦٤	ź					2	2	8				Other	ile I
Location	Start	Stop	Unit (m./ft.		ate d/yyyy)	Time (hh:mm)	Code	erfo	otal						Α		Preservative				
1.			or in.)			(111.17111)		□	_	++		\dashv		N	2	7	Field Filtered		- lan- 6		
SB-10	1	2	++	01/06	12620	1345	S	N	5			.		2	2	1	method			• _	id
2. SB-9	6	8	1	١		1400		١	j					1		ļ	DRG by 1 8015D	nethod	WI M	OD DRO	
^{3.} SB - 7	2	4				1430										\parallel	30130	(- 10	<u> </u>	Ol	
4. SB-7	0	8				1440														Ui	
5. SB-16	8	8				1455											-			01	
6. SB-6	1.5	2				1510			\prod								-			Öl:	
7. SB - 6	5	ی				1515						-				\parallel	-			01	
8. SB - 2\	2	T				1540														Û.	-
9. SB-21	6	B				1550			1					1					1	Ul	-
10. Field Blank					12020	1520										1				67	
BARR USE ONLY		Relinq	uished l	oy: [⁻]) . ,	t-g- 8e	l L On 1		Date		Tin		Receiv	eg by	-		<u> </u>			, Date	Time	
Sampled by: C353 / MAB		Reling	uished l		t-y- se	hot On 1		i 20 Date		15 Tin		Receiv	17/	سر(]h		1 fAC€	///	Date	75.00 Time	`
Barr Proj. Manager: LMC				· .		Y	,					, ecely		~/	ىر <u>و</u>	-15	PACE	l	110/20	8186	
Barr DQ Manager: 3ET		Sample	es Shipp	oed VIA:	☐ Cou		deral Exp	ress		Samp	ler	Air Bill	Num	ber:					uested D	ue Date:	Na S
Lab Name: Pace		1 1 2			Othe			_										X Stan ☐ Rush		Around Tin	ne E
Lab Location: Minneapolis Distribution - White-Original: Accompanie	61:	Lab W				emperature on							-				☑None	∟ Kusi	(mm/dd/y	yy) Page 04	of 105

Barr Engineering Co. C	hain	of	Cust	ody Sam	ple Origination			A	nalysis Requested	<u>.</u>		COC Number:	6075	
☐ Ann Arbor ☑ Duluth ☐ BARR ☐ Bismarck ☐ Grand Rapids ☐	Hibbing Jefferso	g on City	☐ Mini	— ☐ KS neapolis ☐ Mi Lake City ☐ Mi] UT (WI er:		Wate	r S	Soil		coc _3	f <u>4</u>	
REPORT TO				INVOICE	то		1					Matrix Code:	Preservati	
Company: Barr Engineering		Comp	any:	Same			i srs			ခု	ŀ	GW = Groundwate SW = Surface Wa	ter B = HC	1
Address: 325 S Lake Ave Duluth,	MN	Addre	ess:	1			/ N ntainers			aphthalen		WW = Waste Wate DW = Drinking W		
Name: Lynette Carney		Name	:				Y /			44		S = Soil/Solid SD = Sediment	E = Na	ОН
email: LCarney & barr. com		email					10 p			ap		O = Other	F = Me G = Na	HSO₄
Copy to: datamgt@barr.com		P.O.		1			ΣL						H = Na I = As	₂S₂O₃ corbic Acid
Project Name: Nemadji Substation P				No: 491614	17.00		m MS/ Numbe			ر	Solids		J = NH	I₄CI Acetate
Location	Sam	nple De	epth Unit	Collection	Collection	Matrix	n N				Sol Sol		O = Ot	
Location	Start	Stop	(m./ft. or in.)	Date (mm/dd/yyyy)	Time (hh:mm)	Code						Preservative Code Field Filtered Y/N		i
1. 6.0		, ;		. ,	- 2 -							Proc + Napht	halene by	
SB-22	2	4	++	01/07/2020	0915	S	N 5			2	2 1	method EPA		Bot 9
2. SB-22	6	8			0925		ì				1	DRC by meth 80150 (C	od WI MO 10 - 628)	
3. SB-23	6	8			0950								Ì	-607 0
4. SB-29	2	4			1020									0
5. SB-29	6	8			1025									025
6. SB-27	2	4			1040									626
7. SB -27	G	8			1045									627
8. 58-28	6	8			1100									8 8 01/02/
9. SB-24	6	B			1120									0.5 & LO 2.0
10. SB - 25	و	8			1145								1	2 , 2
BARR USE ONLY		Relinq	uished l	by: Christin J.	o I k		Date	Time	Received by	,		6 /0	Date	Time Time Time Time Oate: OCCUSTOD OF CLUSTOD OF COURT OF COU
Sampled by: CT53		Relina	uished I	by:	Sehrt (B)		12020 Date	1 ≤ 66 Time	106	<u>. C</u>	Ull	PACE !	18/2020 /	5:00 0
Barr Proj. Manager: LMC		riciniq	district i		Y			111110	Received by:		De	PACE	VIONO S	Time Signal Sign
Barr DQ Manager: 3ET	-	Sampl	es Ship _l			deral Exp	ress 👤	Sampler	Air Bill Numb	er:		, Re	equested Due I	Date:
Lab Name: Pace				O									indard Turn Arou	nd Time
Lab Location: Minneupolis	<i>Cl</i> :	Lab V		V II -	Temperature on				dy Seal Intact? [(mm/dd/yyyy)	ge 65 of 103
Distribution - White-Original: Accompanie	s snipm	ient to	Laborat	ory; Yellow Cop y	: Include in Fiel	コ Docum つき	ents; P	Copy; S	iend to Data Ma	anage , 3	ment とって	Administrators.	12-012-176.5	•

Barr Engineering Co. C	hain	of	Cust	ody	Samp	le Origination					Ar	alysis Reque	ested			COC Numl	ner E	6082	
□ Ann Arbor ズ Duluth □ BARR □ Bismarck □ Grand Rapids □] Hibbing] Jefferso	J on City	☐ Minr ☐ Salt I	neapolis Lake City	☐ KS ☐ MI ☐ MN	□ND 🏋] UT f WI er:		-		Water		Soil	[coc 4	of	<u> </u>	
REPORT TO				IN	VOICE T	0	:									<u>Matrix</u> GW = Gro			ative Code:
Company: Barr Engineering		Comp	oany:	Same	و			1	ers					ene		SW = Surf	ace Wate	er B =	-ICI
Address: 325 S Lake Ave Dulla	th MN	Addre	ess:				··	z	aine					ક		WW = Was DW = Drin	te Water king Wat	C =	HNO₃ H₂SO₄
Name: Lynette Carney		Name	e:					1 ≻	Container					7		S = Soil SD = Sed	/Solid	E =	VaOH
email: LCarney @ barr.com		email	:					as	<u>+</u>					Naphthalen		0 = Oth		G =	NaHSO₄
Copy to: datamgt@barr.com		P.O.		1				MS	r l					-					Na₂S₂O₃ Asc o rbic Acid
Project Name: Namadji Substation P	ΗI	Barr	Project I	No: 40	116147	7.00	Matrix Code	MS,	m b					0 0	المح % Solids			J = 1	NH₄Cl Zn Acetate
	Sam	ple De		Colle	ection	Collection	Matrix	٦٤	Ž				Į į	ء ک	2 %			O = 0	
Location	Start	Stop	Unit (m./ft.		ate Id/yyyy)	Time (hh:mm)	Code	ls.	otal					= A	_	Preservativ			
1. ,			or in.)	(11111)/C	iu/yyyy)	(nn.mm)	 	ď	ř				ì	1 1	l N	Field Filtere			
SB-26	2	T	++	01/07	1/2020	1235	S	N	5					2 2	.			halane b 8260B	• ነ i
2. SB - 26	6	8				1245	(1	1					1	1	DRO by	method (CIO	WI MO - C28)	D DRO 037
3. SB-19	6	8				1310													633
4. 58-18	2	4				1330												- "	634
5. SB-18	6	8				1340													635
6. 58-17	6	8				1405													036
7. SB-20	6	8				1420										i			037
8. Trip Blank				01/0-	1/2020														038
9.																			
10.																<u> </u>			
BARR USE ONLY		Relina	uished b	DV: On		On On	Ice? [Date	I	Ti	me	Received J	2X: /	7) Date	Time
Sampled by: CTS3		Dollass	uished b	- Uhrist	rin J. 8.		N 1/8	120	20	_	∞	to	<u> </u>	Wh	<u></u>	PRICE	1/	8/2020	15;01
Barr Proj. Manager: LMC		reing	uisnea D	y.		On :		Date		11	me	Received t	oy: Lasta	O	آسر	A/A	16	Date (10/2/)	Time 87 S/2
Barr DQ Manager: JET		Sample	es Shipp	ed VIA:	☐ Co		deral Exp	ress	Z	Samp	oler	Air Bill Nu	יאט. ımber:	<u>سرس</u>		A CU		uested Du	-7
Lab Name: Pace					Oth	er:										ļ		dard Turn Ar	
Lab Location: Minneapolis		Lab W	/O:			emperature on	Receipt	(°C):		(Custody	Seal Intac	t? 🗆 Y	/ [□N	☑None	☐ Rush	(mm/dd/yyyy	-
Distribution - White-Original: Accompanie	s Shinm	ent to	Laborato	one Volle	ow Cone	Include in Field	d D		D:			1 . 5 .							age 66 of 100

Include in Field Documents; Pink Copy: Send to Data Management Administrators.

Page 67 of 103

Pace Analytical*

Document Name: Sample Condition Upon Receipt Form

Document No.: F-MN-L-213-rev.30 Document Revised: 14Nov2019 Page 1 of 1

Pace Analytical Services - Minneapolis

Sample Condition Client Name:			Pro	oject #:	1.10	·# · 1	05	049	84
Upon Receipt Barr Engine	o orin	1						Due Date	: 01/24/20
		,			PM:			Due Davi	
Courier:		iPS Immerci	∐Cli al√See Ex	13	CLI	ENT: BAI	RR		į
Tracking Number: 6779 8897 9362	1/9341	0/93SI	<u>A</u> 330[·				
Custody Seal on Cooler/Box Present? Yes]No	Sea	is Intact	? Yes	□No	Biolo:	gical Tis	sue Frozen?	Yes No N/A
Packing Material: Bubble Wrap Bubble Ba	ags 🗀]None	□Oth	er:			Te	emp Blank?	Yes No
Thermometer: ☐ T1(0461) ☐ T2(1336) ☐ T3(0459) ☐ T4(0254) ☐ T5(0489)		Type of I	7	JWet □	Blue	□None	□Dr	y Melte	ed
Note: Each West Virginia Sample must have temp take	en (no tei	mp blan	ks)						
Temp should be above freezing to 6°C Cooler Temp Rea	ad w/tem	ıp blank	: <u>0.7 j</u>	1.811.9.1	9,3	ос	Avera	ge Corrected	l Temp
Correction Factor: + U. 7 Cooler Temp Correcte	/		. 40	2021	16	. 00	(no	•	only): See Exceptions
	a w/tem	p blank	: 01		<i>(,,</i>)	⁰C		0	1 Container
USDA Regulated Soil: (N/A, water sample/Other:)				Person Exam			1710766 15
Did samples originate in a quarantine zone within the Unit							_		ationally, including
ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check m If Yes to/either question, fill out a F			No Acklist (F			to Rico)?		Yes JAN	
in restoletate question, fin out a r	regulatet		- CKIISC (I	-Witt-Q-336)	allu ill	ciuue with			· · · · · · · · · · · · · · · · · · ·
							COMN	IEN I 5:	
Chain of Custody Present and Filled Out?	Yes	_ □No		1.					·
Chain of Custody Relinquished?	Yes	□No		2.					- The state of the
Sampler Name and/or Signature on COC?	Yes	No	□N/A	3.					
Samples Arrived within Hold Time?	∑Yes	□No		4.					
Short Hold Time Analysis (<72 hr)?	□Yes	ØÑo						orm/E coli □B thophos □Oth	OD/cBOD Hex Chrome
Rush Turn Around Time Requested?	☐Yes	_JZNo_		6.					
Sufficient Volume?	ZŶes	□No		7.		****			· .
Correct Containers Used?	∠ZYes	□No	*	8.					
-Pace Containers Used?	Yes	□No	····						
Containers Intact?	√Yes	□No		9.					
Field Filtered Volume Received for Dissolved Tests?	□Yes	□No	☑ N/A	10. Is sec	diment v	isible in the	dissolve	ed container?	☐Yes ☐No
Is sufficient information available to reconcile the samples				11. If no, w	rite ID/ I	Date/Time on	Contain	er Below:	See Exception
to the COC?	Yes	□No							
Matrix: Water Soil Oil Other									
All containers needing acid/base preservation have been	Yes	□No	N/A ₪	12. Sample	#				
checked?	_	_	, — ·						
All and all the second			,				_		_
All containers needing preservation are found to be in compliance with EPA recommendation?	□Yes	□No	⊠N/A	⊔	NaOH	☐ HN	O ₃	∐H₂SO₄	Zinc Acetate
(HNO ₃ , H ₂ SO ₄ , <2pH, NaOH >9 Sulfide, NaOH>12 Cyanide)									
, , , , , , , , , , , , , , , , , , , ,				Positive for	Res.]Yes			See Exception
Exceptions: VOA, Coliform, TOC/DOC Oil and Grease,	□Yes	□No	ØN/A	Chlorine?]No	рН Рар	er Lot#	
DRO/8015 (water) and Dioxin/PFAS				Res. Chlorin	ne	0-6 Roll		0-6 Strip	0-14 Strip
Extra labels present on soil VOA or WIDRO containers?	Yes	□No		13.					See Exception
Headspace in VOA Vials (greater than 6mm)? Trip Blank Present?	Yes X∕es	□No □No	☑Ñ/A □N/A	14.		-	-		
Trip Blank Custody Seals Present?	Yes	□No	□N/A		Trip Blar	nk Lot # (if p	urchase	95 N 18	19-3
		<u></u>			,- 2.01				
CLIENT NOTIFICATION/RESOLUTION Person Contacted:				Date/Tim	٠	Held	ı Data I	requirea?	Y e s No
Comments/Resolution:				. Date/IIII	··· —				
									
Project Manager Review:	10	Mes	alist		Date:	1/10)/20		
Note: Whenever there is a discrepancy affecting North Carolina	compliand	e sample	es, a copy of	of this form wi				a DEHNR Cert	ification Office (i.e out of
hold, incorrect preservative, out of temp, incorrect containers)	-								

Labeled by:

Date : 12-JAN-2020 16:47

Client ID: SB-14_6-8

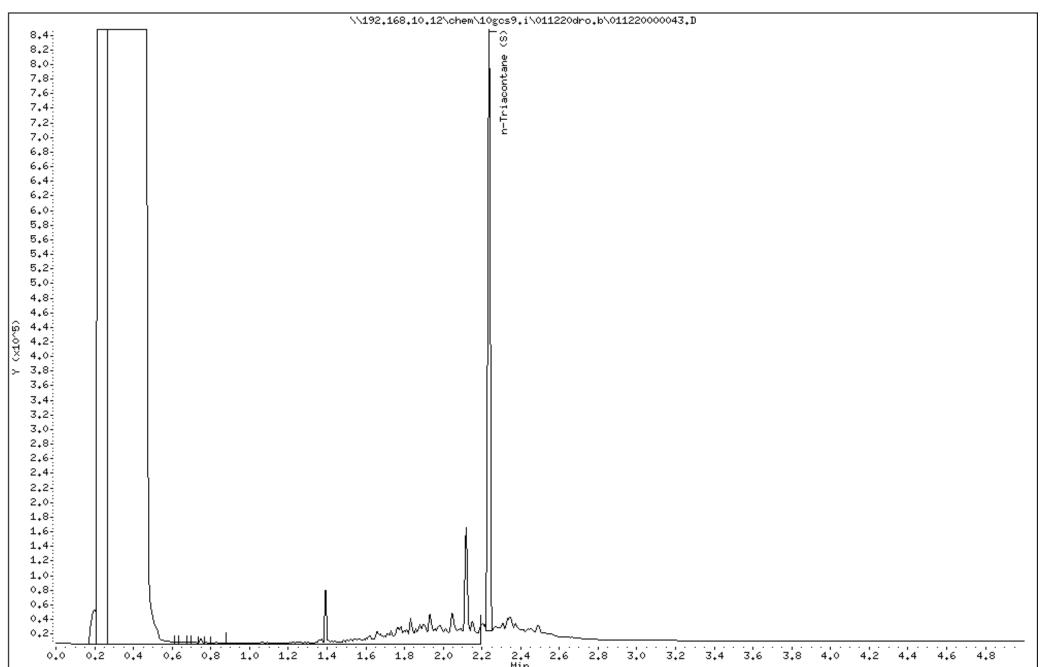
Sample Info: 10504984001

Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 16:54

Client ID: SB-15_6-8

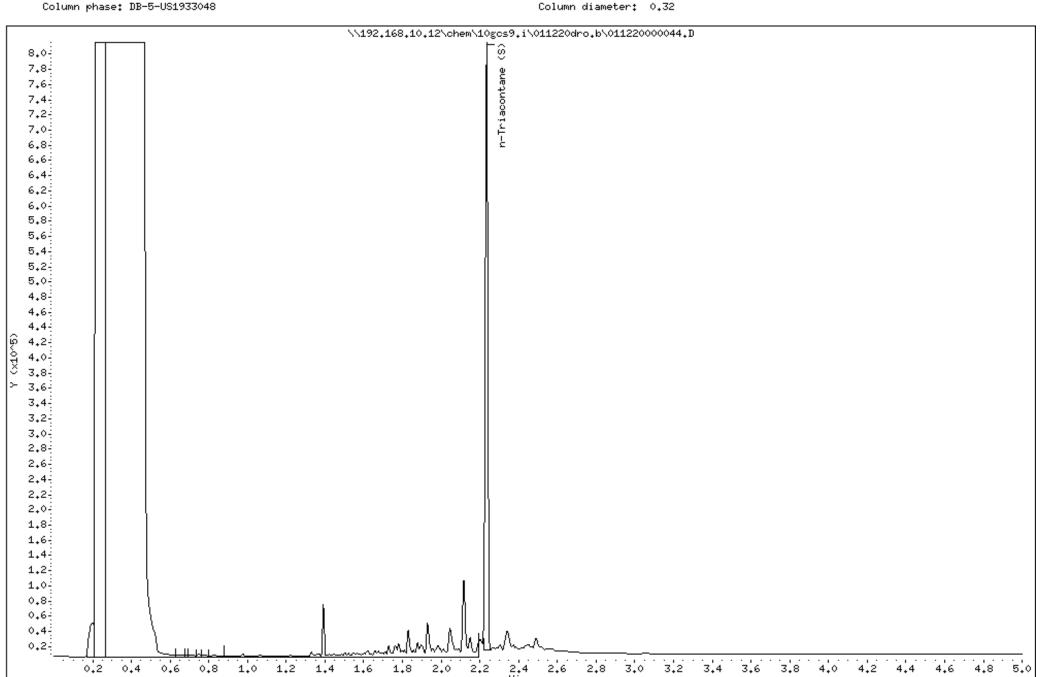
Sample Info: 10504984002

Volume Injected (uL): 1.0

Operator: JVM

Column diameter: 0.32

Instrument: 10gcs9.i



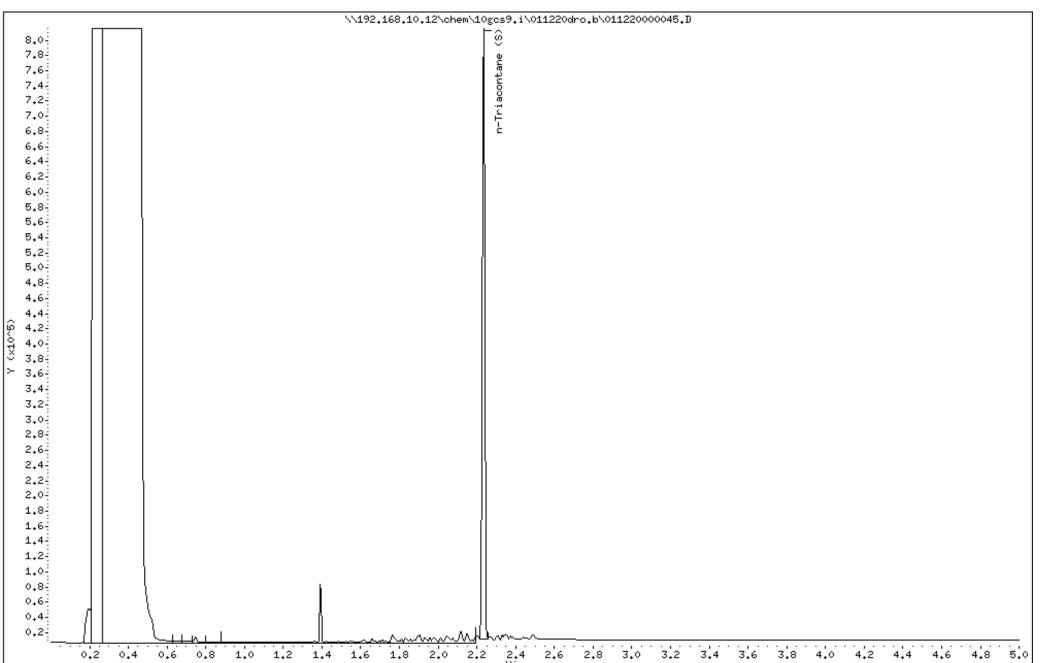
Date : 12-JAN-2020 17:01

Client ID: SB-13_6-8

Sample Info: 10504984003

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Instrument: 10gcs9.i

Operator: JVM



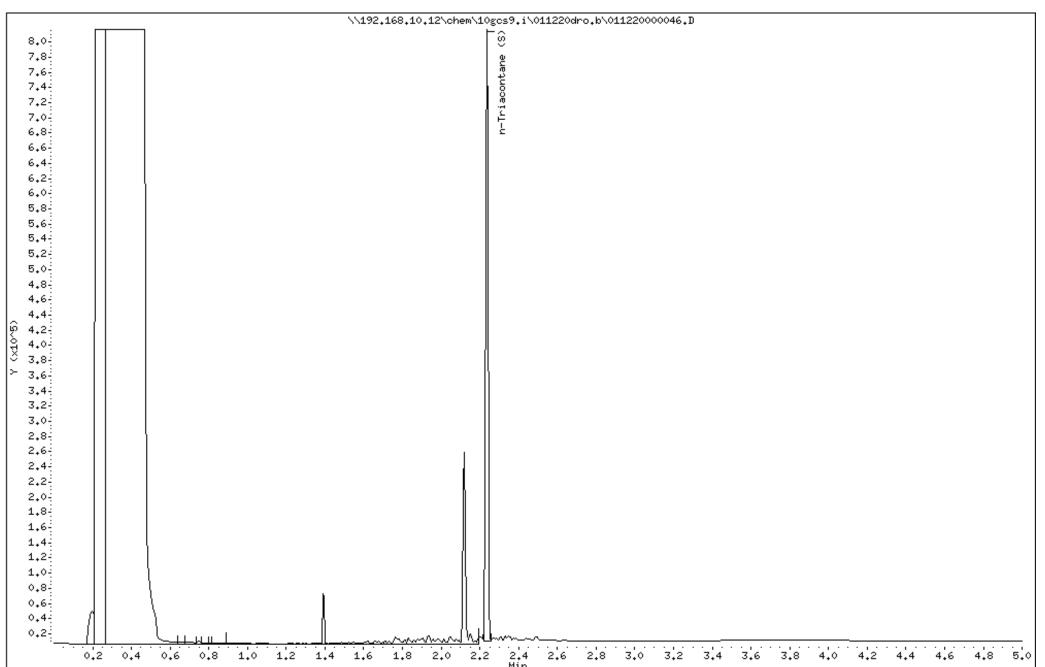
Date : 12-JAN-2020 17:08

Client ID: SB-12_6-8

Sample Info: 10504984004

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Instrument: 10gcs9.i

Operator: JVM



Page 72 of 103

Date : 12-JAN-2020 16:33

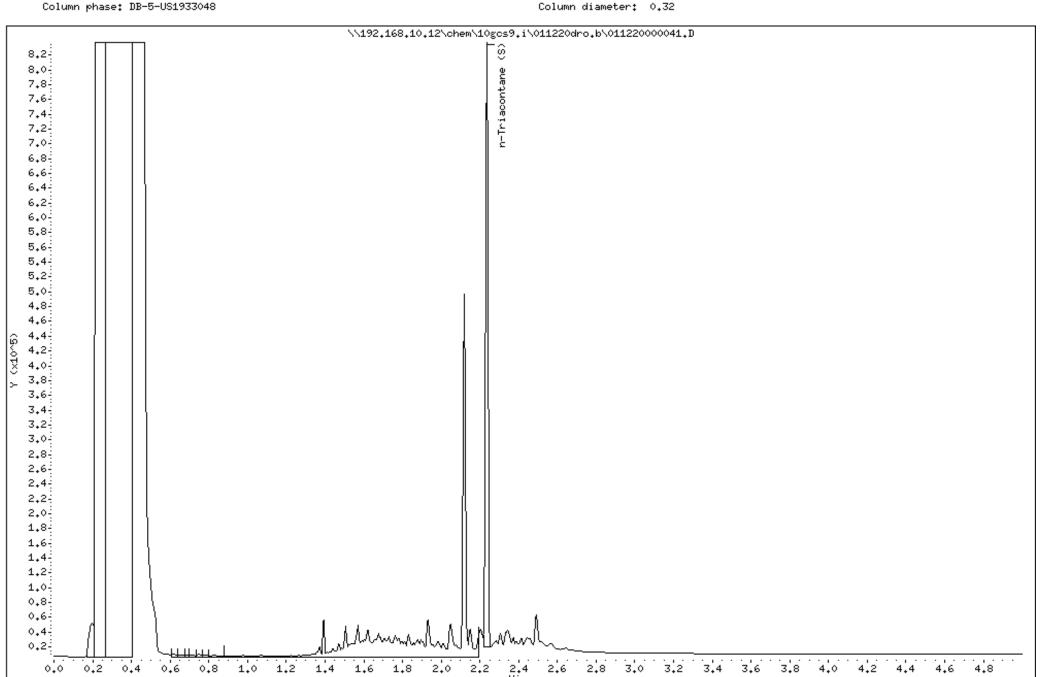
Client ID: SB-8_2-4

Sample Info: 10504984005

Volume Injected (uL): 1.0

Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 17:15

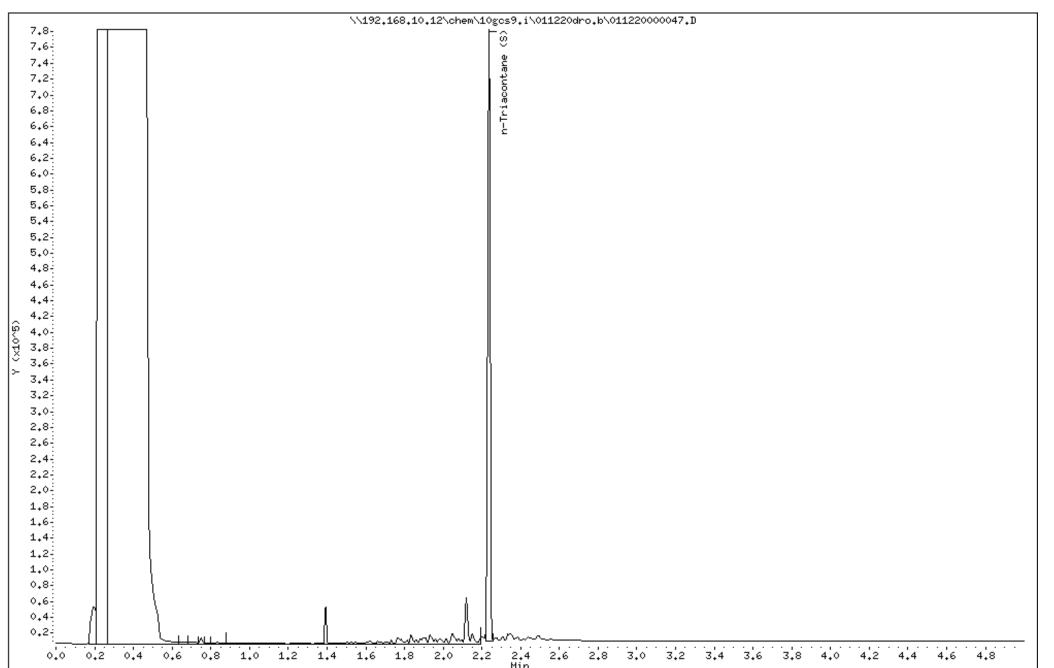
Client ID: SB-8_6-8

Sample Info: 10504984006

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Operator: JVM

Column diameter: 0.32

Instrument: 10gcs9.i



Date : 12-JAN-2020 16:40

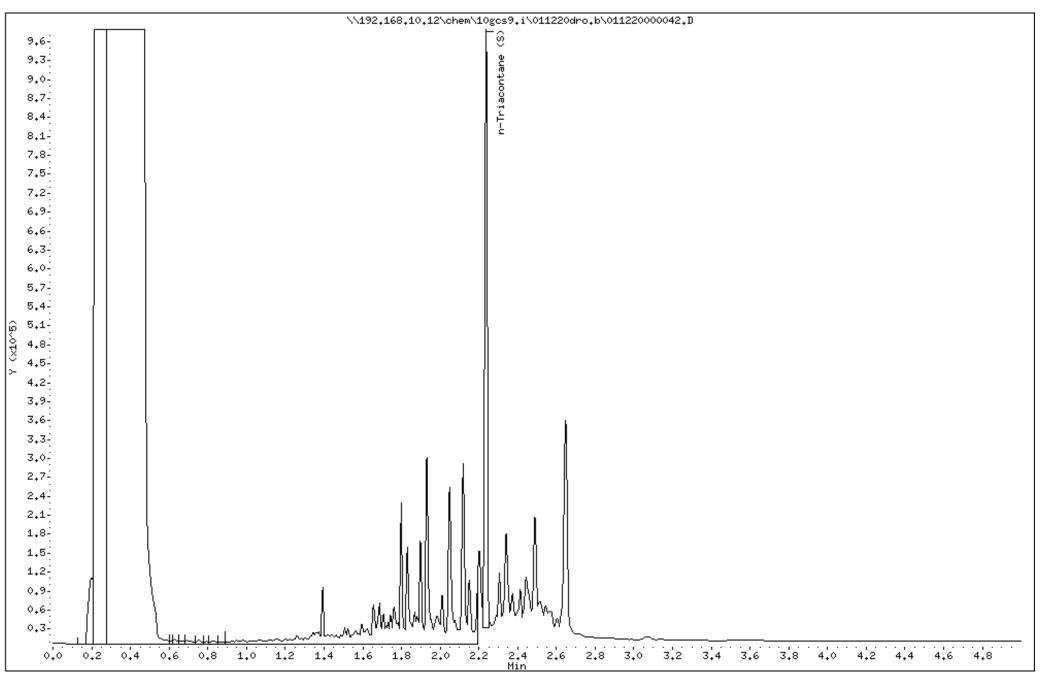
Client ID: SB-11_2-4

Sample Info: 10504984007 Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 17:22

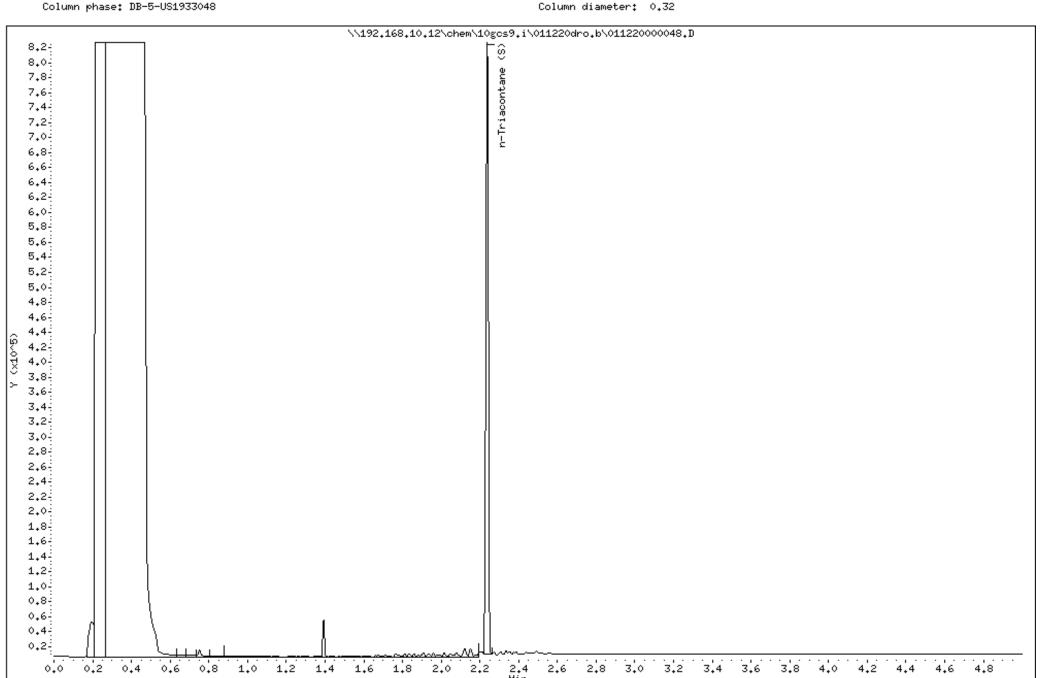
Client ID: SB-11_6-8

Sample Info: 10504984008

Volume Injected (uL): 1.0

Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 17:29

Client ID: SB-10_6-8

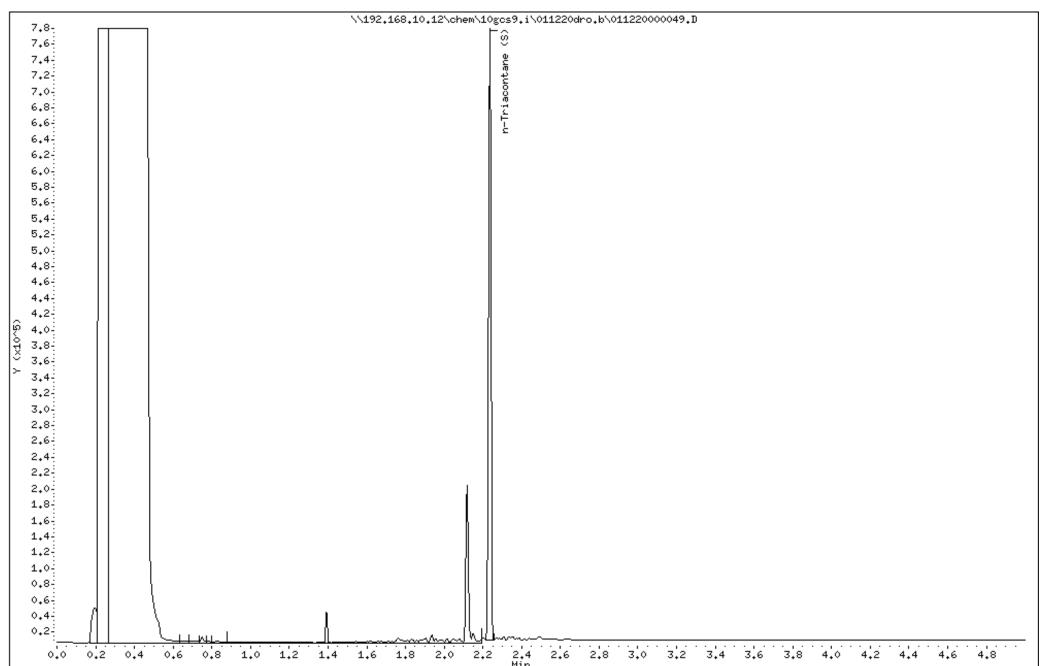
Sample Info: 10504984009

Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



Page 77 of 103

Date : 12-JAN-2020 17:36

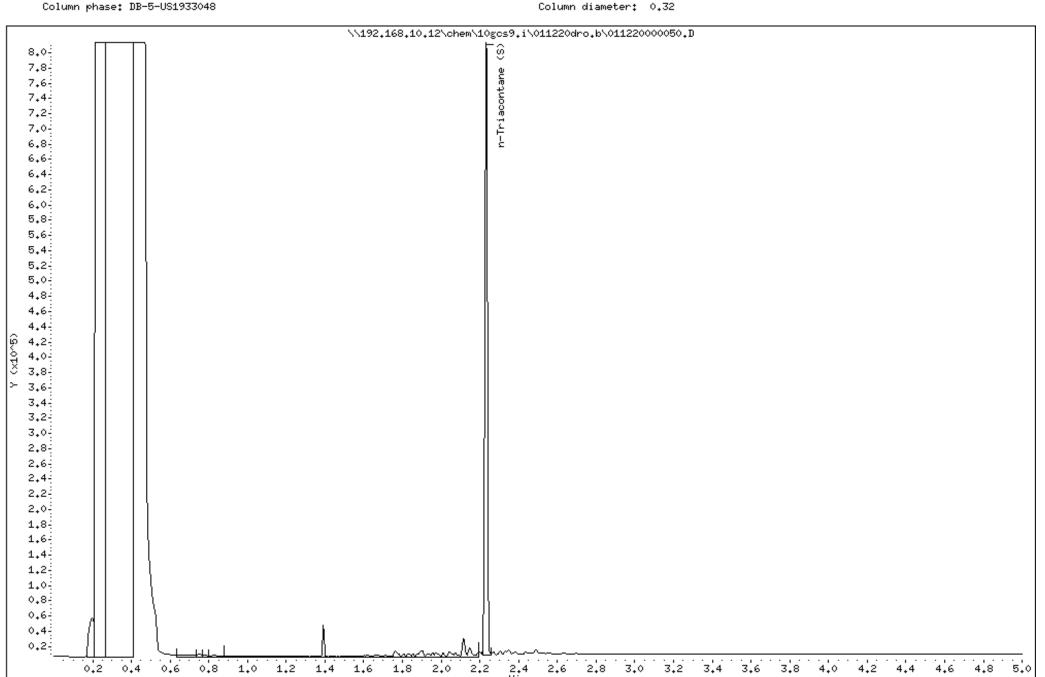
Client ID: SB-10_5-6

Sample Info: 10504984010

Volume Injected (uL): 1.0

Instrument: 10gcs9.i

Operator: JVM



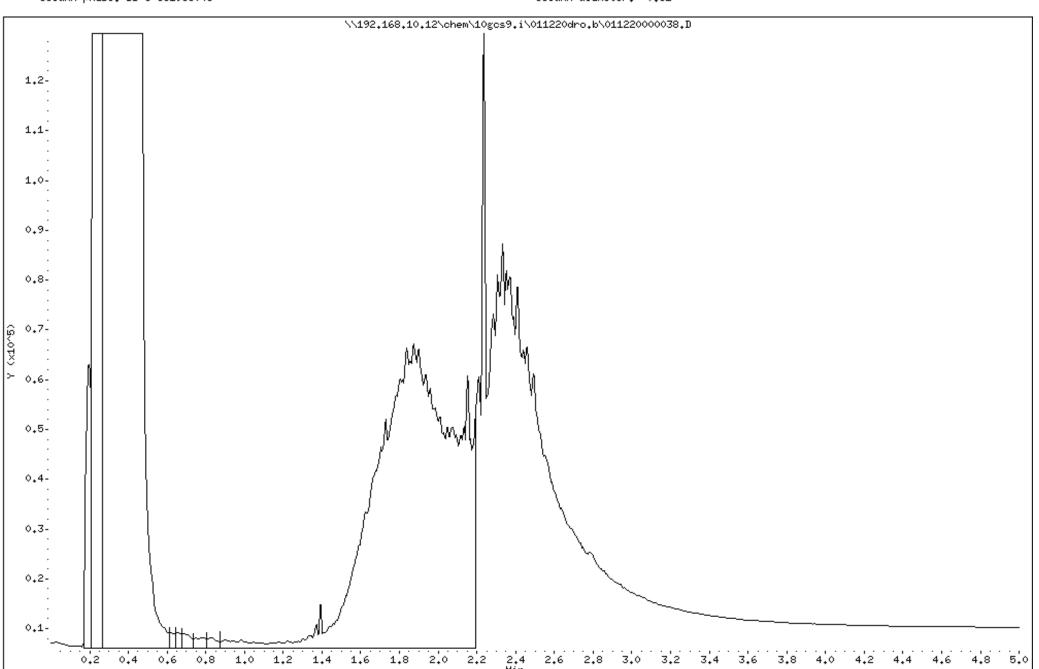
Date : 12-JAN-2020 16:12

Client ID: SB-10_1-2

Sample Info: 10504984011X10

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 17:43

Client ID: SB-9_6-8

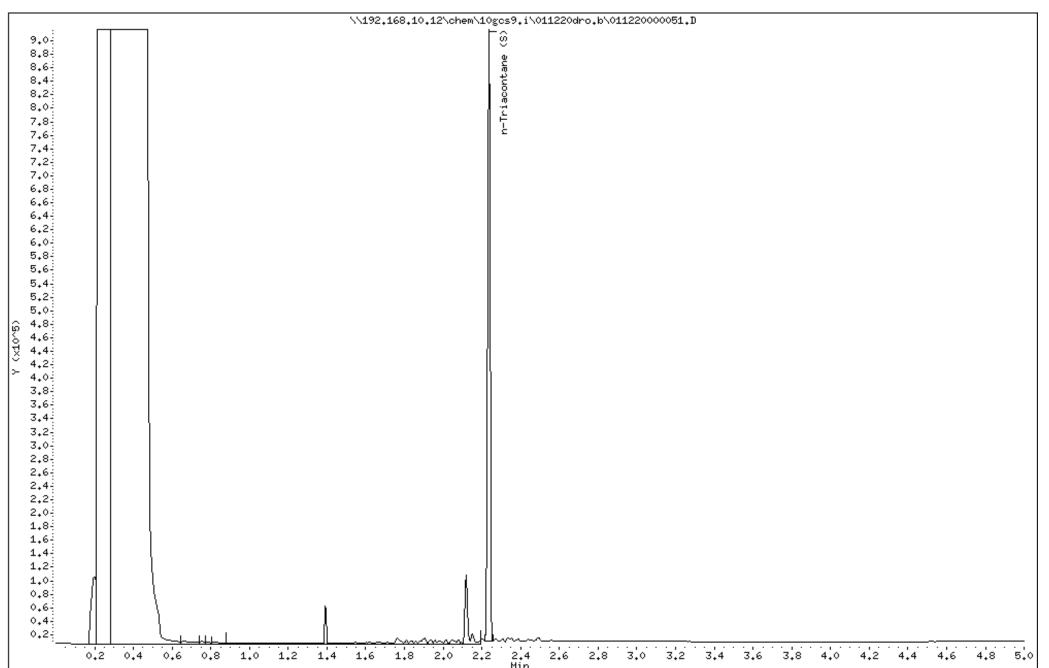
Sample Info: 10504984012

Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



Page 80 of 103

Date : 12-JAN-2020 17:50

Client ID: SB-7_2-4

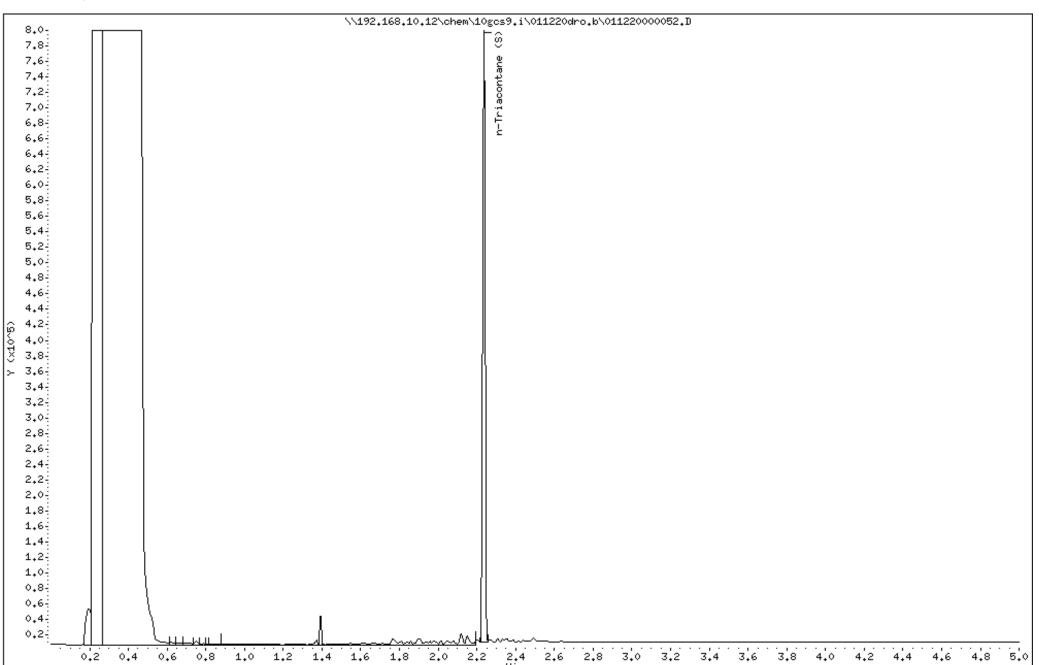
Sample Info: 10504984013

Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



Page 81 of 103

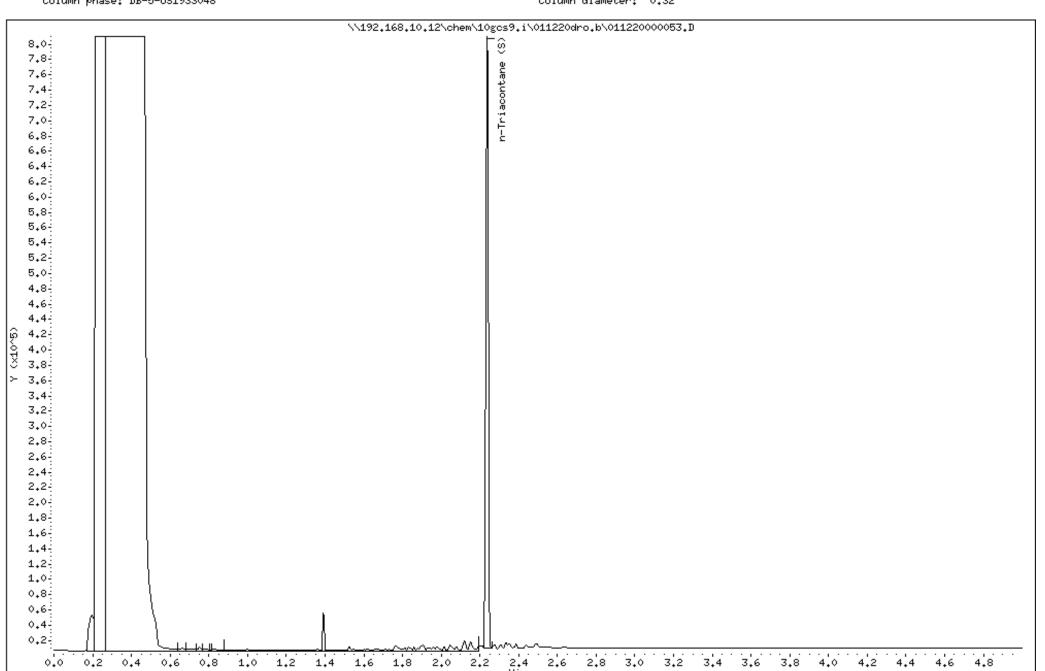
Date : 12-JAN-2020 17:57

Client ID: SB-7_6-8

Sample Info: 10504984014

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 16:26

Client ID: SB-16_6-8

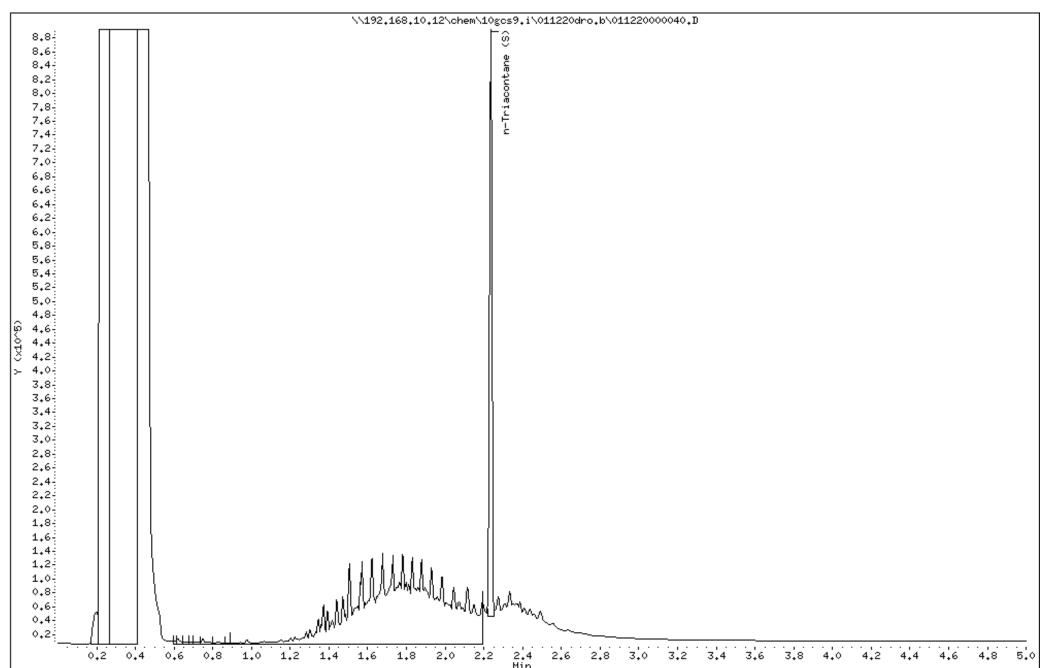
Sample Info: 10504984015

Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



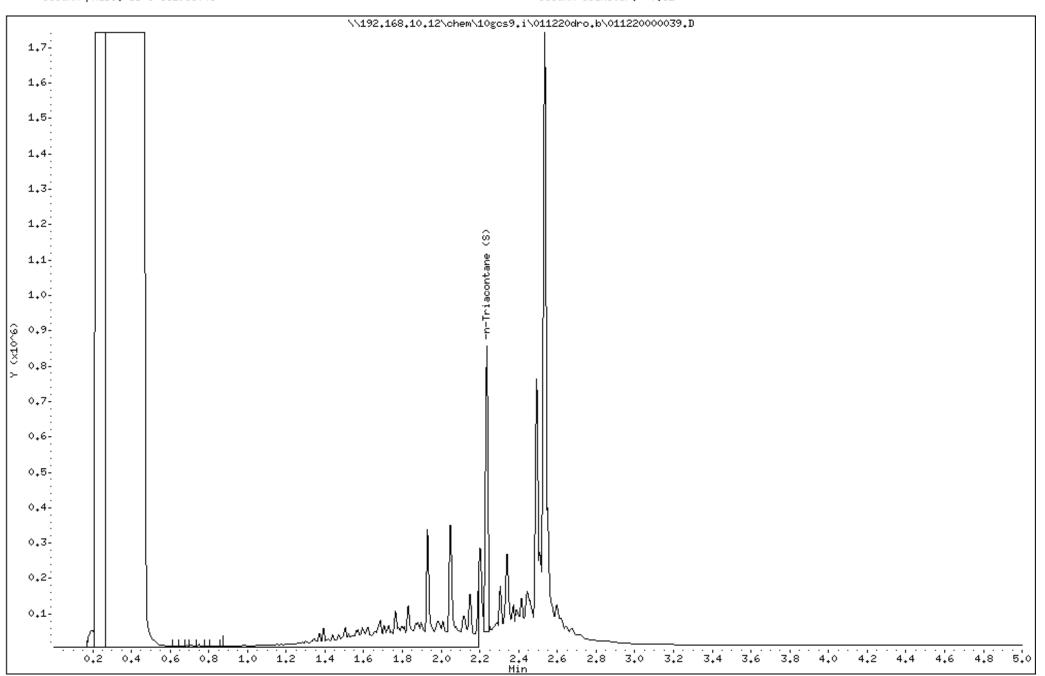
Date : 12-JAN-2020 16:19

Client ID: SB-6_1.5-2

Sample Info: 10504984016

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Instrument: 10gcs9.i

Operator: JVM



Page 84 of 103

Date : 12-JAN-2020 18:19

Client ID: SB-6_5-6

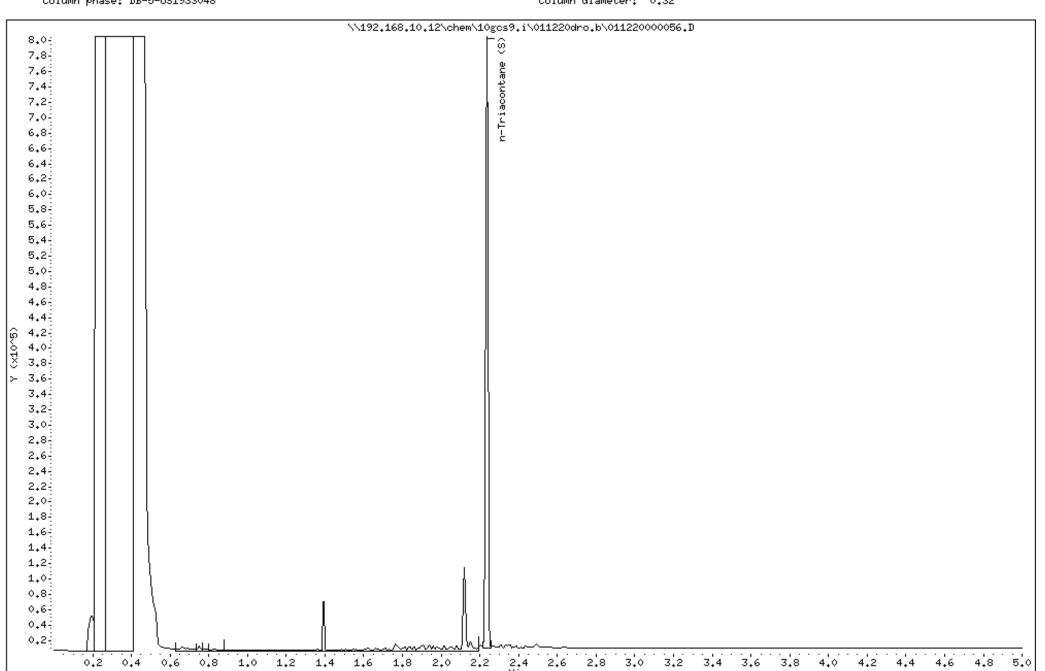
Sample Info: 10504984017

Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



Page 85 of 103

Date : 12-JAN-2020 18:05

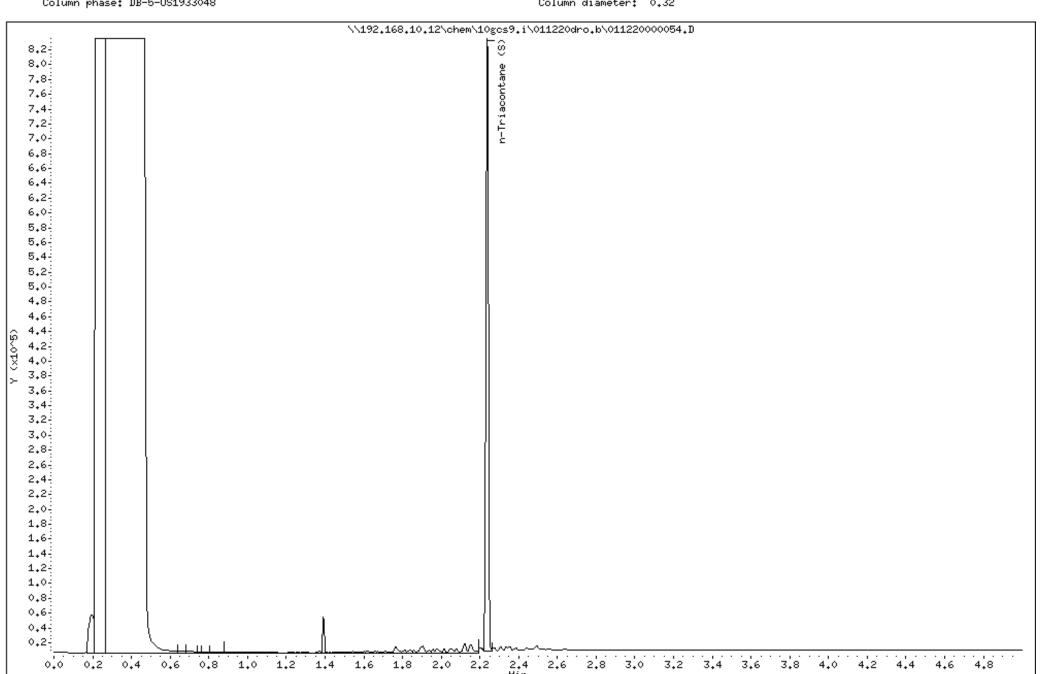
Client ID: SB-21_2-4

Sample Info: 10504984018 Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



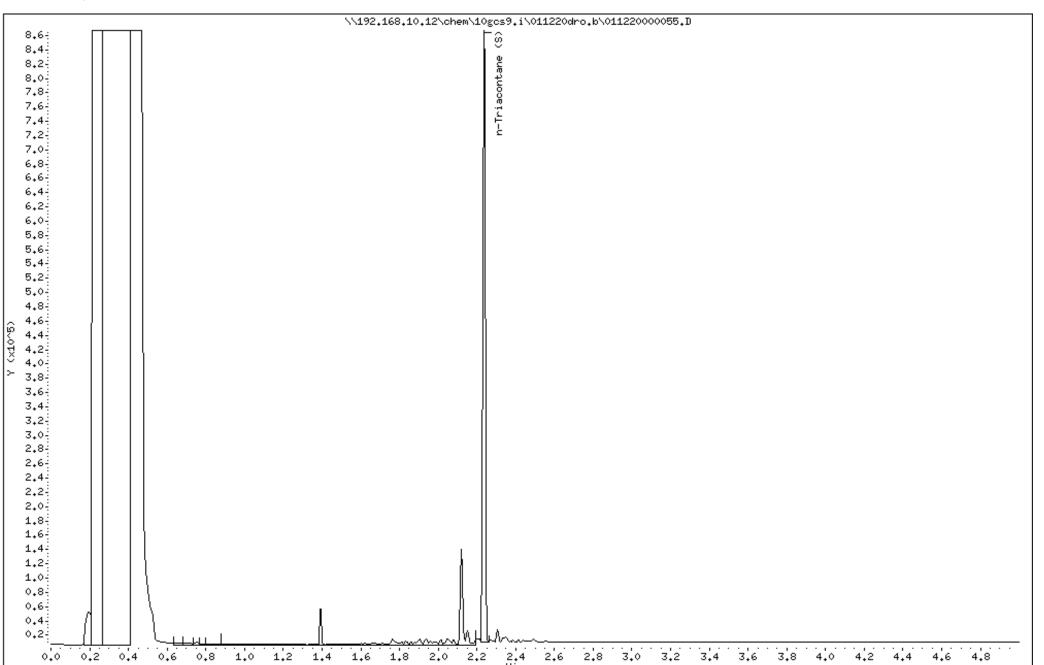
Date : 12-JAN-2020 18:12

Client ID: SB-21_6-8

Sample Info: 10504984019

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 18:26

Clicat ID: CD 20 0 4

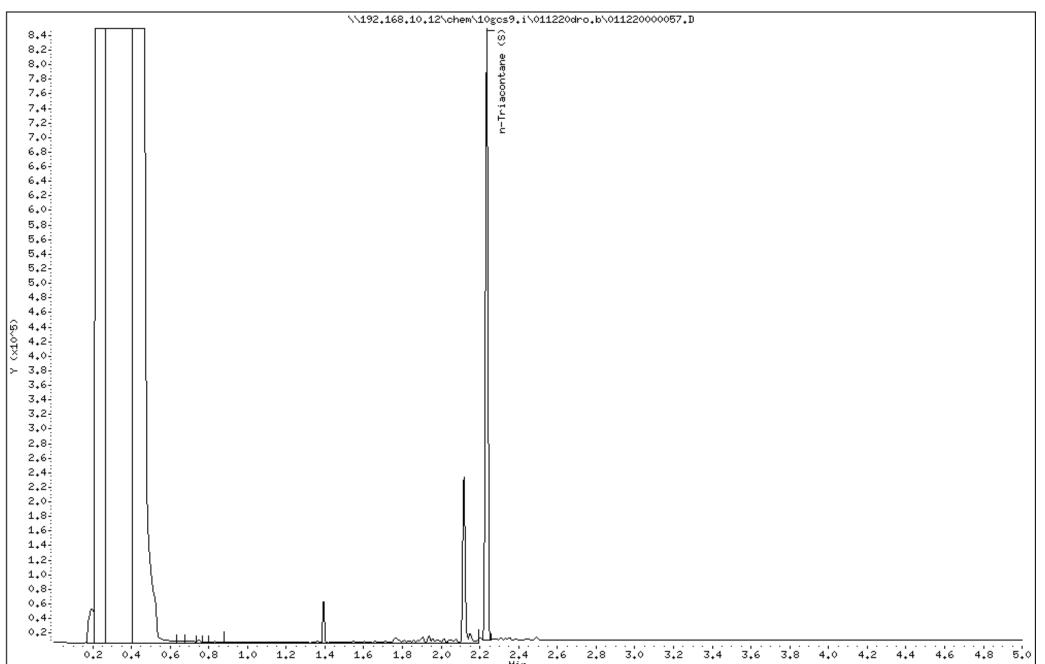
Client ID: SB-22_2-4

Sample Info: 10504984021 Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



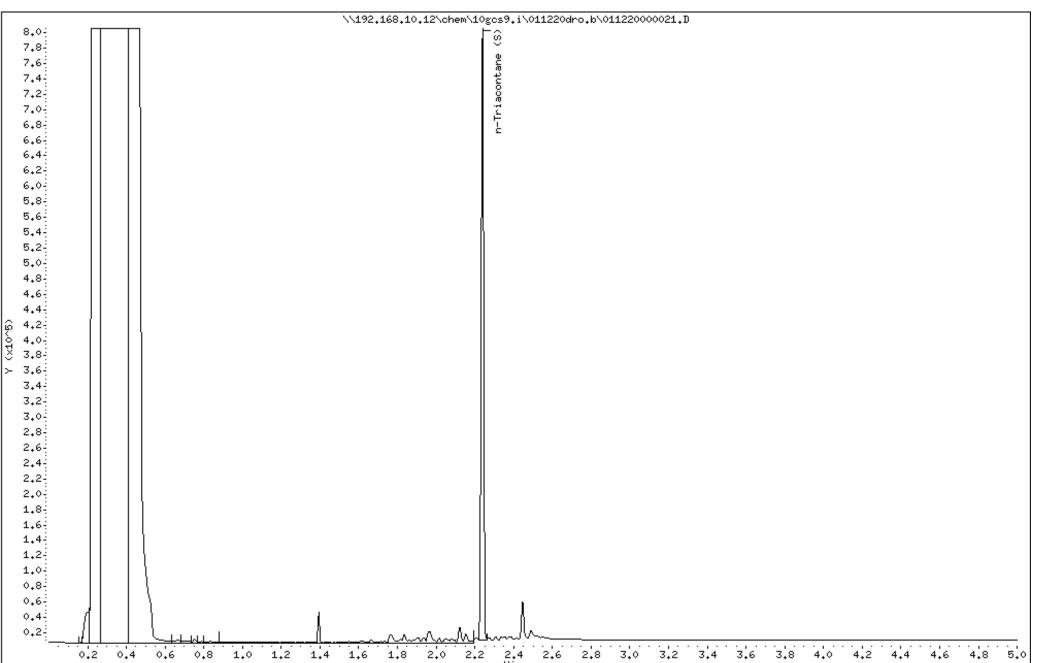
Date : 12-JAN-2020 13:53

Client ID: SB-22_6-8

Sample Info: 10504984022

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Instrument: 10gcs9.i

Operator: JVM



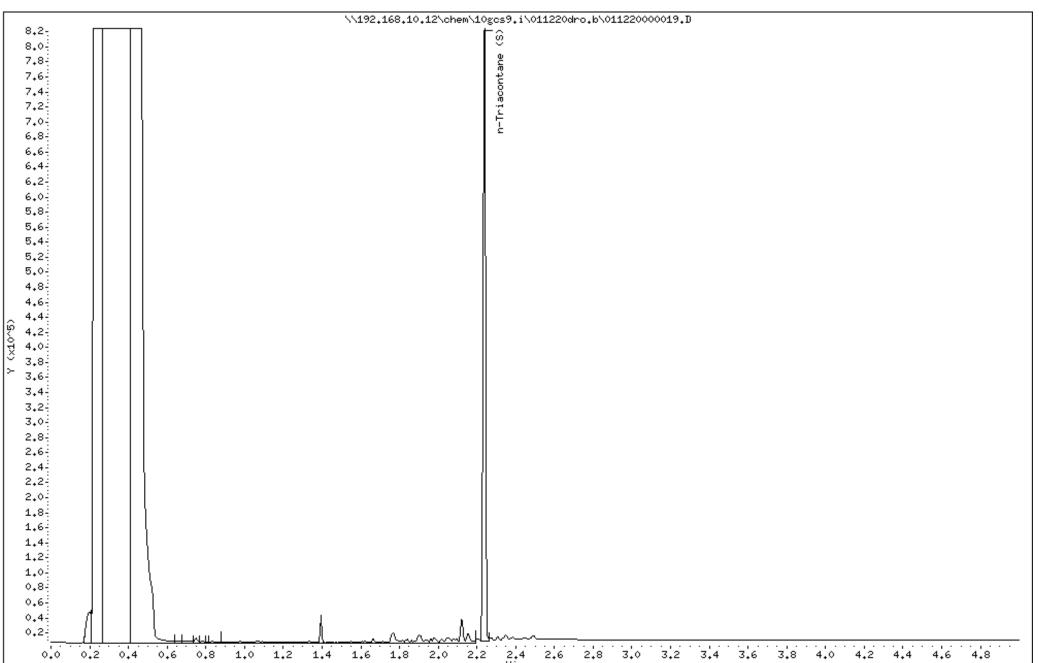
Date : 12-JAN-2020 13:39

Client ID: SB-23_6-8

Sample Info: 10504984023

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 13:46

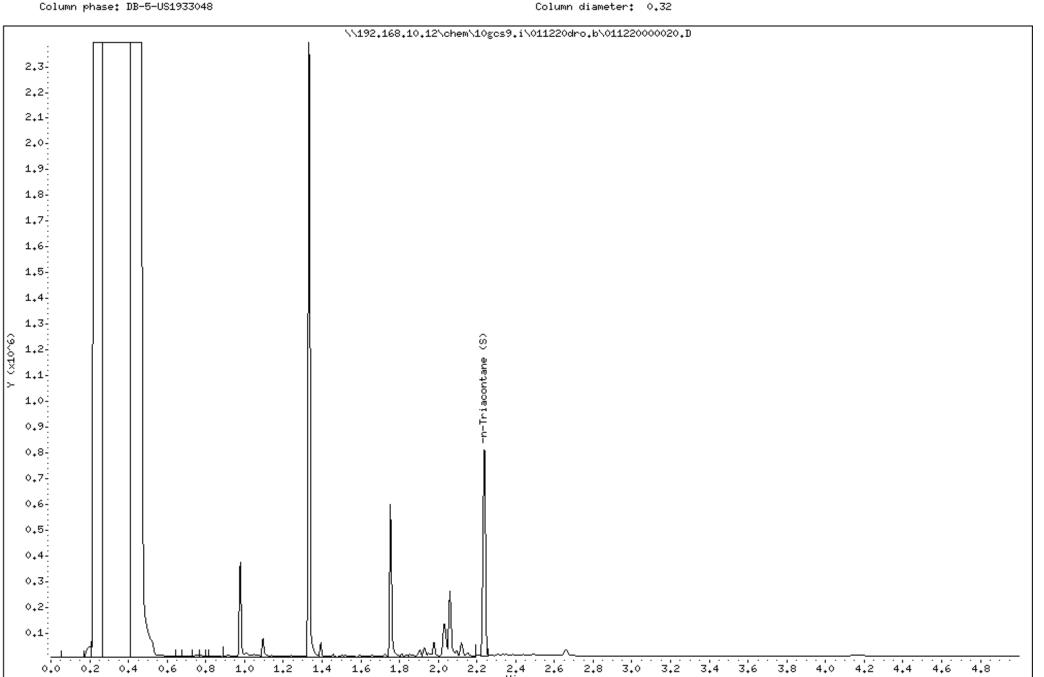
Client ID: SB-29_2-4

Sample Info: 10504984024

Volume Injected (uL): 1.0

Instrument: 10gcs9.i

Operator: JVM



Page 91 of 103

Date : 12-JAN-2020 14:00

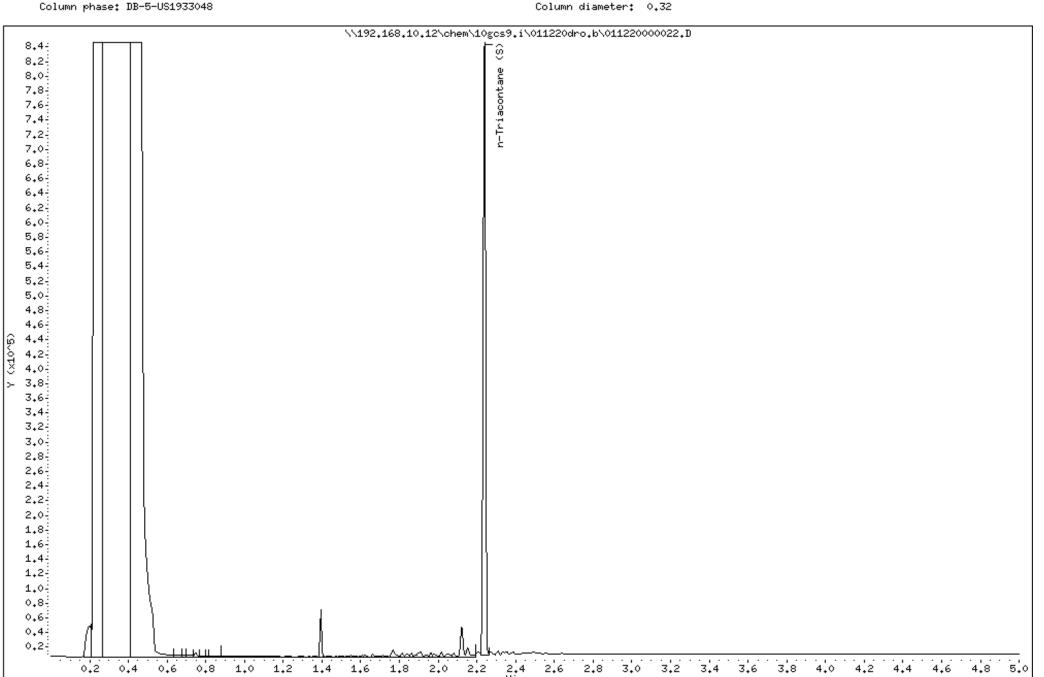
Client ID: SB-29_6-8

Sample Info: 10504984025

Volume Injected (uL): 1.0

Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 14:07

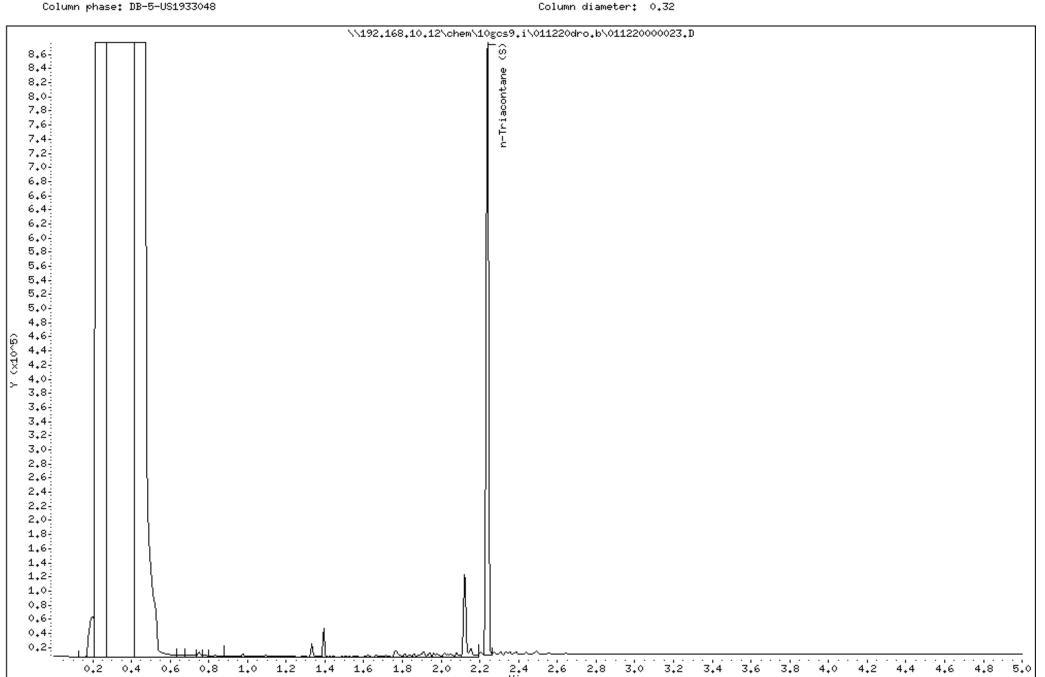
Client ID: SB-27_2-4

Sample Info: 10504984026

Volume Injected (uL): 1.0

Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 14:14

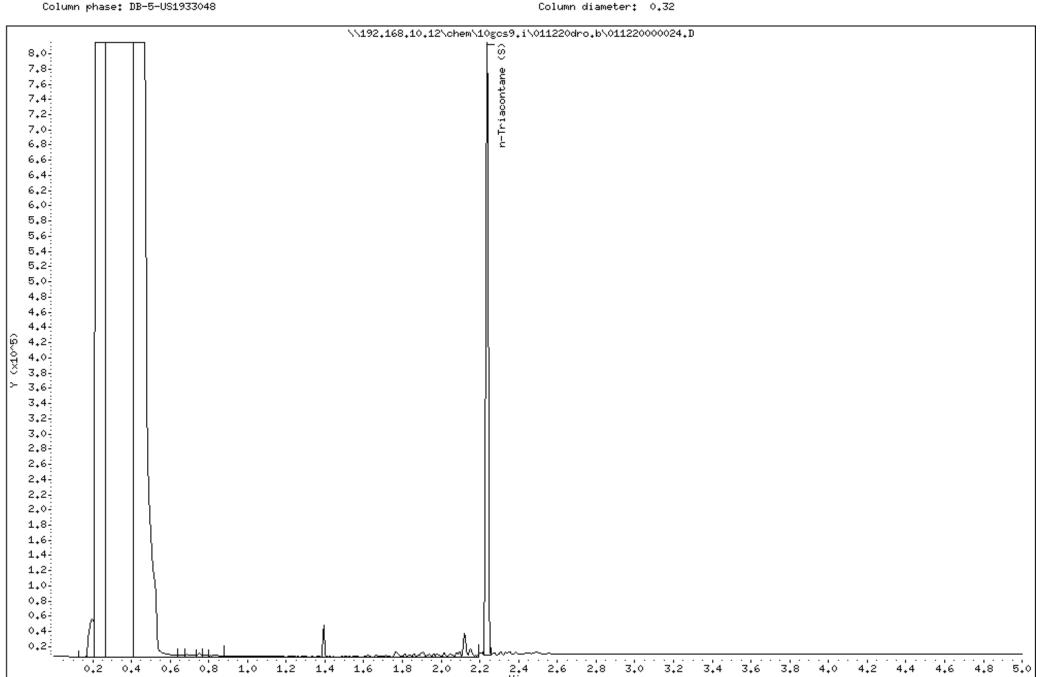
Client ID: SB-27_6-8

Sample Info: 10504984027

Volume Injected (uL): 1.0

Instrument: 10gcs9.i

Operator: JVM



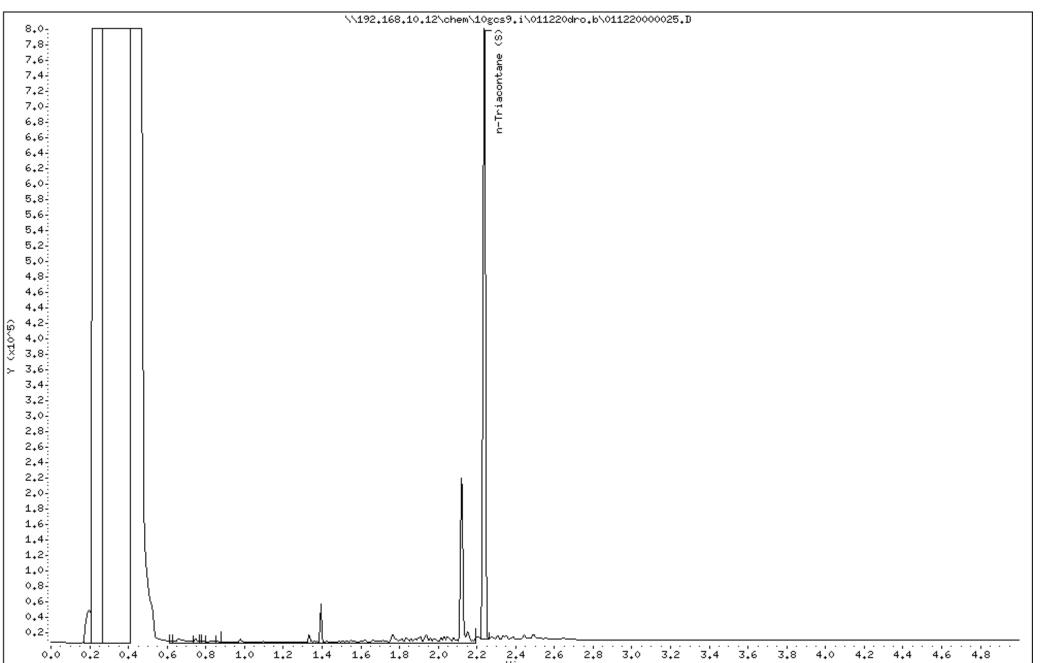
Date : 12-JAN-2020 14:21

Client ID: SB-28_6-8

Sample Info: 10504984028

Volume Injected (uL): 1.0 Column phase: DB-5-US1933048 Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 13:10

Client ID: SB-24_6-8

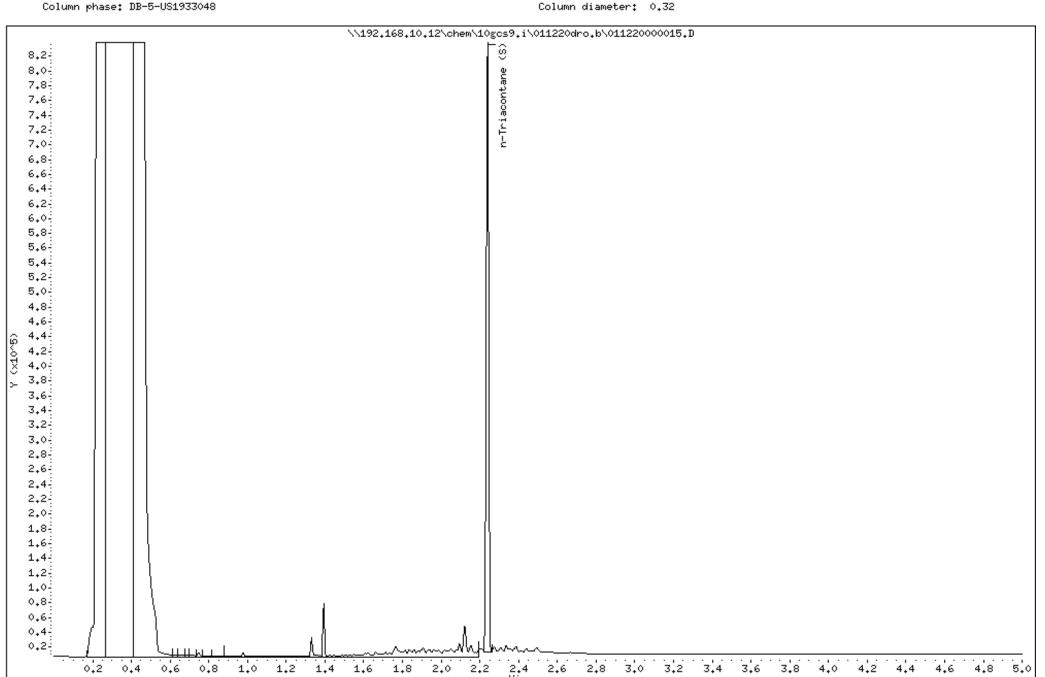
Sample Info: 10504984029

Volume Injected (uL): 1.0

Operator: JVM

Column diameter: 0.32

Instrument: 10gcs9.i



Date : 12-JAN-2020 13:32

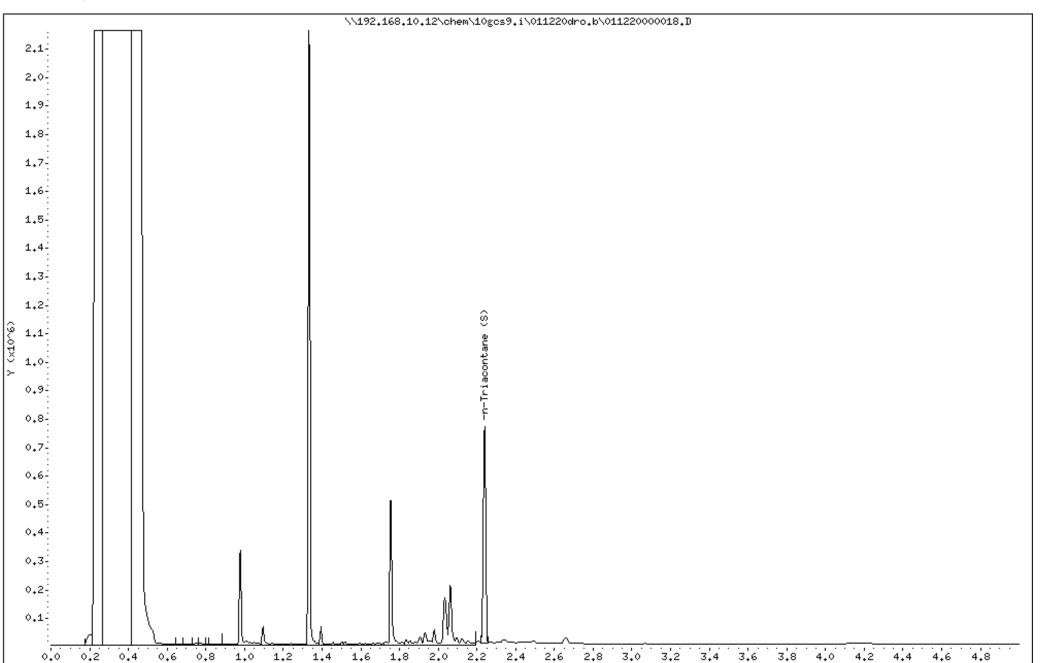
Client ID: SB-25_6-8

Sample Info: 10504984030 Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 14:28

Client ID: SB-26_2-4

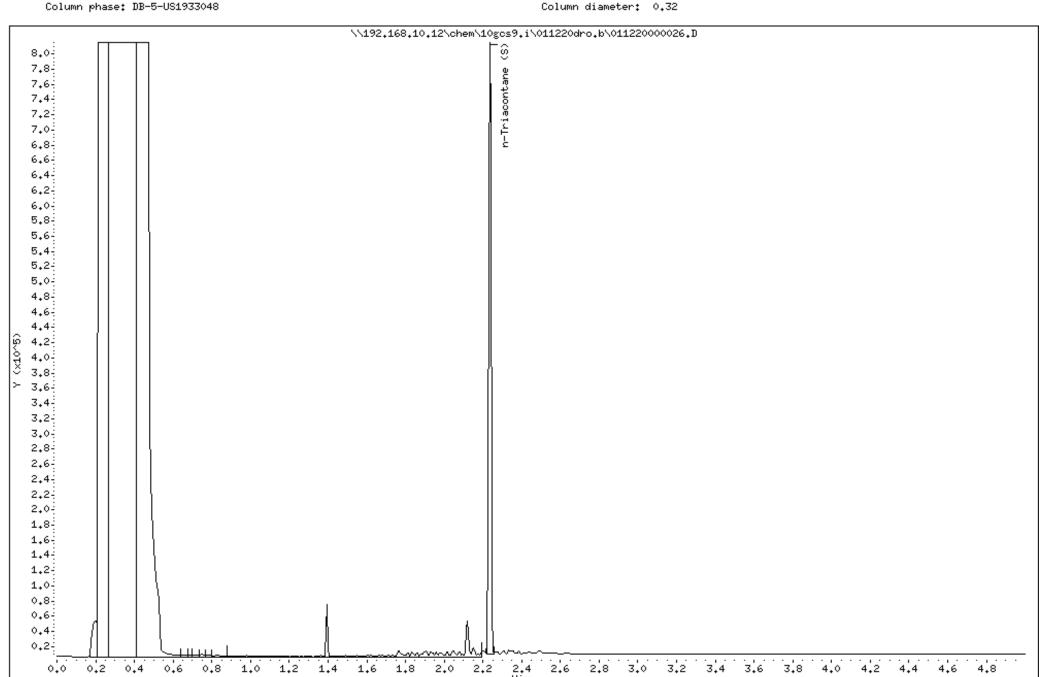
Sample Info: 10504984031

Volume Injected (uL): 1.0

Operator: JVM

Column diameter: 0.32

Instrument: 10gcs9.i



Date : 12-JAN-2020 14:35

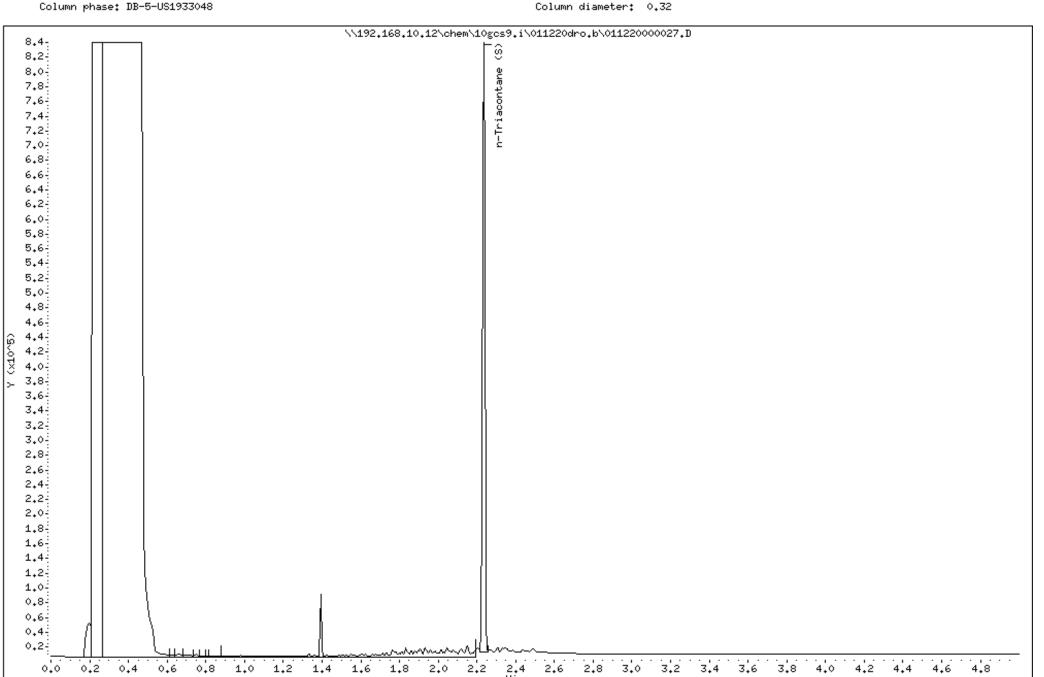
Client ID: SB-26_6-8

Sample Info: 10504984032

Volume Injected (uL): 1.0

Instrument: 10gcs9.i

Operator: JVM



Page 99 of 103

Date : 12-JAN-2020 14:56

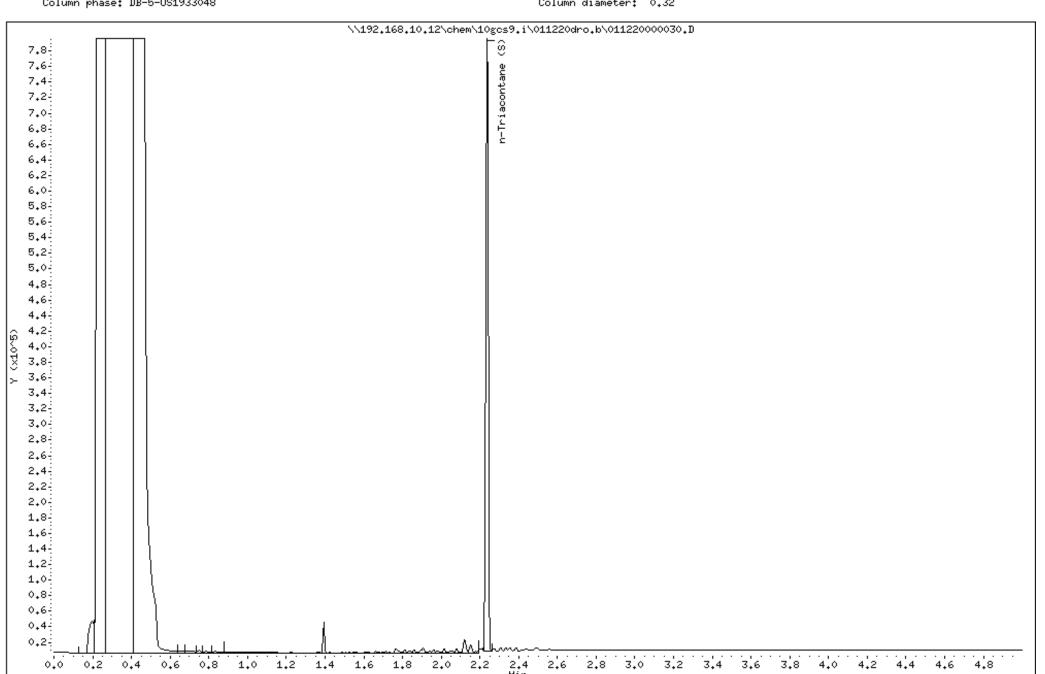
Client ID: SB-19_6-8

Sample Info: 10504984033 Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 15:03

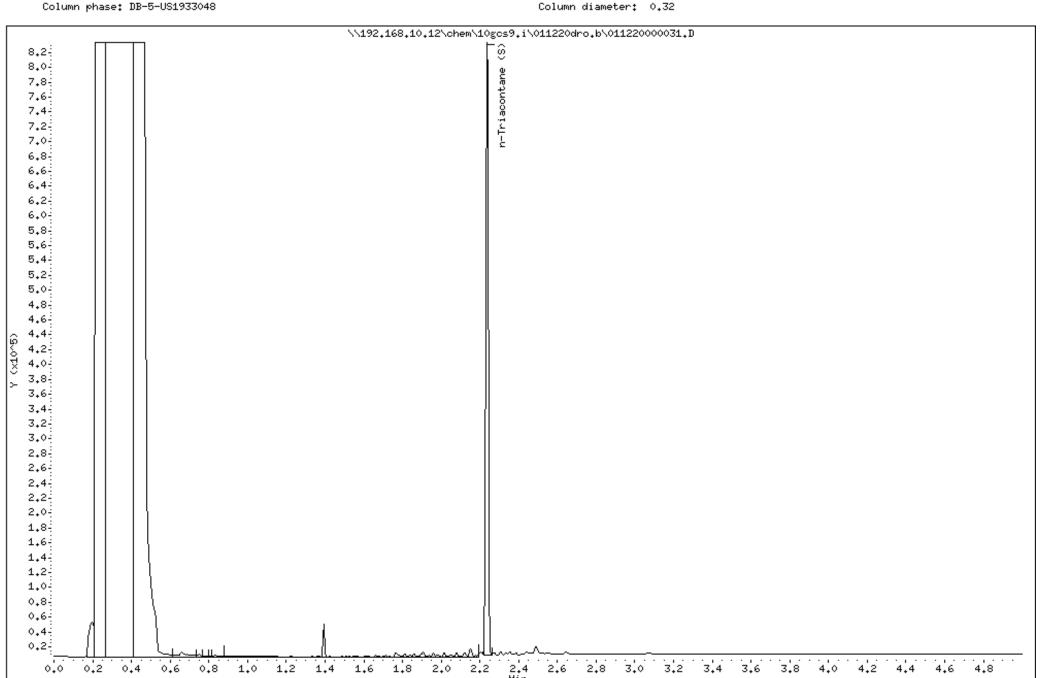
Client ID: SB-18_2-4

Sample Info: 10504984034

Volume Injected (uL): 1.0

Instrument: 10gcs9.i

Operator: JVM



Date : 12-JAN-2020 15:10

Client ID: SB-18_6-8

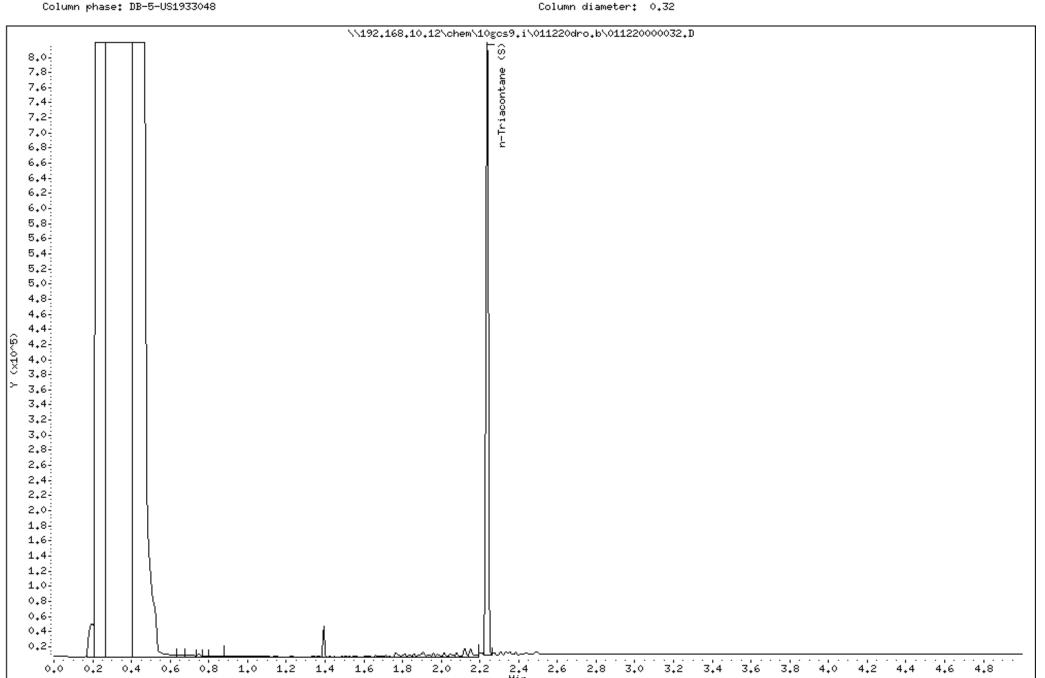
Sample Info: 10504984035

Volume Injected (uL): 1.0

Operator: JVM

Column diameter: 0.32

Instrument: 10gcs9.i



Date : 12-JAN-2020 15:17

Client ID: SB-17_6-8

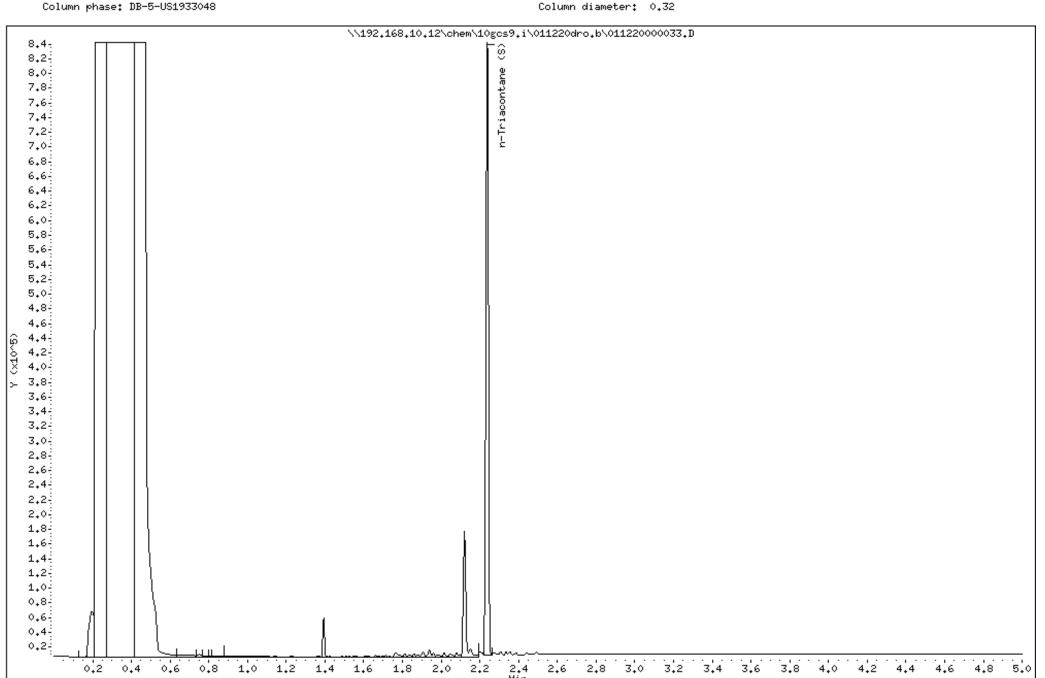
Sample Info: 10504984036

Volume Injected (uL): 1.0

Operator: JVM

Column diameter: 0.32

Instrument: 10gcs9.i



Date : 12-JAN-2020 14:42

Client ID: SB-20_6-8

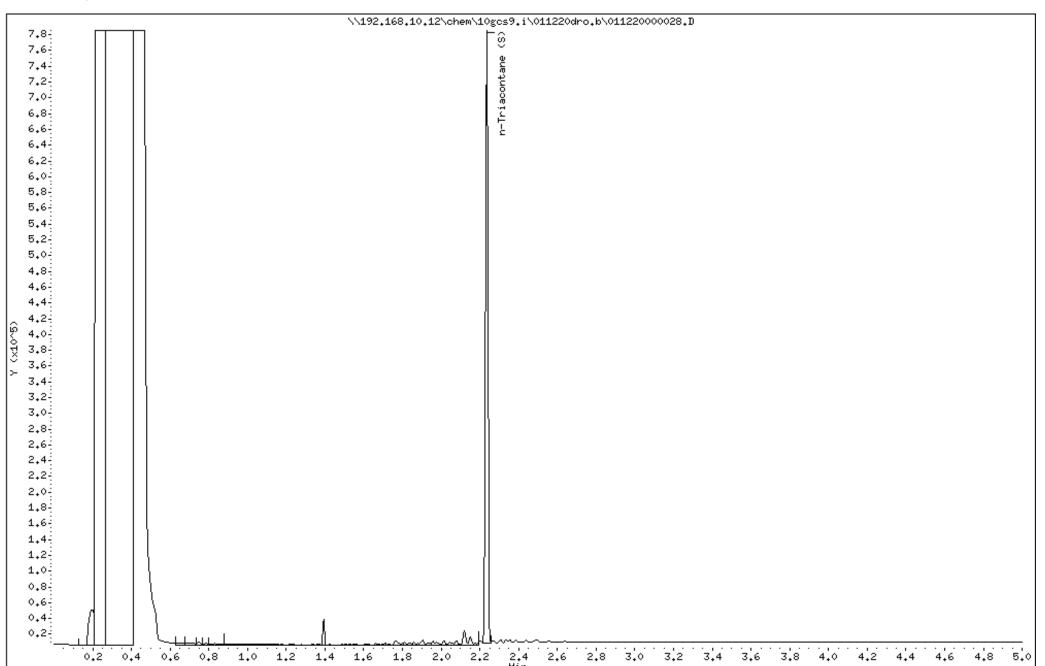
Sample Info: 10504984037

Volume Injected (uL): 1.0

Column phase: DB-5-US1933048

Instrument: 10gcs9.i

Operator: JVM



C.2 – Investigation Waste Disposal Documentation



Waste Profile Sheet



P.O. Number	Customer Code		SKB Represe	ntative Kyle Back	strom CL		
I. Generator Information	n						
Generator Name: Superior Wate		Generato	EPA ID Num	ber WIR 000 1	50 185	SIC Code	
Generator Location: Nemadji Substation, Hill Avenue and	County: Douglas	Generato	Contact: Gr	eg Prom or Zach	Golkowski		
Stinson Avenue Superior WI, 54880	J	Phone: 218-355-3191 Fax:					
Generator Mailing Address (if differen 2915 Hill Avenue Superior, WI 54880	t: SWLP	Generato zgolkow	r Email Addres rski@mnpor	ss: gprom@mnpd wer.com	ower.com or		
Bill To Name & Address: SWLP Bill To #: Billing Contact: Accounts Payable 2915 Hill Avenue							
Superior, WI 54880		Phone: 2	218-355-31	91	Fax:		
Invoice Contact: Zach Golkowsk	i	Billing Em	ail Address:	accountspayable	@allete.com		
II. Waste Generation In							<u> </u>
Waste Name: Oil Impacted Soi	I/Debris			ed rate of waste general sections.		⊠ one □ yea	time rly
Generator Facility Operations and/or	Site History: Buried debris	mixed wi	th bituminou	S.			-
Describe the generating process or s	ource of contaminated soil/de	ebris and/o	waste: His	toric dumping of oil	y tarry bituminous.		
III. Waste Composition	and Constituents (list all kr	own)				Actual Rang %	ppm
Oil Contaimainted Soil/Debris	(e.g. class 5, grave, sa	nd clay, t	opsoil, crus	hed rock, metal d	ebris)	100	<50 (PCB)
IV. Waste Properties Physical state: Figure 1. The properties of the properties of	ree Liquids: pH R	ongo:	Flash	noint:	Color:	Odor (des	oribo):
Solid Liquid Sludge Gas] Yes ⊠ No □ < ⊠ 5	ange: 2	-4 -12.4	140°F 140°F to < 200°F 200°F	Brown	Slight petroleu	•
V. Waste Classification			<u> </u>		•	•	<u>'</u>
Waste stream properties (answer				Does this waste o	ontain absorbents?	☐ Yes	⊠ No
Does this waste stream contain a	ny D, F, K, U or P listed a	s		Is this waste letha	ıl (by Minn. Rules		
hazardous waste, either in pure for treatment residue?	orm, as a mixture, or	☐ Y	es 🛚 No	7045.0131 Subp.	6)?	☐ Yes	⊠ No
Does this waste stream contain F		☐ Y	es 🛛 No	Is this waste recy		Yes	⊠ No
If yes, concentration:	ppm		N N	Is this waste explo		∐ Yes	⊠ No
Does this waste stream contain for Does this waste contain asbestos	•	HY	=	Is this waste infec		∐ Yes	⊠ No ⊠ No
Does this waste contain aspestos Does this waste contain oxidizers		∐ Y	_	Is this putrescible Is this waste dem		∐ Yes □ Yes	⊠ No ⊠ No
Does this waste contain oxidizers						Yes	⊠ No
Please attach any available info							
	ations. Include MSDS's an	d any info	rmation from	other agencies (i.e.,	MPCA, USEPA)		
VI. Shipping Information							
Proper DOT Shipping Name (per CFF	R 172.101) where applicable						
Reportable Quantity	DOT Hazard Class	UN/NA	Number		Packing Group		
Method of packaging: drums (siz	•	Method Ro	of shipment	nd dump 🔲 Rail	Other (Specify)		
Bulk Solids boxes (siz	e)			· —	, , , _		

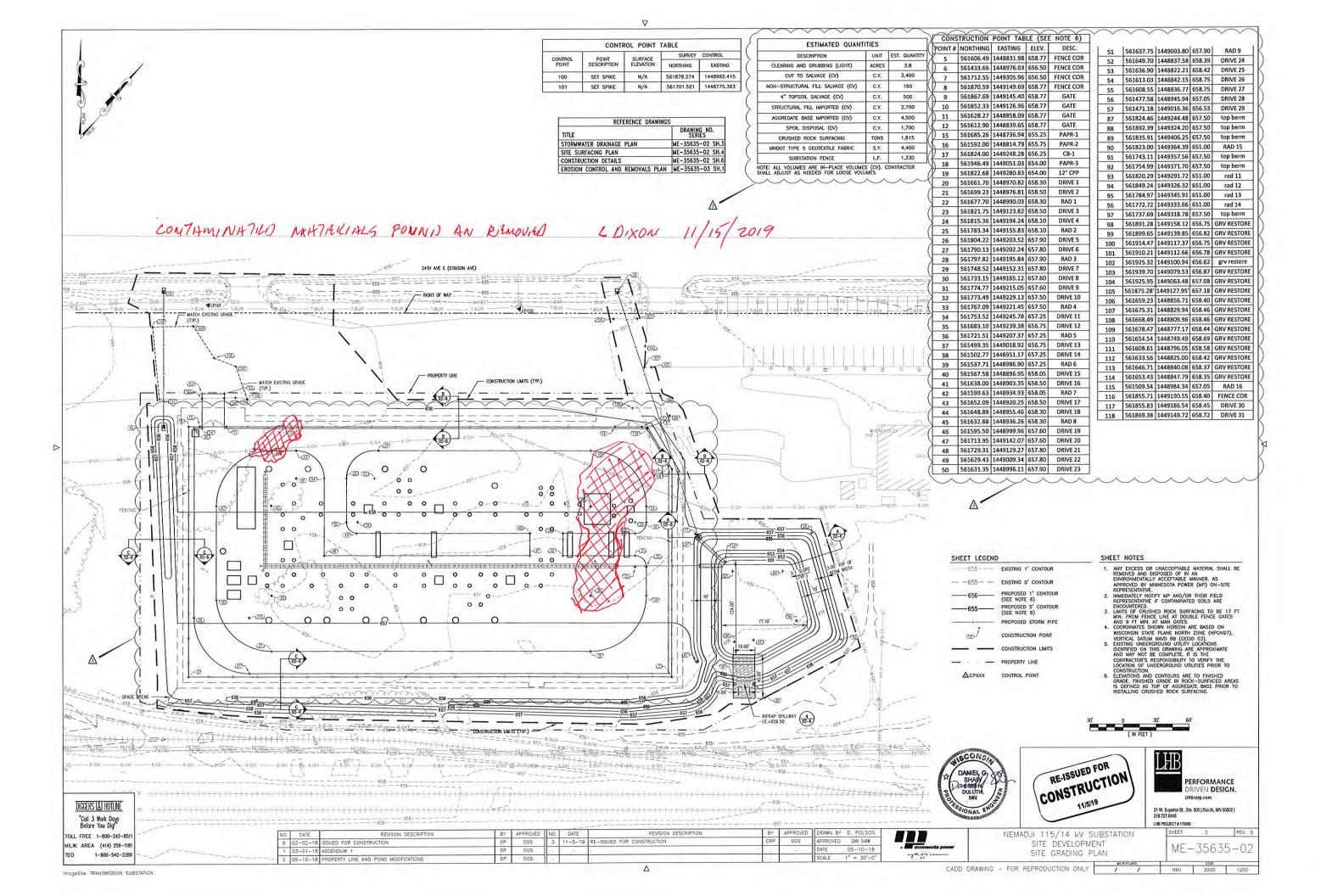
VII. Certification of Non Hazardous Waste & Approval Conditions

I hereby certify and warrant, on behalf of the generator and myself that, to the best of my knowledge and belief, the information contained herein is accurate, and true and that the waste is nonhazardous as defined in Title 42, Unites States Code Section 6903, Minnesota Statute Section 116.06, Subdivision 13, and/or any rules adopted by the Minnesota Pollution Control Agency under Minnesota Statute Section 116.07.

I understand that any approval is no longer valid if there are any changes in the process generating the waste or there have been changes in the composition of the waste. Therefore, if the composition of the waste stream changes or potentially changes, I or someone representing the generator, will immediately notify SKB Environmental. I, on behalf of the generator, hereby agree to fully indemnify SKB Environmental for any damages and/or costs incurred as a result of this certification being inaccurate or untrue.

	Greg Prom	Env. Complinace Spec	11/18/2019
Signature	Printed Name	Title	Date

Version 2012







November 15, 2019

Zach Golkowski MN Power 30 W. Superior St. Duluth, MN 55802

RE: Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Dear Zach Golkowski:

Enclosed are the analytical results for sample(s) received by the laboratory on November 08, 2019. The results relate only to the samples included in this report. Results reported herein conform to the most current, applicable TNI/NELAC standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ryan Thibault ryan.thibault@pacelabs.com (612)607-1700

Project Manager

13-16

Enclosures

cc: Ross Dudzik, Minnesota Power Drew Janke, Minnesota Power







CERTIFICATIONS

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Pace Analytical Services Minneapolis

A2LA Certification #: 2926.01 Alabama Certification #: 40770

Alaska Contaminated Sites Certification #: 17-009

Alaska DW Certification #: MN00064 Arizona Certification #: AZ0014 Arkansas DW Certification #: MN00064 Arkansas WW Certification #: 88-0680

California Certification #: 2929 CNMI Saipan Certification #: MP0003 Colorado Certification #: MN00064 Connecticut Certification #: PH-0256

EPA Region 8+Wyoming DW Certification #: via MN 027-

053-137

Florida Certification #: E87605 Georgia Certification #: 959 Guam EPA Certification #: MN00064 Hawaii Certification #: MN00064 Idaho Certification #: MN00064

Idaho Certification #: MN00064
Illinois Certification #: 200011
Indiana Certification #: C-MN-01
Iowa Certification #: 368
Kansas Certification #: E-10167
Kentucky DW Certification #: 90062
Kentucky WW Certification #: 90062
Louisiana DEQ Certification #: 03086
Louisiana DW Certification #: MN00064

Maine Certification #: MN00064 Maryland Certification #: 322

Massachusetts Certification #: M-MN064

Massachusetts DWP Certification #: via MN 027-053-137

Michigan Certification #: 9909

Minnesota Certification #: 027-053-137

Minnesota Dept of Ag Certifcation #: via MN 027-053-137

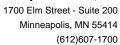
Minnesota Petrofund Certification #: 1240
Mississippi Certification #: MN00064
Missouri Certification #: 10100
Montana Certification #: CERT0092
Nebraska Certification #: NE-OS-18-06
Nevada Certification #: MN00064
New Hampshire Certification #: 2081
New Jersey Certification #: MN002
New York Certification #: 11647

North Carolina DW Certification #: 27700 North Carolina WW Certification #: 530 North Dakota Certification #: R-036 Ohio DW Certification #: 41244 Ohio VAP Certification #: CL101 Oklahoma Certification #: 9507

Oregon Primary Certification #: MN300001
Oregon Secondary Certification #: MN200001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification #: MN00064
South Carolina Certification #:74003001
Tennessee Certification #: TN02818
Texas Certification #: T104704192
Utah Certification #: WN00064
Vermont Certification #: VT-027053137
Virginia Certification #: 460163
Washington Certification #: C486
West Virginia DEP Certification #: 382
West Virginia DW Certification #: 9952 C

Wisconsin Certification #: 999407970

Wyoming UST Certification #: via A2LA 2926.01





SAMPLE SUMMARY

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10498837001	Nemadji Sub	Solid	11/08/19 02:07	11/08/19 14:00





SAMPLE ANALYTE COUNT

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory	
10498837001	Nemadji Sub	EPA 8082A	JVM	12	PASI-M	
		WI MOD DRO	EC2	2	PASI-M	
		EPA 6010D	BD1	7	PASI-M	
		EPA 7470A	LMW	1	PASI-M	
		ASTM D2974	JDL	1	PASI-M	
		EPA 8270D	STB	18	PASI-M	
		EPA 8260B	AEZ	14	PASI-M	



ANALYTICAL RESULTS

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Date: 11/15/2019 05:18 PM

Sample: Nemadji Sub	Lab ID: 1049	98837001	Collected: 11/08/1	9 02:07	Received: 11	/08/19 14:00 N	/latrix: Solid	
Results reported on a "dry weight" l	basis and are adj	usted for p	ercent moisture, sa	mple s	ize and any dilut	ions.		
Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qua
8082A GCS PCB	Analytical Meth	nod: EPA 80	082A Preparation Me	thod: E	PA 3550			
PCB-1016 (Aroclor 1016)	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	12674-11-2	
PCB-1221 (Aroclor 1221)	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	11104-28-2	
PCB-1232 (Aroclor 1232)	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	11141-16-5	
PCB-1242 (Aroclor 1242)	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	53469-21-9	
PCB-1248 (Aroclor 1248)	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	12672-29-6	
PCB-1254 (Aroclor 1254)	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	11097-69-1	
PCB-1260 (Aroclor 1260)	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	11096-82-5	
PCB-1262 (Aroclor 1262)	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	37324-23-5	
PCB-1268 (Aroclor 1268)	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	11100-14-4	
PCB, Total	ND	ug/kg	46.8	1	11/11/19 17:17	11/14/19 20:23	1336-36-3	
Surrogates	54	0/	E7.40E		44/44/40 47.47	44/44/40 00:00	077 00 0	C 0
Tetrachloro-m-xylene (S)	54	%.	57-125	1		11/14/19 20:23		S0
Decachlorobiphenyl (S)	49	%.	49-125	1	11/11/19 17:17	11/14/19 20:23	2051-24-3	
WIDRO GCS	Analytical Meth	nod: WI MO	D DRO Preparation	Method	I: WI MOD DRO			
NDRO C10-C28 Surrogates	9220	mg/kg	2530	50	11/11/19 13:02	11/12/19 17:20		
a-Triacontane (S)	0	%.	50-150	50	11/11/19 13:02	11/12/19 17:20	638-68-6	P3,S4
010D MET ICP, TCLP			010D Preparation Me PA 1311; 11/12/19 14			I nH: 1 87		
			•		•	•		
Arsenic	ND	mg/L	0.50	1		11/14/19 15:32		
Barium S	1.2	mg/L	1.0	1		11/14/19 15:32		
Cadmium	ND	mg/L	0.050	1		11/14/19 15:32		
Chromium	ND	mg/L	0.50	1		11/14/19 15:32		
Lead	ND	mg/L	0.50	1		11/14/19 15:32		
Selenium	ND	mg/L	0.10	1		11/14/19 15:32		
Silver	ND	mg/L	0.10	1	11/14/19 05:33	11/14/19 15:32	7440-22-4	
7470A Mercury, TCLP			70A Preparation Me					
	Leachate Meth	od/Date: El	PA 1311; 11/12/19 14	:20 Init	ial pH: 8.98; Final	l pH: 1.87		
Mercury	ND	ug/L	0.60	1	11/14/19 09:28	11/15/19 11:04	7439-97-6	
Ory Weight / %M by ASTM D2974	Analytical Meth	nod: ASTM	D2974					
Percent Moisture	29.6	%	0.10	1		11/14/19 13:40		N2
3270D MSSV TCLP	Analytical Meth	nod: EPA 82	270D Preparation Me	thod: E	PA 3510			
			PA 1311; 11/12/19 14			l pH: 1.87		
,4-Dichlorobenzene	ND	ug/L	100	1	11/13/19 13:28	11/13/19 23:32	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	100	1		11/13/19 23:32		
Hexachloro-1,3-butadiene	ND	ug/L	100	1		11/13/19 23:32		
Hexachlorobenzene	ND	ug/L	100	1		11/13/19 23:32		
Hexachloroethane	ND	ug/L	100	1		11/13/19 23:32		
2-Methylphenol(o-Cresol)	ND	ug/L	100	1		11/13/19 23:32		
3&4-Methylphenol(m&p Cresol)	ND	ug/L	100	1		11/13/19 23:32		



ANALYTICAL RESULTS

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Date: 11/15/2019 05:18 PM

Lab ID: 10498837001 Sample: Nemadji Sub Collected: 11/08/19 02:07 Received: 11/08/19 14:00 Matrix: Solid Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions. **Parameters** Results Units Report Limit DF Prepared Analyzed CAS No. Qual 8270D MSSV TCLP Analytical Method: EPA 8270D Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 11/12/19 14:20 Initial pH: 8.98; Final pH: 1.87 ND 100 Nitrobenzene ug/L 1 11/13/19 13:28 11/13/19 23:32 98-95-3 Pentachlorophenol ND ug/L 200 11/13/19 13:28 11/13/19 23:32 87-86-5 Pyridine ND ug/L 100 11/13/19 13:28 11/13/19 23:32 110-86-1 2,4,5-Trichlorophenol ND 100 11/13/19 13:28 11/13/19 23:32 95-95-4 ug/L 1 2,4,6-Trichlorophenol ND 100 11/13/19 13:28 11/13/19 23:32 88-06-2 ug/L Surrogates Nitrobenzene-d5 (S) 78 % 57-125 1 11/13/19 13:28 11/13/19 23:32 4165-60-0 2-Fluorobiphenyl (S) 71 %. 48-125 11/13/19 13:28 11/13/19 23:32 321-60-8 p-Terphenyl-d14 (S) 102 %. 53-125 11/13/19 13:28 11/13/19 23:32 1718-51-0 Phenol-d6 (S) 34 %. 10-128 11/13/19 13:28 11/13/19 23:32 13127-88-3 1 54 30-125 11/13/19 13:28 11/13/19 23:32 367-12-4 2-Fluorophenol (S) %. 1 2,4,6-Tribromophenol (S) 80 %. 45-125 11/13/19 13:28 11/13/19 23:32 118-79-6 8260B MSV TCLP Analytical Method: EPA 8260B Leachate Method/Date: EPA 1311; 11/11/19 16:14 Benzene ND ug/L 25.0 1 11/14/19 06:11 71-43-2 2-Butanone (MEK) ND ug/L 125 1 11/14/19 06:11 78-93-3 11/14/19 06:11 56-23-5 Carbon tetrachloride ND ug/L 25.0 1 Chlorobenzene ND 25.0 ug/L 1 11/14/19 06:11 108-90-7 Chloroform ND ug/L 25.0 11/14/19 06:11 67-66-3 1 1,4-Dichlorobenzene ND ug/L 25.0 1 11/14/19 06:11 106-46-7 1,2-Dichloroethane ND ug/L 25.0 1 11/14/19 06:11 107-06-2 1,1-Dichloroethene ND ug/L 25.0 1 11/14/19 06:11 75-35-4 Tetrachloroethene ND ug/L 25.0 1 11/14/19 06:11 127-18-4 Trichloroethene ND ug/L 10.0 1 11/14/19 06:11 79-01-6 Vinyl chloride ND 11/14/19 06:11 75-01-4 ug/L 5.0 1 Surrogates 102 1,2-Dichloroethane-d4 (S) %. 75-125 11/14/19 06:11 17060-07-0 1 Toluene-d8 (S) 75-125 11/14/19 06:11 2037-26-5 81 %. 1 4-Bromofluorobenzene (S) 98 %. 75-125 1 11/14/19 06:11 460-00-4

(612)607-1700



QUALITY CONTROL DATA

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

QC Batch: 644684 Analysis Method: EPA 7470A

QC Batch Method: EPA 7470A Analysis Description: 7470A Mercury TCLP

Associated Lab Samples: 10498837001

METHOD BLANK: 3470775 Matrix: Water

Associated Lab Samples: 10498837001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Mercury ug/L ND 0.60 11/15/19 10:52

METHOD BLANK: 3468794 Matrix: Water

Associated Lab Samples: 10498837001

Blank Reporting
Parameter Units Result Limit Analyzed Qualifiers

Mercury ug/L ND 0.60 11/15/19 11:35

LABORATORY CONTROL SAMPLE: 3470776

Date: 11/15/2019 05:18 PM

Spike LCS LCS % Rec Parameter Units Conc. Result % Rec Limits Qualifiers Mercury ug/L 15 15.5 103 80-120

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3470777 3470778

MSD MS 10498724001 MSD MS MSD Spike Spike MS % Rec Max Parameter Units Result Conc. Conc. Result Result % Rec % Rec Limits **RPD** RPD Qual Mercury ND 103 80-120 20 ug/L 15 15 15.5 15.4 103

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

(612)607-1700



QUALITY CONTROL DATA

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

QC Batch: 644686 Analysis Method: EPA 6010D

QC Batch Method: EPA 3010 Analysis Description: 6010D TCLP

Associated Lab Samples: 10498837001

METHOD BLANK: 3470783 Matrix: Water

Associated Lab Samples: 10498837001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.50	11/14/19 15:12	
Barium	mg/L	ND	1.0	11/14/19 15:12	
Cadmium	mg/L	ND	0.050	11/14/19 15:12	
Chromium	mg/L	ND	0.50	11/14/19 15:12	
Lead	mg/L	ND	0.50	11/14/19 15:12	
Selenium	mg/L	ND	0.10	11/14/19 15:12	
Silver	mg/L	ND	0.10	11/14/19 15:12	

METHOD BLANK: 3468794 Matrix: Water

Associated Lab Samples: 10498837001

Date: 11/15/2019 05:18 PM

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.50	11/14/19 15:14	
Barium	mg/L	ND	1.0	11/14/19 15:14	
Cadmium	mg/L	ND	0.050	11/14/19 15:14	
Chromium	mg/L	ND	0.50	11/14/19 15:14	
Lead	mg/L	ND	0.50	11/14/19 15:14	
Selenium	mg/L	ND	0.10	11/14/19 15:14	
Silver	mg/L	ND	0.10	11/14/19 15:14	

		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
Arsenic	mg/L		5.3	106	80-120	
Barium	mg/L	5	5.2	104	80-120	
Cadmium	mg/L	5	5.3	105	80-120	
Chromium	mg/L	5	5.2	104	80-120	
Lead	mg/L	5	5.2	104	80-120	
Selenium	mg/L	5	5.5	109	80-120	
Silver	mg/L	2.5	2.6	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3470785						;						
			MS	MSD								
		10498724001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Arsenic	mg/L	ND	5	5	5.3	5.4	106	108	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



1700 Elm Street - Suite 200 Minneapolis, MN 55414 (612)607-1700

QUALITY CONTROL DATA

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Date: 11/15/2019 05:18 PM

MATRIX SPIKE & MATRIX S	SPIKE DUPLIC	CATE: 3470	785 MS	MSD	3470786							
	1	0498724001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
Barium	mg/L	ND	5	5	5.3	5.4	100	103	75-125	3	20	
Cadmium	mg/L	ND	5	5	5.1	5.2	101	104	75-125	3	20	
Chromium	mg/L	ND	5	5	5.1	5.2	101	104	75-125	3	20	
Lead	mg/L	ND	5	5	5.0	5.1	100	102	75-125	2	20	
Selenium	mg/L	ND	5	5	5.5	5.6	109	112	75-125	2	20	
Silver	mg/L	ND	2.5	2.5	2.6	2.7	104	107	75-125	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

Minneapolis, MN 55414 (612)607-1700



QUALITY CONTROL DATA

Project:

Nemadji Substation Soil Sampli

Pace Project No.:

10498837

QC Batch:

644825

QC Batch Method:

ASTM D2974

Analysis Method:

ASTM D2974

Analysis Description:

Dry Weight / %M by ASTM D2974

Associated Lab Samples:

10498837001

SAMPLE DUPLICATE: 3471559

Parameter

10498814003 Result

Result

Dup Result

Max **RPD**

RPD

Qualifiers

Percent Moisture

Percent Moisture

Units %

5.6

5.9

6

30 N2

SAMPLE DUPLICATE: 3471560

Date: 11/15/2019 05:18 PM

10497839003

Dup Result

RPD

Max RPD

Qualifiers

Parameter

%

Units

18.3

19.4

6

30 N2

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

QC Batch: 644619 Analysis Method: EPA 8260B
QC Batch Method: EPA 8260B Analysis Description: 8260B MSV TCLP

Associated Lab Samples: 10498837001

METHOD BLANK: 3470492 Matrix: Water

Associated Lab Samples: 10498837001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1 diameter				Analyzed	Qualificis
,1-Dichloroethene	ug/L	ND	25.0	11/13/19 11:11	
,2-Dichloroethane	ug/L	ND	25.0	11/13/19 11:11	
,4-Dichlorobenzene	ug/L	ND	25.0	11/13/19 11:11	
P-Butanone (MEK)	ug/L	ND	125	11/13/19 11:11	
enzene	ug/L	ND	25.0	11/13/19 11:11	
arbon tetrachloride	ug/L	ND	25.0	11/13/19 11:11	
Chlorobenzene	ug/L	ND	25.0	11/13/19 11:11	
hloroform	ug/L	ND	25.0	11/13/19 11:11	
trachloroethene	ug/L	ND	25.0	11/13/19 11:11	
chloroethene	ug/L	ND	10.0	11/13/19 11:11	
nyl chloride	ug/L	ND	5.0	11/13/19 11:11	
2-Dichloroethane-d4 (S)	%.	101	75-125	11/13/19 11:11	
Bromofluorobenzene (S)	%.	101	75-125	11/13/19 11:11	
oluene-d8 (S)	%.	97	75-125	11/13/19 11:11	

METHOD BLANK: 3468472 Matrix: Solid

Associated Lab Samples: 10498837001

Date: 11/15/2019 05:18 PM

		Blank	Reporting		
Parameter	Units	Result	Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	25.0	11/13/19 11:11	
1,2-Dichloroethane	ug/L	ND	25.0	11/13/19 11:11	
1,4-Dichlorobenzene	ug/L	ND	25.0	11/13/19 11:11	
2-Butanone (MEK)	ug/L	ND	125	11/13/19 11:11	
Benzene	ug/L	ND	25.0	11/13/19 11:11	
Carbon tetrachloride	ug/L	ND	25.0	11/13/19 11:11	
Chlorobenzene	ug/L	ND	25.0	11/13/19 11:11	
Chloroform	ug/L	ND	25.0	11/13/19 11:11	
Tetrachloroethene	ug/L	ND	25.0	11/13/19 11:11	
Trichloroethene	ug/L	ND	10.0	11/13/19 11:11	
Vinyl chloride	ug/L	ND	5.0	11/13/19 11:11	
1,2-Dichloroethane-d4 (S)	%.	101	75-125	11/13/19 11:11	
4-Bromofluorobenzene (S)	%.	101	75-125	11/13/19 11:11	
Toluene-d8 (S)	%.	97	75-125	11/13/19 11:11	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Date: 11/15/2019 05:18 PM

METHOD BLANK: 3469532 Matrix: Solid

Associated Lab Samples: 10498837001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	25.0	11/13/19 11:28	
1,2-Dichloroethane	ug/L	ND	25.0	11/13/19 11:28	
1,4-Dichlorobenzene	ug/L	ND	25.0	11/13/19 11:28	
2-Butanone (MEK)	ug/L	ND	125	11/13/19 11:28	
Benzene	ug/L	ND	25.0	11/13/19 11:28	
Carbon tetrachloride	ug/L	ND	25.0	11/13/19 11:28	
Chlorobenzene	ug/L	ND	25.0	11/13/19 11:28	
Chloroform	ug/L	ND	25.0	11/13/19 11:28	
Tetrachloroethene	ug/L	ND	25.0	11/13/19 11:28	
Trichloroethene	ug/L	ND	10.0	11/13/19 11:28	
Vinyl chloride	ug/L	ND	5.0	11/13/19 11:28	
1,2-Dichloroethane-d4 (S)	%.	102	75-125	11/13/19 11:28	
4-Bromofluorobenzene (S)	%.	100	75-125	11/13/19 11:28	
Toluene-d8 (S)	%.	95	75-125	11/13/19 11:28	

LABORATORY CONTROL SAMPLE:	3470493					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,1-Dichloroethene	ug/L	500	423	85	73-125	
1,2-Dichloroethane	ug/L	500	444	89	75-125	
1,4-Dichlorobenzene	ug/L	500	470	94	75-125	
-Butanone (MEK)	ug/L	2500	2090	84	67-127	
Senzene	ug/L	500	469	94	75-125	
arbon tetrachloride	ug/L	500	513	103	73-125	
hlorobenzene	ug/L	500	517	103	75-125	
nloroform	ug/L	500	477	95	75-125	
trachloroethene	ug/L	500	559	112	75-125	
chloroethene	ug/L	500	504	101	75-125	
nyl chloride	ug/L	500	409	82	68-127	
2-Dichloroethane-d4 (S)	%.			95	75-125	
Bromofluorobenzene (S)	%.			106	75-125	
oluene-d8 (S)	%.			103	75-125	

MATRIX SPIKE & MATRIX	SPIKE DUPL	ICATE: 3470	823		3470824							
Parameter	Units	10499029001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	500	500	626	561	125	112	60-137	11	30	
1,2-Dichloroethane	ug/L	ND	500	500	529	492	106	98	69-125	7	30	
1,4-Dichlorobenzene	ug/L	ND	500	500	537	501	107	100	75-125	7	30	
2-Butanone (MEK)	ug/L	ND	2500	2500	2270	3000	91	120	59-133	28	30	
Benzene	ug/L	2610	500	500	3240	4060	126	290	70-125	23	30	M1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Date: 11/15/2019 05:18 PM

			MS	MSD								
		10499029001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qua
Carbon tetrachloride	ug/L	 ND	500	500	625	685	125	137	67-130	9	30	M1
Chlorobenzene	ug/L	ND	500	500	559	527	112	105	75-125	6	30	
Chloroform	ug/L	ND	500	500	552	626	110	125	71-125	13	30	
Tetrachloroethene	ug/L	ND	500	500	590	563	118	113	73-126	5	30	
Trichloroethene	ug/L	ND	500	500	555	515	111	103	72-133	8	30	
Vinyl chloride	ug/L	ND	500	500	576	533	115	107	70-134	8	30	
1,2-Dichloroethane-d4 (S)	%.						104	103	75-125			
1-Bromofluorobenzene (S)	%.						96	103	75-125			
Toluene-d8 (S)	%.						97	101	75-125			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

(612)607-1700



QUALITY CONTROL DATA

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Date: 11/15/2019 05:18 PM

QC Batch: 644184 Analysis Method: EPA 8082A
QC Batch Method: EPA 3550 Analysis Description: 8082A GCS PCB

Associated Lab Samples: 10498837001

METHOD BLANK: 3468508 Matrix: Solid

Associated Lab Samples: 10498837001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	ND	33.0	11/14/19 19:35	
PCB-1221 (Aroclor 1221)	ug/kg	ND	33.0	11/14/19 19:35	
PCB-1232 (Aroclor 1232)	ug/kg	ND	33.0	11/14/19 19:35	
PCB-1242 (Aroclor 1242)	ug/kg	ND	33.0	11/14/19 19:35	
PCB-1248 (Aroclor 1248)	ug/kg	ND	33.0	11/14/19 19:35	
PCB-1254 (Aroclor 1254)	ug/kg	ND	33.0	11/14/19 19:35	
PCB-1260 (Aroclor 1260)	ug/kg	ND	33.0	11/14/19 19:35	
PCB-1262 (Aroclor 1262)	ug/kg	ND	33.0	11/14/19 19:35	
PCB-1268 (Aroclor 1268)	ug/kg	ND	33.0	11/14/19 19:35	
Decachlorobiphenyl (S)	%.	82	49-125	11/14/19 19:35	
Tetrachloro-m-xylene (S)	%.	87	57-125	11/14/19 19:35	

LABORATORY CONTROL SAMPLE:	3468509					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	667	582	87	69-125	
PCB-1260 (Aroclor 1260)	ug/kg	667	559	84	63-125	
Decachlorobiphenyl (S)	%.			85	49-125	
Tetrachloro-m-xylene (S)	%.			91	57-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3468544 3468545												
		40400007004	MS	MSD	140	MOD	140	MOD	0/ D			
		10498837001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	ND	944	946	654	640	69	68	56-125	2	30	
PCB-1260 (Aroclor 1260)	ug/kg	ND	944	946	568	571	60	60	45-125	0	30	
Decachlorobiphenyl (S)	%.						60	62	49-125			
Tetrachloro-m-xylene (S)	%.						68	68	57-125			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Date: 11/15/2019 05:18 PM

QC Batch: 644645 Analysis Method: EPA 8270D

QC Batch Method: EPA 3510 Analysis Description: 8270D TCLP MSSV

Associated Lab Samples: 10498837001

METHOD BLANK: 3470595 Matrix: Water

Associated Lab Samples: 10498837001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L		100	11/13/19 19:06	
2,4,5-Trichlorophenol	ug/L	ND ND	100	11/13/19 19:06	
2,4,6-Trichlorophenol	ug/L	ND	100	11/13/19 19:06	
2,4-Dinitrotoluene	ug/L	ND	100	11/13/19 19:06	
2-Methylphenol(o-Cresol)	ug/L	ND	100	11/13/19 19:06	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	100	11/13/19 19:06	
Hexachloro-1,3-butadiene	ug/L	ND	100	11/13/19 19:06	
Hexachlorobenzene	ug/L	ND	100	11/13/19 19:06	
Hexachloroethane	ug/L	ND	100	11/13/19 19:06	
Nitrobenzene	ug/L	ND	100	11/13/19 19:06	
Pentachlorophenol	ug/L	ND	200	11/13/19 19:06	
Pyridine .	ug/L	ND	100	11/13/19 19:06	
2,4,6-Tribromophenol (S)	%.	82	45-125	11/13/19 19:06	
2-Fluorobiphenyl (S)	%.	72	48-125	11/13/19 19:06	
2-Fluorophenol (S)	%.	54	30-125	11/13/19 19:06	
Nitrobenzene-d5 (S)	%.	77	57-125	11/13/19 19:06	
p-Terphenyl-d14 (S)	%.	108	53-125	11/13/19 19:06	
Phenol-d6 (S)	%.	33	10-128	11/13/19 19:06	

LABORATORY CONTROL SAMPLE:	3470596					
		Spike	LCS	LCS	% Rec	
Parameter	Units	Conc.	Result	% Rec	Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	500	272	54	34-125	
2,4,5-Trichlorophenol	ug/L	500	420	84	70-125	
2,4,6-Trichlorophenol	ug/L	500	408	82	70-125	
2,4-Dinitrotoluene	ug/L	500	435	87	55-125	
2-Methylphenol(o-Cresol)	ug/L	500	365	73	43-125	
3&4-Methylphenol(m&p Cresol)	ug/L	500	335	67	41-125	
Hexachloro-1,3-butadiene	ug/L	500	206	41	40-125	
Hexachlorobenzene	ug/L	500	399	80	72-125	
Hexachloroethane	ug/L	500	251	50	30-125	
Nitrobenzene	ug/L	500	370	74	62-125	
Pentachlorophenol	ug/L	500	322	64	36-125	
Pyridine	ug/L	500	183	37	30-125	
2,4,6-Tribromophenol (S)	%.			78	45-125	
2-Fluorobiphenyl (S)	%.			77	48-125	
2-Fluorophenol (S)	%.			53	30-125	
Nitrobenzene-d5 (S)	%.			77	57-125	
p-Terphenyl-d14 (S)	%.			92	53-125	
Phenol-d6 (S)	%.			33	10-128	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



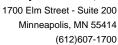
Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Date: 11/15/2019 05:18 PM

MATRIX SPIKE & MATRIX SI	PIKE DUPLIC	CATE: 3470	597 MS	MSD	3470598							
	1	0499029001	Spike	Spike	MS	MSD	MS	MSD	% Rec		Max	
Parameter	Units	Result	Conc.	Conc.	Result	Result	% Rec	% Rec	Limits	RPD	RPD	Qual
1,4-Dichlorobenzene	ug/L	ND	500	500	287	236	57	47	70-130	20	30	M1
2,4,5-Trichlorophenol	ug/L	ND	500	500	390	370	78	74	70-130	5	30	
2,4,6-Trichlorophenol	ug/L	ND	500	500	397	351	79	70	70-130	12	30	
2,4-Dinitrotoluene	ug/L	ND	500	500	415	372	83	74	70-130	11	30	
2-Methylphenol(o-Cresol)	ug/L	ND	500	500	369	331	70	62	70-130	11	30	M1
3&4-Methylphenol(m&p Cresol)	ug/L	ND	500	500	360	319	67	59	70-130	12	30	M1
Hexachloro-1,3-butadiene	ug/L	ND	500	500	243	212	49	42	70-130	13	30	M1
Hexachlorobenzene	ug/L	ND	500	500	378	334	76	67	70-130	12	30	M1
Hexachloroethane	ug/L	ND	500	500	278	242	56	48	70-130	14	30	M1
Nitrobenzene	ug/L	ND	500	500	386	329	77	66	70-130	16	30	M1
Pentachlorophenol	ug/L	ND	500	500	309	279	62	56	70-130	10	30	M1
Pyridine	ug/L	ND	500	500	156	134	31	27	70-130	15	30	M1
2,4,6-Tribromophenol (S)	%.						73	69	45-125			
2-Fluorobiphenyl (S)	%.						77	71	48-125			
2-Fluorophenol (S)	%.						54	48	30-125			
Nitrobenzene-d5 (S)	%.						80	68	57-125			
p-Terphenyl-d14 (S)	%.						93	84	53-125			
Phenol-d6 (S)	%.						34	30	10-128			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.





Project:

Nemadji Substation Soil Sampli

Pace Project No.:

10498837

QC Batch: QC Batch Method: 644171

WI MOD DRO

Analysis Method: Analysis Description: WI MOD DRO WIDRO GCS

Associated Lab Samples:

10498837001

METHOD BLANK: 3468463

Parameter

Matrix: Solid

Associated Lab Samples:

Date: 11/15/2019 05:18 PM

10498837001

Blank Result

Reporting

Limit

Analyzed

Qualifiers

WDRO C10-C28 n-Triacontane (S)

Units mg/kg %.

ND 89

10.0 50-150

11/12/19 17:07 11/12/19 17:07

LABORATORY CONTROL SAMPLE & LCSD: 3468464 3468465 Spike LCS **LCSD** LCS LCSD % Rec Max Parameter Units Conc. Result Result % Rec % Rec Limits **RPD RPD** Qualifiers **WDRO C10-C28** mg/kg 80 61.7 60.7 77 76 70-120 2 20 n-Triacontane (S) %. 90 88 50-150

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.



QUALIFIERS

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-M Pace Analytical Services - Minneapolis

ANALYTE QUALIFIERS

Date: 11/15/2019 05:18 PM

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
P3	Sample extract could not be concentrated to the routine final volume, resulting in elevated reporting limits.
S0	Surrogate recovery outside laboratory control limits.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.





QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Nemadji Substation Soil Sampli

Pace Project No.: 10498837

Date: 11/15/2019 05:18 PM

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10498837001	Nemadji Sub	EPA 3550	644184	EPA 8082A	645040
10498837001	Nemadji Sub	WI MOD DRO	644171	WI MOD DRO	644499
10498837001	Nemadji Sub	EPA 3010	644686	EPA 6010D	644988
10498837001	Nemadji Sub	EPA 7470A	644684	EPA 7470A	645053
10498837001	Nemadji Sub	ASTM D2974	644825		
10498837001	Nemadji Sub	EPA 3510	644645	EPA 8270D	644783
10498837001	Nemadji Sub	EPA 8260B	644619		



Section B

Section A

CHAIN-OF-CUSTODY / /

Section C

The Chain-of-Custody is a LEGAL DC

WO#:10498837

10498837

Required Client Information: Required Project Information: Invoice Information: Of Company: Attention: Minnesota Power Report To: Zach Golkowski Address: Copy To: Company Name: 30 W. Superior St. Duluth, MN 55802 Address: Regulatory Agency Email: zgolkowski@mnpower.com Purchase Order #: Pace Quote: (218)428-5582 Project Name: Nemadji Substation Soil Sampling Pace Project Manager: State / Location ryan.thibault@pacelabs.com, Requested Due Date: Project #: Pace Profile #: 36155 WE WISCONS IN Requested Analysis Filtered (Y/N) (see valid codes to left) C=COMP) COLLECTED Preservatives MATRIX CODE SAMPLE TEMP AT COLLECTION DW WT Drinking Water (G=GRAB ww Waste Water Residual Chlorine (Y/N) Product TCLP 8 RCRA Metals SL OL WP SAMPLE ID Soil/Solid START END. TCLP VOCs 8260 TCLP SVOC/8270 # OF CONTAINERS Oil DRO by WIDRO One Character per box. Wipe MATRIX CODE SAMPLE TYPE AR OT (A-Z, 0-9 / , -) Other Na2S203 Sample lds must be unique ITEM H2S04 HNO3 DATE TIME DATE TIME Nemad 2:07 11/8 li 1(3. 11/8 Ħ l1 2:05 OUN 11/8 1(5 11/8 2105 11 (6 16 11/8 Į1 2105 7 11 11/8 h 8 11/8 2:07 11 1(9 12 DATE SAMPLE CONDITIONS ADDITIONAL COMMENTS RELINQUISHED BY / AFFILIATION 1118 2:30 14:30 155 Piease pack TCLP VOC jar full. 1900 3,5 11/8/19 SAMPLER NAME AND SIGNATURE TEMP in C Zach Golkowski PRINT Name of SAMPLER: SIGNATURE of SAMPLER: DATE Signed:



hold, incorrect preservative, out of temp, incorrect containers).

Document Name: Sample Condition Upon Receipt Form

Document No.: F-MN-L-213-rev.29

Document Revised: 23Aug2019

Page 1 of 1

Issuing Authority:
Pace Minnesota Quality Office

Sample Condition Client Name:			Pro	roject #: WO#: 10498837					
Upon Receipt MINNESS	ta Power				PM: F				
Courier: Fed Ex	UPS U	SPS ommercial	Clic			NT: MN P		ue Date: 1	1/15/19
احر Tracking Number:		ummerciai	See Ext						j
Custody Seal on Cooler/Box Present? Yes No Seals Intact? Yes No Biological Tissue Frozen? Yes No N/A									
Packing Material: Bubble Wrap	Bubble Bags	None	Othe				Te	emp Blank?	⊠Yes
Thermometer: ☐ T1(0461) ☐ T2(1336) ☐ T3(0459)									
Note: Each West Virginia Sample must have temp taken (no temp blanks) MK2 11-8-19									
Temp should be above freezing to 6°C Cooler Temp Read w/temp blank:					3.6	oC_	Avera	ge Corrected Te	mp
-01			2/2	15-6	2 <		(no	•	y): See Exceptions
	Temp Corrected w/tem	np blank :_	4/2	۵,5	2,3	oc		℃	1 Container
USDA Regulated Soil: (N/A, water sai)	11-8-19	Date/In	itials of	Person Exan	nining C	Contents:	1KZ 11-8-19
Did samples originate in a quarantine zone within the United States: AL, AR, CA, FL, ĠÁ, Did samples originate from a foreign source (internationally, including ID, LA. MS, NC, NM, NY, OK, OR, SC, TN, TX or VA (check maps)? ☐Yes ☒No Hawaii and Puerto Rico)? ☐Yes ☒No									
If Yes to either question, fill out a Regulated Soil Checklist (F-MN-Q-338) and include with SCUR/COC paperwork.									
[.			•				COMM		
Chain of Custody Procent and Filled Out?				1					
Chain of Custody Present and Filled Out? Chain of Custody Relinquished?	∑ Yes	No □No		1. 2.					
Sampler Name and/or Signature on COC?	Yes	□No	□N/A	3.					
Samples Arrived within Hold Time?	∑ Yes	□No	LIN/A	4.			_		
Short Hold Time Analysis (<72 hr)?				5.					CBOD Hex Chrome
Rush Turn Around Time Requested?		₩No		Tu 6.	rbidity 🗌	Nitrate Nitr	iteOr	thophos Other_	
Sufficient Volume?	Yes	□No		7.					
Correct Containers Used?	Yes	□No		8.			-		
-Pace Containers Used?	yayıes √Ziyes	□No		0.					
Containers Intact?				9.			_		, <u>sin</u> -t
			7			ortette Leiter alle e			V []N-
Field Filtered Volume Received for Dissolved Tests?		No `	JZIN/A		10. Is sediment visible in the dissolved container? Yes No 11. If no, write ID/ Date/Time on Container Below: See Ex				
Is sufficient information available to reconci	ile the samples	□No		11. 11 110,	write ID/	Date/ fille on	Containe	er below:	See Exception
	<u></u> ► Ties								
Matrix: ☐Water ☑ Soil ☐ Oil ☐ Other All containers needing acid/base preservation	on have been $\square_{V_{-}}$			12. Samp	lo #				· · · · · · · · · · · · · · · · · · ·
checked?	on have been Yes	□No 〕	E IN/A	12. 541119	iC #				
All containers needing preservation are four	nd to be in ☐Yes	□No ~	√ZÍN/A		NaOH	☐ HN	10₃	∏H₂SO₄	Zinc Acetate
compliance with EPA recommendation?									
(HNO ₃ , H ₂ SO ₄ , <2pH, NaOH >9 Sulfide, NaO	H>12 Cyanide)			Positive fo	or Res [المود			See Exception
Exceptions: VOA, Coliform, TOC/DOC Oil and	d Grease, □Yes	□No `	₩ /A	Chlorine?	_	JNo	рН Рарс	er Lot#	
DRO/8015 (water) and Dioxin/PFAS				Res. Chlor		0-6 Roll	<u> </u>	0-6 Strip	0-14 Strip
	_			13.					See Exception
Headspace in VOA Vials (greater than 6mm)			Z N/A_					·	
Trip Blank Present?	☐Yes		N/A	14.	. Trin Bla	ınk Lot # (if p	urchaco	۹/۰	
Trip Blank Custody Seals Present? ☐Yes ☐No ☑N/A					tilb pie				. 🗖
CLIENT NOTIFICATION/RESOLUTION				Field Data Required? ☐ Yes ☐ No					
Person Contacted: Comments/Resolution:				Date/Ti	me:				
Comments/Nesotation.							_		
Project Manager Review: Date: 11/11/19									
Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e. out of									





Notification of Waste Acceptance

11/18/2019

CUSTOMER INFORMATION

Superior Water, Light & Power Co Nemadji Substation Hill Ave & Stinson Ave Superior, WI 54880 Contact: Greg Prom Phone: (218) 355-3191 INVOICE INFORMATION

Bill #: 2636 Superior Water, Light & Power Co 2915 Hill Ave Superior, WI 54880 Contact: Accounts Payable Phone: (218) 355-3191

Waste Stream #: CL19-0049

Waste Name: Oil Impacted Soil/Debris

Thank you for selecting SHAMROCK LANDFILL for your waste management requirements. Your waste stream has been reviewed and is acceptable for management at our facility based on the information provided in the profile sheet number listed above and conditions below. Our facility has the necessary permits to allow the storage, treatment, or disposal of this waste. The above referenced acceptance number should be listed on all shipping documents and correspondence. Please retain these documents for your records and future reference.

To schedule a shipment, or should you have any questions, please contact the facility at (218) 878-0112.

ACCEPTANCE INFORMATION

The waste stream identified by the reference above is acceptable for disposal.

This waste is acceptable for delivery beginning on 11/18/2019 thru 11/8/2021 at which time the material will need to be reanalyzed and recertified.

Spill Reporting Reminder: MPCA spill reporting procedures must be followed.

Free Liquid Statement: Free liquids will not be placed in cells at Shamrock Landfill. Free liquids must be solidified either prior to shipment to Shamrock Landfill or at Shamrock Landfill.

Shipping Requirements A NON-HAZARDOUS certificate is required to be on file, certifying the waste is non-hazardous as specified per 40 CFR 261.4. The shipment may be accompanied with an Shamrock Landfill manifest.

AUTHORIZATION					
Approval:	Heath	Genty	Date:	((-18-19	

We want to assist you with the proper completion of the Shipping Manifest for this waste stream. Based on our analytical data from WS # CL19-0049, we suggest your waste stream should be shipped using the following information...

Non Hazardous Industrial Waste

Shamrock	
Landfill	

	Ch. L	1. Generator's US EPA ID N	o. <i>(if</i>	any,)	_	2	. Page 1	of		page	(s)
П	Shipping Manifest		1	1	ı		1 .					
	Generator's Name and Facility Address Superior Water, Light & Power Co Hill Ave & Stinson Ave Superior, WI 54880	 	-1.	-1	Mailing	2915 Hi	r Water, II Ave Ir, WI 54		Power 0	;o	Nemad	ji Substat
Ш	4. Generator's Phone (218) 355-3191				Fax	- Cupeno						
П	5. Transporter 1 Company Name											
	:				Phone:							
II	6. Transporter 2 Company Name											
					Phone:				_			
II	7. Designated Facility Name and Site Address	Shamrock Environn		al,	LLC							
		761 MN Highway 4				_	_					
H		Cloquet, MN 5572							8-0112	<u> </u>		
H	8. U.S. DOT Description (including Proper Shipping	(Name)	9.	Co	ntainer	5	10. Total	١,	11. Unit	М	12. aste Pi	ofile
			_ N	lo.	Туре		Quantity		it/Voi		Sheet	#
Ġ	a, Non Hazardous Industrial Waste (Oil Impa	acted Soil/Debris)						. \				
E	ч -						1 1					
E	b.		╫			 	<u> </u>					
A	-		١,	ı	l i	1 .) [,				
A T O R			11				1		ĺ			
	C.		+		1		- ·					
lt		, r	<i>^</i>	1	' I.	ી !		. Î				
			\vdash	_=		₁	. —	<u>i</u>		- \	-	
		* P	14	ı	1 I		1 1		ı İ			
	13. Additional Descriptions for Materials Listed Above (Indiana, CL CL19-0049 Oil Impacted Soil/D	icale waste stream Approval # balowj	14). S	pecial Ha	endling Proc	cedures f	or Waste	s Listed A	bave	1	
	b. CL	ĖNI 19										
	c. CL											
	d. CL											
$\ $	15. Special Handling Instructions and Additional Info								Use Only	/ :		
	g Enerators Müs t supply emerg	ENCY CONTACT NUMB	ER!	!				Load:	·			
ŀ								<u> </u>				
	16. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packet	clare that the contents of this	isnoo ni eu	gnn sila	eva iner etneme	fully and in proper	accurati conditio	ely desc on for th	inbed ab ansport b	ove: y hi:	oy qhway	
	according to applicable international and nation	ai government regulations.		 , 1		ш. р. оро.				•		
	Printed/Typed Name	Signature			· · · · · · · ·		·		Mont	'n	Day	Year
Î	PLEASE BE SURE GENERATOR HAS SIG	ENED AND DATED IN TH	HS S	EC	T10N	OF THE	MANI	EEST!!	<u> </u>	_1_		1
Ţ	17. Transporter 1 Acknowledged of Receipt of Mate	rials										
TRANSP	Printed/Typed Name	Signature						1	Mont	h	Day	Year
P	18. Transported 2 Acknowledgement of Receipt of N	deterials			<u> </u>				ــــــــــــــــــــــــــــــــــــــ			 ,
ORTER	Printed/Typed Name	Signature							Mont	n -	Day	Year
E	rancuriyou namo	Siftigrois							1		<u> </u>	<u>_ll</u>
-	19. Discrepancy Indication Space											
F												
ĉ												
ACILI												
			·····	··			(11 la 10 a			
Y	20. Facility Owner or Operator: Certification of rece	lipt of non-hazardous material	is cov	rer o	o by this	Manifest	except	as note			<u>.</u>	
1	Printed/Typed Name	Signature							Mont	h i	Day	Year
l	, 1	1								L_		





November 18, 2019

Accounts Payable Superior Water, Light & Power Co 2915 Hill Ave Superior, WI 54880

RE: CL19-0049 Oil Impacted Soil/Debris

Dear Sir/Madam:

This agreement will confirm the price and length of service for disposal and /or transportation of your non-hazardous industrial material at our facility. This agreement is for the term of the Waste Approval granted by Shamrock Landfill and is for all services ordered and performance initiated within such period and does include the disposal surcharge fees which you are obligated to pay as of the date of this agreement. Shamrock Landfill may incur additional costs including but not limited to increases in state and local taxes. Shamrock Landfill may pass these costs on to the customer only after notification to the Customer. This agreement grants Shamrock Landfill the exclusive right to dispose of the referenced waste for the term of this agreement. This agreement shall automatically renew thereafter for an additional term of 24 months "Renewal Term" unless either party gives the other party written notification of termination at least 90 days prior to the termination of the then-existing term. Shamrock Landfill will notify the customer prior to the expiration of the agreement of any rate changes prior to the start of the Renewal Term.

Payment and terms are net thirty (30) days. Interest will be charged at a rate of 11/2% per month (18% annually) on any unpaid balance 30 days after the date of the invoice. In the event Customer terminates this Agreement prior to its expiration other than as a result of a breach by Shamrock Landfill or Shamrock Landfill terminates this agreement for Customer's breach (including nonpayment) Customer agrees to pay to Shamrock Landfill as liquidated damages a sum calculated as follows: (1) if the remaining term under this agreement is six or more months Customer shall pay its average monthly charges multiplied by six: or (2) if the remaining term under this agreement is less than six months Customer shall pay its average monthly charge multiplied by the number of months remaining in the term. Customer expressly acknowledges that in the event of an unauthorized termination of this agreement the anticipated loss to Shamrock Landfill in such event is estimated to be the amount set forth in the foregoing liquidated damages provision and such estimated value is reasonable and is not imposed as a penalty.

These prices are based on an approved waste stream composition. In the event that a non-conforming waste is received, you will be notified of additional charges, when applicable.

To accept this agreement, please sign one copy and return it to Shamrock Landfill, PO Box 2232, Cloquet, MN 55720 or email to janetb@wasteconnections.com.

For	all Terms ad Conditions pl	Shamrock Landfill Nearl refer to Contract Puncha	ر اکر
Agree	Customer ACCEPTED BY: (name, position) DATE: 1//8/2019	ENV. Specialist	
	WASTE APPROVAL Period: 11/18/2019 to 11/8/2021	_	

Start Date: 11/1/2019 Stop Date: 11/30/2019

BILL TO ACCOUNT

2636 Superior Water Light & Power C

SUPS8

Superior Water - Nemadji Subst

Hill Ave & Stinson Ave

Superior WI 54880

Superior. WI						
48693	Manifest 65386			Waste Name	12.82	
48694	65385		9 19-0049	Oil Impacted Soil/Debris	12.74	
48697	65387		9 19-0049	Oil Impacted Soil/Debris	17.27	
48698	65388		9 19-0049	Oil Impacted Soil/Debris	17.38	
2000	7		9 19-0049	Oil Impacted Soil/Debris	33777	
48700	65389		19-0049	Oil Impacted Soil/Debris	20.18	
48705	69648		9 19-0049	Oil Impacted Soil/Debris	20.15	
48706	69649		19-0049	Oil Impacted Soil/Debris	18.25	
48707	65390		19-0049	Oil Impacted Soil/Debris	10.45	
48710	69650		19-0049	Oil Impacted Soil/Debris	16.35	
48711	69651		9 19-0049	Oil Impacted Soil/Debris	18.10	
48712	69652	11/19/19	19-0049	Oil Impacted Soil/Debris	14.82	
48714	69653	11/19/19	19-0049	Oil Impacted Soil/Debris	14.74	
48716	69655	11/19/19	19-0049	Oil Impacted Soil/Debris	15.59	
48718	69656	11/19/19	9 19-0049	Oil Impacted Soil/Debris	16.91	
48719	69654	11/19/19	9 19-0049	Oil Impacted Soil/Debris	17.57	
48720	69657	11/19/19	9 19-0049	Oil Impacted Soil/Debris	18.67	
48722	69658	11/19/19	9 19-0049	Oil Impacted Soil/Debris	17.27	
48724	69659	11/19/19	9 19-0049	Oil Impacted Soil/Debris	16.60	
48726	69660	11/19/19	9 19-0049	Oil Impacted Soil/Debris	11.16	
48728	69662	11/19/19	19-0049	Oil Impacted Soil/Debris	19.63	
48729	69663	11/19/19	9 19-0049	Oil Impacted Soil/Debris	16.32	
48730	69664	11/19/19	19-0049	Oil Impacted Soil/Debris	16.53	
48731	69661	11/19/19	9 19-0049	Oil Impacted Soil/Debris	8.40	
48732	69665	11/19/19	19-0049	Oil Impacted Soil/Debris	15.38	
48733	69666	11/19/19	19-0049	Oil Impacted Soil/Debris	19.24	
48735	69667	11/19/19	19-0049	Oil Impacted Soil/Debris	18.55	
48736	69668	11/19/19	19-0049	Oil Impacted Soil/Debris	18.75	
48738	69669	11/19/19	19-0049	Oil Impacted Soil/Debris	18.22	
48739	69670		9 19-0049	Oil Impacted Soil/Debris	17.04	
48740	69671	11/19/19	9 19-0049	Oil Impacted Soil/Debris	20.12	
48743	69672	11/19/19	9 19-0049	Oil Impacted Soil/Debris	19.54	
			200	The Parity and Street, Name of		

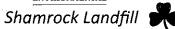
Print Date: 3/26/2020

Start Date: 11/1/2019 Stop Date: 11/30/2019

BILL TO A	ACCOUNT 69673	11/19/19 19-0049	001	16.38
48745	69674	11/19/19 19-0049	Oil Impacted Soil/Debris	13.17
48747	69675		Oil Impacted Soil/Debris	19.48
27.2	69676	11/19/19 19-0049	Oil Impacted Soil/Debris	
48748 48750		11/19/19 19-0049	Oil Impacted Soil/Debris	15.75
35305	69678	11/19/19 19-0049	Oil Impacted Soil/Debris	16.40
48753	69677	11/19/19 19-0049	Oil Impacted Soil/Debris	16.75
48754	69680	11/19/19 19-0049	Oil Impacted Soil/Debris	17.84
48755	69681	11/19/19 19-0049	Oil Impacted Soil/Debris	14.86
48756	69679	11/19/19 19-0049	Oil Impacted Soil/Debris	13.79
48757	69682	11/19/19 19-0049	Oil Impacted Soil Debris	18.46
48761	69683	11/19/19 19-0049	Oil Impacted Soil/Debris	20.03
48762	69684	11/19/19 19-0049	Oil Impacted Soil/Debris	16.52
48763	69685	11/19/19 19-0049	Oil Impacted Soil/Debris	18.38
48764	69686	11/19/19 19-0049	Oil Impacted Soil/Debris	10.50
48765	69687	11/19/19 19-0049	Oil Impacted Soil/Debris	17.66
48767	69688	11/19/19 19-0049	Oil Impacted Soil/Debris	24.48
48768	69689	11/19/19 19-0049	Oil Impacted Soil/Debris	19.68
48770	69690	11/19/19 19-0049	Oil Impacted Soil/Debris	18.63
48774	69691	11/19/19 19-0049	Oil Impacted Soil/Debris	11.13
48780	69693	11/20/19 19-0049	Oil Impacted Soil/Debris	9.79
48781	69692	11/20/19 19-0049	Oil Impacted Soil/Debris	8.82
48789	69694	11/20/19 19-0049	Oil Impacted Soil/Debris	12.46
48792	69695	11/20/19 19-0049	Oil Impacted Soil/Debris	12.99
48798	69696	11/20/19 19-0049	Oil Impacted Soil/Debris	8.93
48807	69697	11/20/19 19-0049	Oil Impacted Soil/Debris	11.36
48816	69698	11/20/19 19-0049	Oil Impacted Soil/Debris	13.07
48817	69699	11/20/19 19-0049	Oil Impacted Soil/Debris	13.06
48821	66951	11/21/19 19-0049	Oil Impacted Soil/Debris	9.06
48823	66950	11/21/19 19-0049	Oil Impacted Soil/Debris	12.81
48833	66952	11/21/19 19-0049	Oil Impacted Soil/Debris	12.57
48846	66953	11/21/19 19-0049	Oil Impacted Soil/Debris	14.11
48858	66954	11/21/19 19-0049	Oil Impacted Soil/Debris	14.16
	# of Lo		TOTAL FOR Waste Stream	987.82
		GRAND TOTALS		987.82
		AND THE RESERVE AND ADDRESS OF THE PARTY OF		

Shipping Manifest	1. Generato	or's US EPA ID No.	. (if any	1)				I. Pag	e 1 of		page	(s)
3. Generator's Name and Facility Address	50/2/h 1			M	 Mailing Ai		alderst, man som a press, a	TI TI WARE PROPERTY SECOND STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET STREET	(Alexa) Maragental and make alexa and an easier	MANAGEMENT OF THE PARTY.		
16 U 4 	erus in la la serie. Para la la la serie	10 71 210 TO TO 311 TO				CIST IN A			R Janat	133 N	an a	1811 C
L Generator's Phone:	1			F	ax:		us programa	die sitz	e de la companya de la companya de la companya de la companya de la companya de la companya de la companya de La companya de la companya de la companya de la companya de la companya de la companya de la companya de la co		بوقامه إيكامه والمطوف	44.49
5. Transporter 1 Company Name												
SHAMROCK TRUCKING			-	F	hone:	218-8	38.01	12				
6. Transporter 2 Company Name						10 3 11,5 1.7	2 722 5. 5	h g.r				
				P	hone:							
Designated Facility Name and Site Address	SKB/S1	hamrock Envi	ronn	nei	ntal, L	LC						
	761 M	N Highway 45	;									
	Cloque	t, MN 55720				Pho	ne: 2	218-8	378-011	2		
3. U.S. DOT Description (including Proper Sh	nipping name)	74.0	9. C	on	tainers		10.		11.		12.	
			No.		Type		Total Jantity		Unit Wt/Vol		iste Pr Sheet	
l. Non Hazanicus Industriai Waste	a a				71							
(OIL CONTAMINATED DEFE												
1												
).												
		•					ı	ı				
		-										
					'	,	,	•				
									•			
0. A 10: 10				\Box								
Additional Descriptions for Materials Listed About CL		am Approval # oelow)	14.	Spe	eciai Hand	iling Proc	eaures	tor wa	stes Listed	Above		
P. CL GLISSON OIL CONFAMINA	ted debres -											
DETERCT OF									•			
i. OL 5. Special Handling Instructions and Additio	nal Information							SKI	3 Use Onl	v.		
Emergency Contact:								Loa		y		
								Loa	·			
								1				
GENERATOR'S CERTIFICATION: I here proper shipping name and are classified,	packed, marked, a	nd labeled, and ar										
according to applicable international and	national governme	nt regulations.							•		•	
Printed/Typed Name		Signature			1	/			Mont	h ,[Dąyy	χ
LINGS STON		and the same	·		مكتون الكر		garathing	· 1779	1' 1'		17	
7. Transporter 1 Acknowledged of Receipt of	f Materials	<u>/}_</u>	<u></u> ·	, aq	1							
Printed/Typed Name		Signature	and the same	7	Land	1			Mont	h [Day.	Y
18. Transporter 2 Acknowledgement of Recei	pt of Materials	At Gard to the se	(James Comment			and the same					.1	
Printed/Typed Name	1	Signature		_		•			h A	h ^r)av	1/2
		2.5				4.			Mont	.ı L	Day 	- Ye
9. Discrepancy Indication Space											1	
	•											
			_									
0. Facility Owner or Operator: Certification	of receipt of non-ha	azardous materials	cove	red	by this	Manifest	excep	t as n	oted in ite	m 19.		
Printed/Typed Name		Signature							Mont	h ſ	Эау	Y
3 L										·· •		ι ΄





Generator's Name and Facility Address Generator's Phone: Transporter 1 Company Name SHAMBOCK TRUCKING Transporter 2 Company Name Designated Facility Name and Site Address U.S. DOT Description (including Proper Shipping response in the Address) John Hazardous Industrial Waste (OTL CONTAMINATED DEBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CL CONTAMINATED DEBRUS) CL CONTAMINATED DESCRIPTIONS CL CONTAMINATED DESCRIPTIONS Special Handling Instructions and Additional Informations and Additional Informations and Contact:	SKB/Sh 761 MN Cloquet, name)	amrock Env Highway 4 , MN 55720	9. (No	Pmen	ax: Phone:	LC	(MU) (PE) -57:14	218	L Defermens	0112	12. Waste Pr Sheet	ofile
Transporter 1 Company Name SHAMBOCK TRUCKING: Transporter 2 Company Name Designated Facility Name and Site Address U.S. DOT Description (including Proper Shipping research House Industrial Wards (OTL CONTAMINATED DEBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CONTAMINATED DESTRICT OPS CL CONTAMINATED DESTRICT OPS CL 5. Special Handling Instructions and Additional Informations	SKB/Sh 761 MN Cloquet, name)	amrock Env Highway 4 , MN 55720	9. (No	Pmen	Phone: ntal, L	LC	hone:	218	3-878-	0112	12. Waste Pr Sheet	ofile
Transporter 1 Company Name SHAMBOCK TRUCKING: Transporter 2 Company Name Designated Facility Name and Site Address U.S. DOT Description (including Proper Shipping research House Industrial Wards (OTL CONTAMINATED DEBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CONTAMINATED DESTRICT OPS CL CONTAMINATED DESTRICT OPS CL 5. Special Handling Instructions and Additional Informations	SKB/Sh 761 MN Cloquet, name)	amrock Env Highway 4 , MN 55720	9. (No	Pener	Phone: Phone: ntal, L	LC	hone:	0112 : 218	3-878-	0112	12. Waste Pr Sheet	ofile
Transporter 1 Company Name SHAMBOCK TRUCKING: Transporter 2 Company Name Designated Facility Name and Site Address U.S. DOT Description (including Proper Shipping research House Industrial Wards (OTL CONTAMINATED DEBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CONTAMINATED DESTRICT OPS CL CONTAMINATED DESTRICT OPS CL 5. Special Handling Instructions and Additional Informations	SKB/Sh 761 MN Cloquet, name)	amrock Env Highway 4 , MN 55720	9. (No	Pener	ental, L	318 LC	hone:	: 218	3-878-	0112	12. Waste Pr Sheet	ofile
Transporter 1 Company Name SHAMBOCK TRUCKING: Transporter 2 Company Name Designated Facility Name and Site Address U.S. DOT Description (including Proper Shipping research House Industrial Wards (OTL CONTAMINATED DEBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CONTAMINATED DESTRICT OPS CL CONTAMINATED DESTRICT OPS CL 5. Special Handling Instructions and Additional Informations	SKB/Sh 761 MN Cloquet, name)	amrock Env Highway 4 , MN 55720	9. (No	Pener	Phone: Phone: ntal, L tainers	LC	hone:	: 218	11. Unit	:	12. Waste Pr Sheet	
Transporter 2 Company Name Designated Facility Name and Site Address U.S. DOT Description (including Proper Shipping religions) Hon Hazardous Industrial Waste (OTL CONTAMINATED DEBRIS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CONTAMINATED DEBRIS) CL DISTRICT OPS 5. Special Handling Instructions and Additional Informations	761 MN Cloquet, name)	Highway 4, MN 55720	9. (No	Con	Phone: ntal, L	LC	hone:	: 218	11. Unit	:	12. Waste Pr Sheet	
Designated Facility Name and Site Address U.S. DOT Description (including Proper Shipping reliable Hexardous Industrial Wards (OTL CONTAMINATED DEBRIS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CONTAMINATED DESTRICT OFS CL DISTRICT OFS CL 5. Special Handling Instructions and Additional Informations	761 MN Cloquet, name)	Highway 4, MN 55720	9. (No	Con	Phone: ntal, L	LC	hone:	: 218	11. Unit	:	12. Waste Pr Sheet	
Designated Facility Name and Site Address U.S. DOT Description (including Proper Shipping relations Including Proper Shipping relations Including Proper Shipping relations Including Proper Shipping relations Including Proper Shipping relations Including Proper Shipping relations Including Instructions and Additional Informations and Additional Informations and Additional Informations and Additional Informations Information	761 MN Cloquet, name)	Highway 4, MN 55720	9. (No	Con	ntal, L	LC	hone:	: 218	11. Unit	:	12. Waste Pr Sheet	
JOH Description (including Proper Shipping report Hazardous Industrial Waste (OTL CONTAMINATED DEBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL CULTS (1999) OR CONTAMINATED DESTRICT OF SECULO	761 MN Cloquet, name)	Highway 4, MN 55720	9. (No	Con	ntal, L		10. Tota	ıl .	11. Unit	:	12. Waste Pr Sheet	
JOH Description (including Proper Shipping report Hazardous Industrial Waste (OTL CONTAMINATED DEBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL CULTS (1999) OR CONTAMINATED DESTRICT OF SECULO	761 MN Cloquet, name)	Highway 4, MN 55720	9. (No	Con	tainers		10. Tota	ıl .	11. Unit	:	12. Waste Pr Sheet	
Hon Hazardous Industrial Waste (OH. CONTAMINATED DEBRIS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CL DISTRICT OFS 5. Special Handling Instructions and Additional Informations	Cloquet, name)	, MN 55720	9. (PI	10. Tota	ıl .	11. Unit	:	12. Waste Pr Sheet	
Hon Hazardous Industrial Waste (OH. CONTAMINATED DEBRIS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CL DISTRICT OFS 5. Special Handling Instructions and Additional Informations	name)		9. (PI	10. Tota	ıl .	11. Unit	:	12. Waste Pr Sheet	
Hon Hazardous Industrial Waste (OH. CONTAMINATED DEBRIS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CL DISTRICT OFS 5. Special Handling Instructions and Additional Informations	name)		9. (10. Tota	ıl .	11. Unit	:	12. Waste Pr Sheet	
Hon Hazardous Industrial Waste (OH. CONTAMINATED DEBRIS) 3. Additional Descriptions for Materials Listed Above (indicated CL CL CL DISTRICT OFS 5. Special Handling Instructions and Additional Informations	cate waste stream	n Approval # below)	No				Tota	ı.	Unit	:	Waste Pr Sheet	
(OTL CONTAMINATED DRBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL) CL CL DISTRICT OPS CL 5. Special Handling Instructions and Additional Informations		n Approval # below)			Type						Sheet	
(OTL CONTAMINATED DRBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL) CL CL DISTRICT OPS CL 5. Special Handling Instructions and Additional Informations		n Approval # below)	14.								100	***
(OTL CONTAMINATED DRBRUS) 3. Additional Descriptions for Materials Listed Above (indicated CL) CL CL DISTRICT OPS CL 5. Special Handling Instructions and Additional Informations		n Approval # below)	14.									***:
3. Additional Descriptions for Materials Listed Above (indical CL CONTAMBJATED D. CL CONTAMBJATED D. DISTRICT OPS CL DISTRICT OPS 5. Special Handling Instructions and Additional Info		n Approval # below)	14.									
3. Additional Descriptions for Materials Listed Above (indical CL CL CL CL DISTRICT OPS CL CL S. Special Handling Instructions and Additional Informations		n Approval # below)	14.									
3. Additional Descriptions for Materials Listed Above (indical CL CL CL CL DISTRICT OPS CL CL S. Special Handling Instructions and Additional Informations		n Approval # below)	14.									
3. Additional Descriptions for Materials Listed Above (indiced Listed Above). CL CL DISTRICT OVS CL 5. Special Handling Instructions and Additional Information.		n Approval # below)	14.									
3. Additional Descriptions for Materials Listed Above (indiced Listed Above). CL CL DISTRICT OVS CL 5. Special Handling Instructions and Additional Information.		n Approval # below)	14.									
3. Additional Descriptions for Materials Listed Above (indiced CL CL CL CL DISTRICT OVS 5. Special Handling Instructions and Additional Informations		n Approval # below)	14.								·	
3. Additional Descriptions for Materials Listed Above (indiced CL CL CL CL DISTRICT OVS 5. Special Handling Instructions and Additional Informations		n Approval # below)	14.	Cad							i	
3. Additional Descriptions for Materials Listed Above (indiced CL CL CL CL DISTRICT OVS 5. Special Handling Instructions and Additional Informations		n Approval # below)	14.	Car				<u> </u>			i	
3. Additional Descriptions for Materials Listed Above (indiced CL) CL CL CL DISTRICT OPS CL 5. Special Handling Instructions and Additional Information		n Approval # below)	14.	2							·	
3. Additional Descriptions for Materials Listed Above (indiced CL CC) 15-00150 CIL CONTAMBJATED DESTRICT OFS CL 5. Special Handling Instructions and Additional Info		n Approval # below)	14.					1 1	E .		·	
CL CL CL CL DESTRICT OPS CL 5. Special Handling Instructions and Additional Information		n Approval # below)	14.					1 1			i	
CL CL CL CL DISTRICT OPS CL Special Handling Instructions and Additional Information		n Approval # below)	14.	C=							i	
CL CL CL CL DISTRICT OPS CL Special Handling Instructions and Additional Information		n Approval # below)	14.					I I		l l		
CL CL CL DESTRECT OPS CL Special Handling Instructions and Additional Infor		II Apploval # Delowy	'		ecial Hand	Hina Pr	rocedur	es for	Wastes Li	sted Ah	IOVA	
CL DESTRICT OPS CL 5. Special Handling Instructions and Additional Information	HEBRIS -			Opt	colai i lanc	, in ig	oocaai	00 101	TTESTES E	0100710	,010	
CL DESTRICT OPS CL 5. Special Handling Instructions and Additional Information	AREMOND -											
. CL 5. Special Handling Instructions and Additional Infor			ľ									
5. Special Handling Instructions and Additional Info												
•	ormation							1.	WD 11	O-1		
Emergency Comact.	Jimadon							*	KB Use	Only		
3 , · · · · · · · · · · · · · · · · · ·								L	oad#			
		/										
6. GENERATOR'S CERTIFICATION: I hereby decis												
proper shipping name and are classified, packed,			ire in a	ll re	spects ir	n prop	er con	dition	for trans	sport b	y highway	
according to applicable international and national	ai governmen	nt regulations.	1									
Printed/Typed Name		Signature /	3,				. **			/lonth	,Day	Y
Printed/Typed Name		Signature	11	مية سر								$_{\perp}$ $/$
7. Transporter 1 Acknowledged of Receipt of Materi	rials		C _M								<u> </u>	ــــــــــــــــــــــــــــــــــــــ
Tanaporter Acknowledged of necespt of Mater	i idio	•			- 4	.6*						
Printed/Typed Name		Signature	1		A CONTRACT	Land the second	meric.		V	/lonth	Day	ŢΥ
CMF15 / CLUMON		hans of	Carl Carles 12		1 2					4 /	<u> 1444</u>	
B. Transporter 2 Acknowledgement of Receipt of Ma	laterials											
Printed/Typed Name		Signature							, and the same of	/onth	Day	Y
· ··· · · · · · · · · · · · · · · · ·		2.5								1	l l	
9. Discrepancy Indication Space		· · · · · · · · · · · · · · · · · · ·									1	Ь
A Disorepancy indication opace												
			>									
D. Facility Owner or Operator: Certification of receip	ipt of non-ha						ant ave		s noted i	n item	19.	
	.,	zardous materia	ls cove	ered	by this	Manife	estexc	жин				
Printed/Typed Name		zardous materia	ls cove	ered	by this	Manife	esi exc	ері а				



Shamrock Landfill Non Hazardous Industrial Waste

Γ.		1. Generat	or's H	S EDA I	D No	(if an	24		_			4 D.			-
1	Shipping Manifest	deneral	.01 3 00	1	D 140.	(11 411)	ΥŲ	\. .11	Ĭ.				ige 1 of	page(s)
Į I	3. Generator's Name and Facility Address	. 10			1 1		N	lailing	Addr	ess_	accompany of the	Carlotte material	-	_ :	
	Hill Alle a Stiffen	My an	-;											表表示: 120 mile 4: 1 Establish Sea (1) (1) (1)	
	4. Generator's Phone:	27004 N	, 5				F	ax:	HAT.	2001 	ERI	OR G	E, EHLA	UH, MH 158 YZZ	lé
	5. Transporter 1 Company Name	<i>;</i> ;		_		_			remolest F	£ 1,200	(/ 		* flat	
	SHAMROCK TRUCKING						Ρ	hone:	2	1508	(78a)	1112			
	6. Transporter 2 Company Name		_	*							<u> </u>	1111		-	
	7. Designated Facility Name and Site Address							hone:					· :		
	1. Designated Facility Name and Site Address	SKB/S				onn	1e1	ntal, l	LL(3					
		761 MI	-		•										
	8. U.S. DOT Description (including Proper Shipping	Cloque	t, Mi	N 557						Pho		218-	-878-01	12	
	5. 5.5. bot bescription (including Proper Shipping	g name)					1	tainers			10. Total		11. Unit	12. Waste Profi	ile
¥ G	a. 57 77 5 7 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		<u>_</u>			No.	-	Туре	+	Q	uantit	y	Wt/Vol	Sheet#	
Ε	a. Hon Hozanious Industrial Waste (OIL CONTAMINATED DEBRIS)					1 1		1		ı	1 1	1			
N E		, <u></u> ,													
R A	b.														
Ţ					!										
O Ŗ	C.	_				Ш.	+		-	١		_			_
*															
	d.	<u>-</u> .			-		4		-					<u>.</u>	
						1 1		1		1 1	l f			2 - Q	
	13. Additional Descriptions for Materials Listed Above (ind a. CL	icate waste strea	am Appro	val # belo	ow)	14. 8	Spe	cial Han	dling	Proc	edures	s for W	astes Listed	Above	***
	b. CL ASLASSOBBO OIL CONTAMINATED I	DEMRIS -													
-	B. CL 49LAS-0030 OIL CONTAMINATED I c. CL DISTRICT OPS d. CL														
	15. Special Handling Instructions and Additional Info	ormation						.	_			SK	B Use Onl		
,	Emergency Contact:												ad #		
	16. GENERATOR'S CERTIFICATION: I hereby dec	lare that the	conter	nts of th	his cor	sign	me	nt are f	ully a	and a	ccura	ately d	escribed a	bove by	
	proper shipping name and are classified, packer according to applicable international and nation	d. marked. ai	nd labe	eled, ar	าศ are	in all	res	pects i	n pro	per	condi	ition fo	r transport	t by highway	
	Printed/Typed Name		Sian	ature,-	p	, por			7		_		Mont	h Davi	
<u>¥</u>	17. Transporter 1 Acknowledged of Receipt of Mate	 			A.			1.	/ 	· · · · · · · · · · · · · · · · · · ·			1/1/	h Day 	Year G
R A	Printed/Typed, Name	rials —-	l Olam	.1					es Carlo	-					
TRANSPORTER	A1-EX12753		Sign	ature	and the same	31	į	10	7				Monti	h /	Year
O R	18. Transporter 2 Acknowledgement of Receipt of N	1aterials	1		- , 21' - 2''	_,•								<u> </u>	<u> </u>
T E	Printed/Typed Name		Sign	ature									Monti	h Day	Year
<u>م</u>	19. Discrepancy Indication Space									_				<u> </u>	L
F	-														
A C															
j L															
1	90 Equilibra Oruman - O O O		,			2					_				
T Y	20. Facility Owner or Operator: Certification of recei	ipt of non-ha 			erials c	overe	d b	y this	Man	fest	excep	ot as n	oted in iter	m 19.	
	Printed/Typed Name		Signa	ature									Month	n Day	Year
															1



Shamrock Landfill Non Hazardous Industrial Waste

A	Chinning Monifest	1. Gener	rator's U	S EPA II	D No.	(if aı	(ער					1. Pa	ge 1 of		page	(s)
	Shipping Manifest		1 1	1	I		ı	1 1	1		i		•		15-	(-)
	3. Generator's Name and Facility Address 4. Generator's Phone:	A. P		I				Mailing A	Addre	955 	659 mp milydrill	Act William	Sec.	(1)	u, // A	yak Mit ca
	4. Generator's Phone: 5. Transporter 1 Company Name	3/3/1	, epipe ^d				_							irei.	MN 55	£16
	6. Transporter 2 Company Name		_				I	Phone:						 -	<u>.</u>	·
	7. Designated Facility Name and Site Address							Phone:			78.0	1112				
	The second of a country Wallie and One Address	761 N	Sham IN Hi iet, M	ghway	y 45	roni	me	ntal, I				210	070 0	110		
	8. U.S. DOT Description (including Proper Shipping	name)	ici, IVI	N 33/	20	9. (Cor	ntainers		Pnc	ne:	218-	878-0	112	12,	
	a.				_	No		Туре			Total uantit	у	Unit Wt/Vol		Vaste Pro	
3	Hou Hazardous industrial Wasie						!									
1	b.		-				 	,			<u> </u>	7.	diss ^a		i V	-
)	С.	<u>.</u>		.			<u> </u>					<u> -</u> -				•
	d.				_								_	_		
	*							.							٠.	
-	13. Additional Descriptions for Materials Listed Above (India a. CL b. CL 77-0047	cate waste st	ream Appr	oval # belo	ow)	14.	Spe	ecial Hand	diing	Proce	edures	s for Wa	ustes Liste	ed Abov	e	
1	d. CL CI.13-0030 CIL. CONTAMINATED I.															
	15. Special Handling Instructions and Additional Info Emergency Contact:	rmation	•				_		_			SKI	B Use O	пју		
-	16. GENERATOR'S CERTIFICATION: I hereby decl proper shipping name and are classified, packed	are that th	e conte	nts of th	ils co	nsigr	nme	ent are fu	ılly a	nd a	ccura	ately de	escribed	above	by	
	according to applicable international and nationa	ıl governm	nent regu	ilations.	<u>Jeren</u> o			spects in	(") (")) Per (JOHUI	tion to	rtranspo	ort by n	igriway	
-	Printed/Typed Name // / // / 17. Transporter 1 Acknowledged of Receipt of Mater	ials	Sign	ature	July September	2 c	u'papere	· garden ca	<u>, </u>	And the second	Salt et al.	وحات ا	Mor	nth _	Day _y	Year,
	Printed/Typed Name hard to he	1	Sign	ature	Parket Stranger	er gelekeren er	1	A CONTRACTOR OF THE PARTY OF TH	## **********		elater :	_	Mor	yth j	Day	Year
<u> </u>	 Transporter 2 Acknowledgement of Receipt of Management of Receipt of Rece	aterials	T Cian	ature		_	_		_		_					
	19. Discrepancy Indication Space		Sign	ature ———		_		-			_		Mor	nth	Day	Year
									F							
	20. Facility Owner or Operator: Certification of receip	ot of non-h	nazardou	ıs mate	rials c	over	ed	by this M	1anif	est e	xcep	ot as no	oted in it	em 19.	-	
	Printed/Typed Name	-	Sign							_			Mor		Day	Year



Non Hazardous Industrial Waste

^	Snipping Manifest	rator's US EPA ID N	o. (if any)	F 1		1. Page 1 of	page(s)
	3. Generator's Name and Facility Address 4. Generator's Phone: 5. Transporter 1 Company Name	Aye		note viennes auroporario	Carried Alexander	And har har highlighten	7 71. 11 Av. 120 - VI 5 9 TH, MN 55816
,	6. Transporter 2 Company Name 10					1. 13 1. 160	
	761 M Cloq	/Shamrock Env MN Highway 4 uet, MN 55720	ironme 5	Phone: ental, LI		218-878-01	12
¥	8. U.S. DOT Description (including Proper Shipping name)		9. Cor No.	tainers Type	10. Total Quantity	11. Unit Wt/Vol	12. Waste Profile Sheet#
▼GENER	a. Won Hazardous Industrial Waske b. (CIL CONTALIDIATIO DESERTS)				, , , , , , , , , , , , , , , , , , ,		<u>-</u> -
HATOR	C.			r			
*	d.						
	13. Additional Descriptions for Materials Listed Above (indicate waste s		44.8				,
	a.CL 7/9-3049 b.CL c.CL c.S-0000 OIL CONTAMINATIO DEPRES		14. Sp	eciai Handiir	ng Procedures	for Wastes Listed	Above .
	15. Special Handling Instructions and Additional Information Emergency Contact:	-	<u></u>		-	SKB Use Onl	у
	16. GENERATOR'S CERTIFICATION: I hereby declare that to proper shipping name and are classified, packed, marked according to applicable international and national government. Printed/Typed Name	and labeled and a	onsignme e in all re	ent are fully spects in p	and accurate and accurate and accurate accurate accurate and accurate accurate and accurate a	ely described a on for transport	by highway
T R	17. Transporter 1 Acknowledged of Receipt of Materials		Local -	and the second	mary - 77		h Day Year, '
RANSPOR	Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Materials	Signature Cary	r-Du	13.0	1 Alffan	Monti / (n Day Year
O F T E R	Printed/Typed Name 19. Discrepancy Indication Space	Signature				Montl	n Day Year
FAC!	i i					*	·
 Y	20. Facility Owner or Operator: Certification of receipt of non-		covered	by this Ma	nifest except	as noted in iter	n 19.
	Printed/Typed Name	Signature				Month	n Day Year



Non Hazardous Industrial Waste

65390

		T-1 0. (-			-				
*	Shipping Manifest	1. Generat	1 1	:PA ID No I	. (If an) I I	V) _		,	,	I. Pag	e 1 of	pag	je(s)
	3. Generator's Name, and Facility Address 5007	- /		<u> </u>	L	Ma	<u>i</u> iling Ad	ldress	St-10	P	J.77	5 11.11	AUG
	3. Generator's Name and Facility Address SULL Sulla S	e Complete State of the Complete State of the Complete State of the Complete State of the Complete State of the Co	<i>-1</i>									5 H. 11.	WI 5%
	4. Generator's Phone:	1495	J			Fay		JEFEA SPORTO				TH.MH:	· 医性复数
	5. Transporter 1 Company Name			7.			<u> </u>	re service	Jinganga ter	1.4 E. 2	<u>, 4,675</u> 73,675	the Best of BURSHAN A	<u> </u>
						Pho	one:						
	6. Transporter 2 Company Name	_		-				218-8	78-01	i j			
	7 Decimend Facility Manager 100						one:						
	7. Designated Facility Name and Site Address	SKB/S				nent	al, Ll	LC					
		761 M	_	•				ъ.	_		.=		
	8. U.S. DOT Description (including Proper Shippin	Cloque	t, MN	55/20	• •			Pho		218-8	378-01		
	6. 0.3. DOT Description (including Proper Shippin	g name)				ı	iners		10. Total		11. Unit	12 Waste F	
¥	a.				No.		Туре	Q	uantity		Wt/Vol	Shee	et#
G E	Non Hazardous Industrial Wester						ı		l I	1			
N E	WILLY ON THE AMERICAN THE THEORY OF THE	 .					1					_	
R A	b.	¥											
Т													
O R	C.												<u>-</u>
^ .													·
	d.									١			
					1)			1	1 1				
												:	
	13. Additional Descriptions for Materials Listed Above (Inc. a. CL	licate waste stre	am Approval	l # below)	14.	Speci	al Handi	ing Proc	edures	for Was	stes Listed	l Above	
	b. CL c. CL												
	d. CL CLAS-0030-QU, CONTACTION TED	Debeus -											
	15. Special Handling Instructions and Additional Inf	ormation								SKE	Use On	ly	
	Emergency Contact:									Load	# L		
		<u>. </u>					=:						
	16. GENERATOR'S CERTIFICATION: I hereby deeproper shipping name and are classified, packet	clare that the	contents	of this co	onsign e in all	ment	are ful	ly and a	condit	ely de	scribed a	above by	
	according to applicable international and nation	al governme	nt regula	tions.	المتسيعة والمارا	75°C	0010111	propor	oondie	011 101	папорог	r by mgmva	'
	Printed/Typed Name	***************************************	Signat	ure							— Mont	th /Days	Year,
T	17. Transporter 1 Acknowledged of Receipt of Mate	erials]	part Comment	- "			3:		المستشدة	' '	/	1'17
TRANSPORT	Printed/Typed Name		Signat	ure	وسيسي	e ·					Mont	th Day	Year
S			12757	<u> </u>	2	************	¥					f Day	
O R	18. Transporter 2 Acknowledgement of Receipt of N	/laterials	·										
É	Printed/Typed Name		Signati	ure							Mont	th Day	Year
	19. Discrepancy Indication Space		1								_		
F A													ļ
C													
L													
l T	20. Facility Owner or Operator: Certification of rece	eipt of non-ha	azardous	materials	cover	ed hv	this M	anifest	excen	as no	ated in ite	em 19	
Y	Printed/Typed Name		Signati			- ~ v				110	Mont		Year
			Jigrian		-							iii Day	rear

White - Return to Generator

Canary - Facility Copy



Shamrock Landfill Non Hazardous Industrial Waste

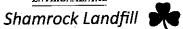
97.4	1. Generato	r's US EPA ID No	. (if any)			1. Pa	age 1 of	page(s)
Shipping Manifest		1 1 - 1		1	1 1			
3. Generator's Name and Facility Address			N	/lailing Ad	dress	1		
SUPERION WATER LITTE & POWER FRIL AVE A STEELOH AVE SUPERI 4. Generator's Phonebys (1882-1993)			F	(#(399) (8 H ax:	RIOR WA ULL AYR	THE.	LIGHT S ERIOR, 1	LANGER CO ALSISEO
5. Transporter 1 Company Name								
			F	Phone:				
6. Transporter 2 Company Name			F	Phone:				
7. Designated Facility Name and Site Address	SKB/Sh	amrock Env			LC			
		Highway 4:		,				
		, MN 55720			Phone:	218	-878-01	12
B. U.S. DOT Description (including Proper Shippin	ng name)	•	9. Con	tainers	_10.		11.	12.
	•		No.	Туре	Tota Quant		Unit Wt/Vol	Waste Profile Sheet#
a. Hen Hanndow Industrial Weste		· · · · · · · · · · · · · · · · · · ·						
(OIL IMPACTED SOIL/DESES)								
D.								
				.		<u>. </u>		
).			.			· · 1		
					·			
		4						
3. Additional Descriptions for Materials Listed Above (ndicata wasta etraer	n Annovel # helow	14 Sn	ecial Handi	ling Procedure	es for V	Vastes List <i>e</i>	d Above
a. CL b. CL ^C L 12-0049 OH, IMPACTED SCIL/I		ii , ipp, orai ii oolow,	III 5p	ooidi i laridi	mig i resocutiv	50 101 1		4,154,0
b. CL	ANDER ENLINE							
d. CL								
15. Special Handling Instructions and Additional In	nformation					SI	KB Use Or	ıly
Emergency Contact:						Lo	oad #	
		4.5						
 GENERATOR'S CERTIFICATION: I hereby deproper shipping name and are classified, pack according to applicable international and national	ed, marked, an	id labeled, and a						
Printed/Typed Name		Signature	1.00	را در المعمور	Je ^{gg}	j	⁾ Mor	4 6 W N S S
7. Transporter 1 Acknowledged of Receipt of Ma	terials	The state of the s	<u> </u>	30 May 19 19 19 19 19 19 19 19 19 19 19 19 19	The second the second	11-11-5		
Printed/Typed Name 1	,	Signature					Mor	nth Day 3
- Dake Englies		Constitution of the	A STATE OF THE STA					
8. Transporter 2 Acknowledgement of Receipt of	Materials							
Printed/Typed Name		Signature					Mor	nth Day Y
9. Discrepancy Indication Space	,							
		*		-				
20. Facility Owner or Operator: Certification of rec	ceipt of non-ha	zardous material	s covered	by this M	lanifest exc	ept as	noted in it	em 19.
Printed/Typed Name		Signature					Mor	nth Day Y
		-						



Non Hazardous Industrial Waste

Shinning Manifest	1. Generator's US EPA ID N	o. (if a	any)					1 . Pa	ige 1 o	f	page(s	3)
Shipping Manifest			1	1								
. Generator's Name and Facility Address	,		N	/lailing Ad								
STEERING WATER LIGHT & BYMAR I FILL AVE & STEERON AVE SUPERIO Generator's Phone: 23 248 448	IO HUMADA IORIT. N, WI MESO		F	90131 9 0131 ax:		Mari Lay	VAT EE	TES. Stu	CANELL BARN	rapc rapc	MERCIA MEMO)
. Transporter 1 Company Name		•										
		•	F	Phone:								
Transporter 2 Company Name			i	Phone:								
. Designated Facility Name and Site Address	SKB/Shamrock Env	viro	nme	ntal, L	LC	i ,						
	761 MN Highway 4											
	Cloquet, MN 55720]	Pho	ne:	218	-878-	-0112		
. U.S. DOT Description (including Proper Shipping	<u> </u>		. Cor	ntainers	Γ		10.		11		12.	
			No.	Туре			otal antii	ty	Un Wt/\		Waste Pro Sheet#	
				1		-		***				
* Hen Hazardous Industrial Wests (CH. IMPACTED COIL/DEBREE)												
•												
		-			-							
•			1			1 1	1	[
. '							ĺ					
•			L' -				•					
•												
		١,	4 6.	ecial Han	dling	Proc	adure	e for l	Maetos	Listed Ab	inve	<u> </u>
Additional Descriptions for Materials Listed Above (Ind. CL	iicate waste stream Approval # below).	· '	4. O	Acriai maii	amig	1 100	saure	3 101	· · · · · · · · · · · · · · · · · · ·			
a. CL b. CL ^T L1240012 OIL IMPACTED SOILAD!	MED RAIST											
c. CL		ļ										
d. CL 15. Special Handling Instructions and Additional Inf	formation				_	·		S	KB Us	e Only		_
Emergency Contact:								L	oad#			
					11			rately				
	-1		-:	ant ara f					MARCH		we hv	
proper shipping name and are classified, packet	ed, marked, and labeled, and	con:	signm n all r	nent are f espects i	ully a n pr	and a oper	cond	dition	for tra	nsport b	ove by ly highway	
16. GENERATOR'S CERTIFICATION: I hereby de- proper shipping name and are classified, packe according to applicable international and nation	ed, marked, and labeled, and	are in	signm n all r	nent are f espects i	ully a	and a oper	cond	dition	for trai	nsport b	ove by y highway	
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	ed, marked, and labeled, and	are in	signm n all r	nent are f	n pr	and a oper	cond	dition	for trai	nsport b	y nigriway	
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	ed, marked, and labeled, and nal government regulations. Signature	are in	signm n all n	nent are f	n pr	and a	cond	dition	for trai	nsport b	Day	
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Materials (1988)	ed, marked, and labeled, and nal government regulations. Signature	are in	signm n all r	nent are f	n pr	and a	cond	dition	for trai	Month	Day	-, <u>/</u>
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name	ed, marked, and labeled, and nal government regulations. Signature	s cons	signm n all r	nent are f	n pr	and a	cond	dition	for trai	nsport b	y nigriway	-, <u>/</u>
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name	ed, marked, and labeled, and nal government regulations. Signature erials Signature	are in	signm n all r	nent are f	n pr	and a	cond	dition	for trai	Month	Day	- <u>/</u>
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of International I	ed, marked, and labeled, and nal government regulations. Signature erials Signature	are in	signm n all r	nent are f	n pr	and a	cond	dition	for trai	Month	Day	-\ <u>/</u> <u>/</u> _
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of International Printed/Typed Name	ed, marked, and labeled, and nal government regulations. Signature erials Signature Materials	are in	signm n all r	nent are f	n pr	and a	cond	dition	for trail	Month ///	Day Day Day	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of International Printed/Typed Name	ed, marked, and labeled, and nal government regulations. Signature erials Signature Materials	s cons	signm n all r	nent are f	n pr	and a	cond	dition	for trai	Month ///	Day Day Day	<u> </u>
according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of	ed, marked, and labeled, and nal government regulations. Signature erials Signature Materials	s cons	signm n all r	nent are f	n pr	and a oper	cond	dition	for training	Month ///	Day Day Day	<u> </u>
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of International Printed/Typed Name	ed, marked, and labeled, and nal government regulations. Signature erials Signature Materials	s cons	n all r	nent are f	n pr	and a	Conc	dition	for train	Month ///	Day Day Day	<u> </u>
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of International Printed/Typed Name	ed, marked, and labeled, and nal government regulations. Signature erials Signature Materials	s cons	n all n	nent are f	n pri	and a oper	CONC	dition	for train	Month Month	Day Day Day	<u> </u>
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of International Printed/Typed Name 19. Discrepancy Indication Space	ed, marked, and labeled, and nal government regulations. Signature erials Signature Materials Signature	are ii	n all r	espects i	n pr	oper	cond	dition	l l	Month Month Month	Day Day Day	-\ <u>/</u> <u>/</u> _
proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of International Printed/Typed Name	ed, marked, and labeled, and nal government regulations. Signature erials Signature Materials Signature	are ii	n all r	espects i	n pr	oper	cond	dition	l l	Month Month Month	Day Day Day	<u> </u>





66952

Chinning Manifest	1. Generator	's US EPA ID No	. (if a	ny)				1.	Page	e 1 of		page(s	3)
Shipping Manifest													
. Generator's Name and Facility Address				٨	lailing Ad								
FUFFRICE WATER LIGHT & POWER LILL AVE. & STRISSH AVE. BUYER. Generator's Phone.	CO MENAL OR, WI MASS	VI. SUPST. O		F	\$1)PE 2215 F ax:	RIOI HLL	A.V.E	JE.	R LI LEGE	CATT S RIOT,), 290,14 VAI, 34	vier or Ker	į
Generator's Phone: Transporter 1 Company Name													
				F	Phone:		-		_				
. Transporter 2 Company Name													
	· .				Phone:				_				
. Designated Facility Name and Site Address		amrock Env		me	ntal, L	LC							
	** .	Highway 4:	5				_						
	Cloquet	, MN 55720				P)	hone	: 2	18-8	378-01	12		
. U.S. DOT Description (including Proper Shipping	ng name)		9.	Cor	ntainers		10 Tota	al		11. Unit	v	12. Vaste Pro	ofile
		·	N	o.	Туре		Quan			Wt/Vol		Sheet	
le ser region de la contrata de la STE-ser		-					,						
Hor Hozanious Industrial Waste (OIL IMPACTIO SOIL/DEBELS)													
The state of the s			+	<u> </u>					1				
•			1	ı			ı	ı	1				
											_		
			Γ.			Ī .					_		
h	·		╀┸	Щ.	 	+	!			-	<u> </u>		
• The second second second second second second second second second second second second second second second				I			l		1				
		•											
3. Additional Descriptions for Materials Listed Above (i	ndicate waste strea	m Approval # below)	14	l. Sp	ecial Han	dling P	rocedu	ires f	or Wa	stes Liste	ed Abov	e	
i.CL 5.CLI 19-2049 — OH. BAPACTED SOILA	Meris				•								
5. CL													
i. CL			\perp		,								
15. Special Handling Instructions and Additional I	nformation	٠.								B Use C	inly		
Emergency Contact:	•				.:				LOS	ad#	··		
		· .							L			_	
6. GENERATOR'S CERTIFICATION: I hereby d	eclare that the	contents of this	cons	ignm	ent are f	ully ar	nd acc	urat	ely d	lescribed	d above	e by highway	
proper shipping name and are classified, pack according to applicable international and nation	kea, markea, a onal governme	nu labeled, and a nt regulations.	ue IN 7	ali (aopecis i	n brol	pei GO	rull	J11 10	, adiisp	J. C D y		
Printed/Typed Name		Signature			The same of the sa				-	Mo	onth	Day	•
- Lileas History		Salara Market Salara Communication of the Communica	<u> </u>	N. Seek Side	ger <u>gang</u> an	49	200					Zil	1
17. Transporter 1 Acknowledged of Receipt of Ma	aterials	a service of an in the									,		
Printed/Typed Name	<u> </u>	Signature		,n							onth	Day	I &
18. Transporter 2 Acknowledgement of Receipt o	f Matariala	San San San San San San San San San San	The second second	ere ages	nest						1 1	žį" <u>} _</u>	į
	IVIALEITAIS	Signature				•••				NA.	onth	Day	
Printed/Typed Name		Signature				•						Lay	<u>L</u> _
19. Discrepancy Indication Space													
,													
		• .											
20. Facility Owner or Operator: Certification of re	eceipt of non-h	azardous materia	ils co	vere	d by this	Mani	fest e	ксер	t as	noted in	item 1	9.	
Printed/Typed Name		Signature									onth	Day	,
i initiar typod rianto									_				<u>L.</u>

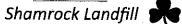
Pink - Transporter



Non Hazardous Industrial Waste

Shipping Manifest	1. Generator	r's US EPA ID No	. urany)	, ,		(4)	ge 1 of	7-	ge(s)
	'			 Mailing Ad	dress				
Generator's Name and Facility Address	en seg in segments of a const	to raine in month offerthe offertions		•		programa in	gengere ø.	alwiigtyenerie	/ Yen.
SUPERIOR WATER LIGHT & YOWER : FULL AVE. & STEEDERM AME, MILLERY Generator's Phone: The WAY MADE	TO WELLE M. WESLE	uesusti. G	· ·		rior wat hit ay b				\$ 1 m
. Transporter 1 Company Name									
				Phone:					
. Transporter 2 Company Name									
				Phone:					
. Designated Facility Name and Site Address		amrock Env		ental, Ll	LC				
		I Highway 4		-			A=	-	•
•		, MN 55720			Phone:	218-	-878-011		
. U.S. DOT Description (including Proper Shipping	g name)		9. Co	ntainers	10. Total		11. Unit	1 Waste	2. Profile
en en en en en en en en en en en en en e	_		No.	Type	Quanti		Wt/Vol		eet#
TOTAL IMPACTION SOUTABERIS									
Live boundaring and a service of the					1				
"			, ,			ı			
		•							•
					<u> </u>				
		•							
i.	•					1			
	•								
13. Additional Descriptions for Materials Listed Above (in	dicate waste strea	ım Approval # below)	14. S	pecial Hand	ling Procedure	es for V	/astes Listed	Above	
a. CL									
o. Click to the second of the	,				•				
d. CL									
15. Special Handling Instructions and Additional In	formation		_ `			SI	KB Use On	ly	
Emergency Contact:						Lo	oad#		
16. GENERATOR'S CERTIFICATION: I hereby de	eclare that the	contents of this	consignr	nent are fu	illy and accu	rately	described a	above by	
proper shipping name and are classified, pack according to applicable international and natio	ed, marked, a	nd labeled, and	are in all	respects ir	proper con	dition 1	for transpor	rt by highv	/ay
	governine	,	Late St. Bar.		7				
Printed/Typed Name		Signature		والمستحصرة	garage and a superior and the superior a		Mon	th Day	7 7
		<u> </u>	11000000	2, 12	- Law Superior			1 20	<u> </u>
17. Transporter 1 Acknowledged of Receipt of Mar	terials							4h D-1	/ / Y
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name	terials	Signature	ar Edward	f /	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			th Day	
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name		Signature	<u> </u>	f /	n i guyê ê		Mon	tn Day	100
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name		Signature Signature	And the second		A		Mon		
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name			Manager and	1 /	Service de la companya de la company				
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name					4. A.A.	<u> </u>			
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of			1.1.						
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name									
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name			and the second						
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name 19. Discrepancy Indication Space	Materials	Signature	***************************************				Mon	th Day	
17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	Materials	Signature	***************************************		Manifest exc	ept as	Mon	th Day	/ Y



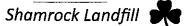


55954

Tarin bek zanajin 5	140	1 110 FD4 (D.)						1.4				<u> </u>	`
Shipping Manifest	1. Generato	or's US EPA ID I	NO. (IT	any)	1 1	1	ı	1.	Page	1 of		page(3)
3. Generator's Name and Facility Address					Mailing A	ddres	is						
SUFERIOR WATER LIGHT & POWE THIL AVE & STRESOM AVE SOVE 4. Generator's Phone	TR CO NEMA BOOK, WE SHE	OH 20 83 T. 20			SUP	EFIO	R W	KTR I SI	R LI	CHTE S JOK,	R POW MESER	MACK SO	À
5. Transporter 1 Company Name					Ψ	-						•	
					Phone:								
6. Transporter 2 Company Name					Phone:								
7. Designated Facility Name and Site Address	SKB/Sl	namrock En	vito			LC							
		l Highway											
		t, MN 5572				P	hone	e: 21	18-8	78-01	12		
8. U.S. DOT Description (including Proper Ship		,		. Co	ntainers	Ŧ	10			11.		12.	
				No.	Туре		Tot Quar		. 1	Unit Wt/Vol		ste Pro Sheet#	
a. 1850 Hazardone industrial Waste													
(OH, IMPACTED COLUMERIE)	No.												
b				L	, , , , , , , , , , , , , , , , , , ,			_ 1,	•				
C.				LL.	<u> </u>	<u> </u>							
			ľ										
d.							- 1	ı	'				
											-		
13. Additional Descriptions for Materials Listed Above	e (indicate waste strea	m Approval # below)	1	4. Sp	ecial Han	dling P	rocedu	ıres fo	r Was	tes Liste	d Above		
a. CL b. CEL-19-00AD OIL IMPACTION SOLL	AMERICA.		'										
c. CL					•								
d. CL 15. Special Handling Instructions and Additiona	Unformation	· .							OVD	llee O			
Emergency Contact:	· ·····Orritation								Load	Use O	niy	•	
									Loud				
16. GENERATOR'S CERTIFICATION: I hereby proper shipping name and are classified, pa according to applicable international and na	cked, marked, ar	nd labeled, and											
Printed/Typed Name		Signature		uy Astronomica	10	7				, Moi	nth [Day	Year
- 104113 13136	(<i>d</i>	The state of the s	1000 m	41.7°	SERVE PARTY AND AND AND AND AND AND AND AND AND AND	e godernoor d	ب _{در و} ه	e egiste g	est (m	$\perp f_{\perp}$	12		115
 Transporter 1 Acknowledged of Receipt of N Printed/Typed Name 	/laterials	Cionatura		*									
A CAPETA CAPETA	and the same	Signature	Ε.		4.		-			Moi	ntn L	Day	Year
18. Transporter 2 Acknowledgement of Receipt	of Materials			* .								. 	7
Printed/Typed Name		Signature								Moi	nth [Day	Year
19. Discrepancy Indication Space		<u>. </u>								1		1 !	
	·				-								
20. Facility Owner or Operator: Certification of	eceipt of non-ha	zardous materi	als co	verec	by this	Manif	est ex	cept	as no	ted in it	tem 19.		
Printed/Typed Name		Signature								Мог	nth C	Day	Year
										1 1			

Pink - Transporter





Shipping Manifest	1. Generate	or's US	EPA ID No	. (if any)	•		1. Pag	e 1 of	page	e(s)
3. Generator's Name and Facility Address					 Mailing Ad	dress				
				. '	_					
APPELIATE WATER LIGHT & POWER OF Generator's Phone! THISEN AVE. SUPERIOR	CHREA.	DH FL	BH.		aupm - Todas	PIUR WA	TER D	KALL &	POWERC	(
. Transporter 1 Company Name	Se Fair Delet	(C) (2			Fax: 1935	HALAVE.	3016	enin, s	71 3445U	يفياد منعنا الإح
,					Phone:					
. Transporter 2 Company Name		· · ·	 -		riionę.			:		
				ē	Phone:					
Designated Facility Name and Site Address	SKB/S	hamro	ck Env		ental, L	LC				
	761 M	N Hig	hway 4.	5	•			•		
	Cloque	t, MÑ	55720			Phone:	218-	878-011	12	
. U.S. DOT Description (including Proper Shipping	name)			9. Co	ntainers	_10.		11.	12.	
				No.	Туре	Total Quanti		Unit Wt/Vol	Waste Pi Sheet	
			•.						-	
Rechtscher industrial Weste (OIL Indipacted Soulaberris)					:					
]			
			1.0			1 1 1				
Additional Descriptions for Materials Listed Above (indic	ate waste stre	am Approv	al # below)	14. Sp	ecial Handl	ing Procedure	s for Wa	stes Listed	Above	
CL: CLEAR P-008 P OIL IMPACTION SOIL JUST	minter .									
CL	Established Control of									
CL	:						 			
 Special Handling Instructions and Additional Info Emergency Contact; 	rmation							B Use Onl	У	
		i.	. 4			é	Loa	.d #		
			<u>:</u>						<u></u>	
6. GENERATOR'S CERTIFICATION: I hereby declar proper shipping name and are classified, packed										
according to applicable international and national						p p. 0		. папорог		
Printed/Typed Name		Signa	iture	/	1/7			Mont	h Day	Ye
Transporter 1 Acknowledged of Receipt of Materi	iala	- Comment	<u> </u>	<u>C. C.</u>	J. J	Ball to the state of		_1/_1/	191	1/
Printed/Typed Name	اهام	Signa	turo				.		L 5	
Timodriypod Hallie		Jogna	uule					Mont	h Day	- Y∈ -
Transporter 2 Acknowledgement of Receipt of Ma	aterials	_								1
Printed/Typed Name		Signa	ture					Mont	h Day	Ye
Discrepancy Indication Space		l	•							
					-					
Facility Owner or Operator: Certification of receip	ot of non-ha	azardou	s materials	covered	by this M	anifest exce	ept as n	oted in ite	m 19.	
Printed/Typed Name		Signa					<u> </u>	Mont		Ye
Transcertypod Haine		Jigilia	eul d					IVIOLIL	Day	τ¢





3. Generator's Name and Facility Address SUPPLIED AND STORED AND SUPPLIED 4. Generator's Phone (1994) (1994) 5. Transporter 1 Company Name 6. Transporter 2 Company Name 7. Designated Facility Name and Site Address	SKB/S 761 M Cloque		ironme	Phone:	erde van Halave			CWE CO
SUPPRIOR WATER LIGHT A POWER OF THE AVE. SUPPRIOR AVE. SUP	SKB/S 761 M Cloque	hamrock Env N Highway 4	ironme	STOPEN 29 (5 La Fax: Phone:	erde van Halave			
i. Generator's Phone Mark Mark Mark Mark Mark Mark Mark Mark	SKB/S 761 M Cloque	hamrock Env N Highway 4	ironme	ence:			OP, 748	9.8.980 <u> </u>
Transporter 1 Company Name Transporter 2 Company Name	761 M Cloque	N Highway 4	ironme	^o hone: ^o hone:				
Transporter 2 Company Name	761 M Cloque	N Highway 4	ironme	Phone:				
	761 M Cloque	N Highway 4	ironme	Phone:				
	761 M Cloque	N Highway 4	ironme					
Designated Facility Name and Site Address	761 M Cloque	N Highway 4	ironme					
Designated Facility Name and Site Address	761 M Cloque	N Highway 4		ntal. LI				
	Cloque		5		LC.			
	Cloque							
	_	•			Phone:	218-87	8-0112	1
. U.S. DOT Description (including Proper Shipping	•			tainers	10.		11.	12.
		-	No.	Time	Total	U	Init :/Vol	Waste Profile Sheet#
· Non Huzanicam buhashisi Waste	÷.;	····	NO.	Туре	Quantit	y VVI	/VOI	2LIGET#
· HAN ENZARIOS RABINAS AVESE (OL EMPACTIO SOLIDENSES)					i + j			
and the second s								
		:		'				
			111					
		-			1			
			111					
			 					
			1					
	. •	*						
. Additional Descriptions for Materials Listed Above (Indi	cate waste stre	am Approval # below)	14. Sp	L ecial Handli	ing Procedure	l I s for Wastes	Listed At	
CULA 2-0047 OIL, INTERCTIED SCHLADI	BRIS		'		·			
CL CL								
CL		*						
5. Special Handling Instructions and Additional Info	ormation		l			SKB U	se Only	
Emergency Contact:						Load #	_	
					•			
CENERATORIS CERTIFICATION. I hombis des				الديك منية		-4-1	21	
 GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packet 								
according to applicable international and national	al governme	ent regulations.	منهو العو	r e	· · ·			
Printed/Typed Name		Signature	Career Co.	1	7		Month,	Day ;
LUKAS VIXUR		-	(all Carrier	A BOOK SAN	C		<u> 44</u>	1/1/1/
Transporter 1 Acknowledged of Receipt of Mate	rials							٠
Printed/Typed Name		Signature	,				Month	Pay _{Cy}
Transporter 2 Acknowledgement of Receipt of M	lateriale	1 8/1/6.8/1	man () and ()	Land French	·	İ	/ /	
	iatoriais	Signatur-						
Printed/Typed Name		Signature				ı	Month	Day \
Discrepancy Indication Space							<u> </u>	1.
					d.			
D. Facility Owner or Operator: Certification of recei	int of non-h	azardous material	s covered	by this M	anifest even	nt as noto	d in item	19
· · · · · · · · · · · · · · · · · · ·	ipcornon-tr		COACIEC	∸ N H H P IVI	annest exce	hr as linte		
Printed/Typed Name		Signature				1	Month	Day



Non Hazardous Industrial Waste

Shipping Manifest	1. Generato	or's US EPA ID No	. (if any)		I F	1. Page 1	of	page(s)
3. Generator's Name and Facility Address SUPERIOR WATER LIGHT & FOWER		<u> </u>	<u> </u>	_ ∕Iailing Ad				
- SUPERIOR WATER LIGHT A POWER C - HILL AVE A STEERE AVE SUPERIOR	O HEIDE	DIE BUESTE.			PLOT WAS			
4. Generator's Phone 18-135-31-14	C. SALE TAPPER	in i			allenva	earapaereac	州, 京庆合臣	* ()
5. Transporter 1 Company Name			<u> </u>	ax:				
a number of a Company Name								
C TN			F	Phone:				
6. Transporter 2 Company Name								
7. Designated Facility Name and Site Address	QTTD (01	1 =		Phone:				
. Designated Facility Name and Site Address		namrock Envi		ntal, Ll	LC			
		N Highway 45	•					
		t, MN 55720			Phone:	218-878	3-0112	
8. U.S. DOT Description (including Proper Shipping	name)	:	9. Cor	ntainers	1 0. Total		1. nit Wa	12. aste Profile
			No.	Туре	Quantit		/Vol	Sheet#
L. Mon Hammlous industrial Waste								
(CIL IMPACTED SOIL/DEBRIE)		$(x_1, \dots, x_n) \in \mathcal{C}$						
		· ·						
).								
<u>.</u>		2.7						
			1		1			
l					1 1 1			
		1.20						
3. Additional Descriptions for Materials Listed Above (indic ১ টোলে মাজ সভাতে আলোন সময় সাম সাম্প্রাস্থ্য সংস্কৃতি সংক্রম	ate waste strea	m Approval # below)	14. Sp	ecial Handl	ling Procedures	s for Wastes	Listed Above	
a. CE J. 19-0149 OU. IMPACTED SOUADE b. CL	DEAD							
c. CL		•						
d. CL		1,1						
15. Special Handling Instructions and Additional Info	rmation					SKB Us	e Only	
Emergency Contact:						Load #		
								*
 GENERATOR'S CERTIFICATION: I hereby decl. proper shipping name and are classified, packed according to applicable international and nationa 	, marked, ar	nd labeled, and ar nt regulations.	onsignme e in all re	ent are ful spects in	ly and accura proper cond	ately descri ition for tra	ibed above t nsport by hi	ghway
Printed/Typed Name		Signature	marked and the second	A. Carrier	/		Month	Day Y
17. Transporter 1 Acknowledged of Receipt of Mater	ials	prom		d constitue	. Supplied thing	a solice.	17 1	1/ 1
Printed/Typed Name	7	Signature	147 i	/		· 1	Month	Day Y
18. Transporter 2 Acknowledgement of Receipt of Ma	aterials	1 1.00 1.00 1.00 1.00 1.00 1.00 1.00 1.	4.7				1/ 1	
Printed/Typed Name		Signature					Month	Day Y
· ····································						1		
9. Discrepancy Indication Space								
		· ·						
		e de la companya de l						
		•						
				-				
Facility Owner or Operator: Certification of receipt	pt of non-ha	zardous materials	covered	by this M	lanifest exce	pt as noted	in item 19.	
Printed/Typed Name		Signature		-	. '			Day Y
· mitem typed radine		Signature						Jay 1



Non Hazardous Industrial Waste

Shipping Manifest	1. Genera	tor's US EPA ID No	. (if i	any)				-	f, Pa	ge 1 of	page	e(s)
. Generator's Name and Facility Address			<u>L</u>		 /lailing A	ddro						
STEELAR VALER LIGHT & PO'N	er co nemi	ada subay.		IV.				AT.	EF. Í	a tedi.	FOWER C	O
HILLAVE A STRIBER AVE SUPE											VI 54.880	
Generator's Phone				F	ax:							
. Transporter 1 Company Name												
·				F	Phone:							
. Transporter 2 Company Name					•							
				F	hone:						<u> </u>	
. Designated Facility Name and Site Address	SKB/S	hamrock Envi	iroı	nme	ntal, L	LC						
		N Highway 45	5							•		
	Cloque	et, MN 55720				I	Phon	e: 2	218-	878-01	12	
. U.S. DOT Description (including Proper Ship	ping name)	-	9.	Cor	itainers	-		0.		11.	12.	
			, N	lo.	Туре	ļ		otal untity		Unit Wt/Vol	Waste P Shee	
· Mon Mazandous Industrial Wasto					.,,,,,	 				1		
(OIL IMPACTIO SOIL/DEERIS)				. [1			
			Ш			ļ						
		*,										
				1								
			,	ı	ı	.		1	1			
· · · · · · · · · · · · · · · · · · ·					- 1		<u> </u>					
				ļ				1	ı			
				٠.	-							
3. Additional Descriptions for Materials Listed Above		eam Approval # below)	14	4. Sp	ecial Hand	dling I	Proced	lures	for W	astes Listed	Above	
. CLOL 19-0049 OIL IMPACTED BOIL . CL	alaels 213											
. CL												
. CL												
Special Handling Instructions and Additiona Emergency Contact:	I Information								SK	B Use On	ly	
Emergency Contact.	*								Lo	ad#		
6. GENERATOR'S CERTIFICATION: I hereby	declare that the	e contents of this c	onsi	ignme	ent are fu	ılly a	nd ac	curat	tely d	lescribed a	bove by	
proper shipping name and are classified, pa according to applicable international and na	cked, marked, a	and labeled, and ar	e in	all re	spects ir	ı pro	per co	onditi	ion fo	or transpor	t by highway	1
	uonai governini		Sept har									
Printed/Typed Name		Signature		and the second		ζ				Mont	h Day	Ye
7. Transporter 1 Acknowledged of Receipt of N	/aterials	I proportion of the same		V _{oge} to	, e							1/
Printed/Typed Name		Signature	5 1	Alaka Salaha Salaha Salaha Salaha Salaha Salaha Salaha Salaha Salaha Salaha Salaha Salaha Salaha Salaha Salaha	And the second second		` <u>`</u>	a district	, , e.	Mont	h Day	V.
Landred toder out	•	Olgridation	A STATE OF THE STA	alang da kanada kanada Marang da kanada kanada kanada kanada kanada kanada kanada kanada kanada kanada kanada kanada kanada kanada ka	and the second s	one collection	مسرمسر الم	Charle		IVIONI }	th Day	
8. Transporter 2 Acknowledgement of Receipt	of Materials	1112		. 2944	,,,,,,							
Printed/Typed Name		Signature								Mont	h Day	Υe
		1			·							
9. Discrepancy Indication Space												
•												
		· .										
0. Facility Owner or Operator: Certification of a	receipt of non-h	nazardous materials	CO	vered	by this I	Mani	fest e	хсер	t as r	noted in ite	m 19.	
Printed/Typed Name		Signature								Mont	h Day	Ye
										1 1	- i'	



Non Hazardous Industrial Waste

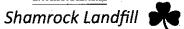
Shipping Manifest	1. Generator	's US EPA ID No.	(if any)			1.	Page 1	of	p	age(s)
		<u> </u>			-					
, Generator's Name and Facility Address	and any in the terms of the letter	THE PRINCIPLE STAIR	IV	lailing Ad	aress 21012 VW	: 1450 <u>51</u> 1	o Tans	T 3. 1	HINAPER) (***)
DUPERIOR WATER LIGHT & POWER'S HILL AVE & STINGEN AVE. SHIERIO	CAPREMAIA W CON EARS	all alliels.			LLAVI					
. Generator's Phone: 18/355/3191	The second second second	<i>.</i>	F	ax:	alebatan it was a si	to 5		, -:		
. Transporter 1 Company Name										
	·		-	hone:						
T O Co Nome				TIONE.						
. Transporter 2 Company Name				. .						
The Address of the Ad				hone:						
'. Designated Facility Name and Site Address		amrock Envi		ntai, Li	LC					
	761 MN	Highway 45								
	Cloquet,	, MN 55720			Phone	e: 21	18-878	8-011	2	
B. U.S. DOT Description (including Proper Shipping	g name)	·. 1	9. Cor	tainers	10).	1	1.		12.
6.6. 20. 2006, parti (· .		No.	Туре	Tot Quai			Init :/Vol		e Profil- heet#
			INO.	Type	Guai	Tity		-		
· Flow Hezerdone Industrial Numb			1 1		1 !	1	1			
(OIL IMPACTED SOULDERRIS).										
<u> </u>							1			
.			1 1	,	1 1	1				
										
			1	. ,	1 1	1				
<u> </u>							'			
			1 1	1		1	1			
3. Additional Descriptions for Materials Listed Above (in	rdicate waste stress	m Approval # helow)	14. Sr	ecial Hand	lling Proced	ures fo	or Waste	s Listed	Above	
a. CL_12-0049 OIL IMPACTED SOB./0										
b. CL										
c, CL		1,						,		
d. CL			L				21/2			
15. Special Handling Instructions and Additional In	iformation	•		•				Jse Oni	У	
Emergency Contact:							Load #	*		
								٠,		
				ent are fu	illy and ac	curate	ely desc	ribed a	bove by	i
16. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, pack according to applicable international and natio	ed, marked, an	nd labeled, and ar	onsignm e in all r	espects ir	proper co	onditio	on for tr	anspor	t by high	ıway
proper shipping name and are classified, pack according to applicable international and natio	ed, marked, an	nd labeled, and ar nt regulations.	onsignme in all r	espects ir	proper co	onditio	on for tr	anspor Mont	L by High	iway ay
proper shipping name and are classified, pack according to applicable international and nation	ed, marked, an	nd labeled, and ar	onsignme in all re	espects in	proper co	onditio	on for tr	anspor	L by High	iway
proper shipping name and are classified, pack according to applicable international and nation	ed, marked, an nal governmer	nd labeled, and ar nt regulations.	onsignme in all re	espects in	proper co	onditio	on for tr	anspor	L by High	iway
proper shipping name and are classified, pack according to applicable international and natio Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Ma	ed, marked, an nal governmer	nd labeled, and ar nt regulations.	onsignme in all m	espects in	proper co	onditio	on for tr	anspor	h D	iway
proper shipping name and are classified, pack according to applicable international and natio Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name	ed, marked, an nal governmer	nd labeled, and ar nt regulations.	onsignme in all m	espects in	n proper co	onditio	on for tr	Mont	h D	ay
proper shipping name and are classified, pack according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name	ed, marked, ar nal governmer terials	nd labeled, and ar nt regulations.	onsignme in all re	espects in	n proper co	ondition	on for tr	Mont	h D	ay
proper shipping name and are classified, pack according to applicable international and national Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of	ed, marked, ar nal governmer terials	nd labeled, and arnt regulations. Signature Signature	onsignme in all m	espects in	n proper co	ondition	oń for tr	Mont	th D	ay
proper shipping name and are classified, pack according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name	ed, marked, ar nal governmer terials	nd labeled, and ar nt regulations.	onsignme in all m	espects in	n proper co	ondition	on for tr	Mont	th D	ay ay ay ay
proper shipping name and are classified, pack according to applicable international and nation. Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	ed, marked, ar nal governmer terials	nd labeled, and arnt regulations. Signature Signature	onsignme in all m	espects in	n proper co	ondition	oń for tr	Mont	th D	ay ay ay ay
proper shipping name and are classified, pack according to applicable international and nation. Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	ed, marked, ar nal governmer terials	nd labeled, and arnt regulations. Signature Signature	onsignme in all m	espects in	n proper co	ondition	on for tr	Mont	th D	ay ay ay ay
Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of	ed, marked, ar nal governmer terials	nd labeled, and arnt regulations. Signature Signature	onsignme in all m	Akung	n proper co	ondition	on for tr	Mont	th D	ay ay ay ay
proper shipping name and are classified, pack according to applicable international and nation. Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	ed, marked, ar nal governmer terials	nd labeled, and arnt regulations. Signature Signature	onsignme in all m	espects in	n proper co	onditio	on for tr	Mont	th D	ay ay ay ay
proper shipping name and are classified, pack according to applicable international and nation. Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	ed, marked, ar nal governmer terials	nd labeled, and arnt regulations. Signature Signature	onsignme in all m	espects in	n proper co	ondition	on for tr	Mont	th D	ay ay ay ay
proper shipping name and are classified, pack according to applicable international and nation Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name 19. Discrepancy Indication Space	ed, marked, ar mai governmer terials Materials	signature Signature Signature	e in all r	espects in	n proper co	naiti	on tor tr	Mont / /	t by high	ay ay ay ay
proper shipping name and are classified, pack according to applicable international and nation. Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	ed, marked, ar mai governmer terials Materials	signature Signature Signature	e in all r	espects in	n proper co	naiti	on tor tr	Mont / /	t by high	ay ay ay ay



Non Hazardous Industrial Waste

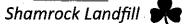
Shipping Manifest	1. General	tor's US EPA ID No	. (if any)			1. Pag	e 1 of	page(s)
3. Generator's Name and Facility Address			1 1	Apilina Ad				
SUPERIOR WATER LIGHT & WWEE	TYN MWENT	- 17-17/ NYS 18745745		lailing Ad العادية		racon i	FORTY A	POWER CO
HOLLAVE & STATSWAAVE OUTTOIN	DR. W. 346	en var i sam i misaren. Sekta			ELL AVY.			
. Generator's Phone \$18 - 335 - 340 f			F	ax:	antical and a second	CITAL E AD	FilthdThay 2	2 4 1 5 1 4 5 1 5 5 5 5 5 5 5 5 5 5 5 5 5
. Transporter 1 Company Name								
)h				
Transporter 2 Company Name			- F	hone:				
. Iransporter 2 Company Name	•							
Decimated Facility Name and Olive Address."		· · · · · · · · · · · · · · · · · · ·		Phone:				****
Designated Facility Name and Site Address	SKB/S	hamrock Env	ironme	ntal, LI	LC			
	761 M	N Highway 4:	5					
	Cloque	et, MN 55720	•	i	Phone:	218-8	378-01	12
. U.S. DOT Description (including Proper Shippin	-		9. Con	tainers	10.		11.	12.
	,				Total		Unit	Waste Profile
	· · · · · · · · · · · · · · · · · · ·		No.	Type	Quantit	У	Wt/Vol	Sheet#
· Hen Hezardevs Indinirial Wante					1 1 1			
(CIL IMPACTIO SCIL/DEFERIS)	100							
	-							
							1	
] , ,]					
		A STATE OF THE STATE OF						
			<u> </u>					
			, ,	,	1 1 1	1		
3. Additional Descriptions for Materials Listed Above (inc	dicata wanto atra	om Annoved # baland	14 85		ng Procedure:	n fou litter		Abaya
CLITA COAS OF THE WATER THE BOARD		am Approval # Delow)	14, Sp	ciai manuii	ng Procedure:	S IOF Wat	sies Listeu	Annye
. CL	00.1100a * +41 Your 70c*							
. CL								
. CL		· .						
5. Special Handling Instructions and Additional In	formation					SKE	Use Onl	У
Emergency Contact:						Load	d#	
8. GENERATOR'S CERTIFICATION: I hereby de	alara that the			6.411				
proper shipping name and are classified, packet	ciare mai me ed. marked. a	e contents of this c and labeled, and a	onsignme e in all re:	ent are tuil spects in i	y and accura proper cond	ately de ition for	scribed a transpor	bove by t hv highway
	nal governme	ent regulations.	-, •				шшири	, g,
according to applicable international and nation	3 - 1 - 1 - 1 - 1	. •					N.A	h Day Y
according to applicable international and nation		Signature	<u> المحمود م</u> المحمود المحمود ال	17			Mont	h Day Ye
according to applicable international and nation Printed/Typed Name		Signature	a jar	12	A CONTRACT OF THE PROPERTY OF			- 1 / + 7 / /
Printed/Typed Name		Signature	T.	12	- Allendary of			<u> </u>
according to applicable international and nation Printed/Typed Name COSTA SOCIAL 7. Transporter 1 Acknowledged of Receipt of Material		The same of the sa	Comment of the second	17. 5	The state of the s		1 ^d	h De 2
Printed/Typed Name		Signature Signature	A. J.	17. 5.	The state of the s		Mont	h Day) Y
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Company of the Printed/Typed Name Printed/Typed Name	erials	The same of the sa		172	The state of the s		1 ^d	h Da() Y
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name Printed/Typed Name Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I	erials	Signature	Access of the second	12 2	The second secon		Mont	
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Company of the Printed/Typed Name Printed/Typed Name	erials	The same of the sa			The state of the s		1 ^d	
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	erials	Signature		<u> </u>			Mont	
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	erials	Signature		<u> </u>	- Control of the cont		Mont	
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	erials	Signature		12 52			Mont	
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials (Acknowledged of Receipt of Materials) 8. Transporter 2 Acknowledgement of Receipt of I	erials	Signature		<u> </u>	The same of the sa		Mont	
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	erials	Signature	Control of the second s	12 22			Mont	
Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Acknowledged of Receipt of Material Acknowledgement of Receipt of I Printed/Typed Name Discrepancy Indication Space	erials Materials	Signature		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \			Mont Mont	h Day Ye
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Acknowledged of Receipt of Material Acknowledgement of Receipt of I Printed/Typed Name	erials Materials	Signature	covered	by this Ma	anifest exce	pt as no	Mont Mont	h Day Y





Shipping Manifest	1. Generator's US EPA ID No	o. (if any)	1. Page	e 1 of page(s)
Generator's Name and Facility Address SUPERION WATER LIGHT A FOWER BILL AVE. & SPEEDING AND BURER Generator's Phone 15-333-3101				GET & POWER CO NOP., WI 34880
. Transporter 1 Company Name		Phone:		
. Transporter 2 Company Name				
Designated Facility Name and Site Address	SKB/Shamrock Env 761 MN Highway 4 Cloquet, MN 55720	5	LC Phone: 218-8	278-0112
L. U.S. DOT Description (including Proper Shippin		9. Containers No. Type	10. Total Quantity	11. 12. Unit Waste Profile Wt/Vol Sheet#
· Wil Harankos Industrial Wiske (OIL IMPAC IN SOLADEBRIS)				
3. Additional Descriptions for Materials Listed Above (in L. CL) 15-0049 OIL BAPACTED SOIL (C. CL) . CL		14. Special Handl	ing Procedures for Wa	stes Listed Adove
 Special Handling Instructions and Additional In Emergency Contact: 	formation			3 Use Only d #
GENERATOR'S CERTIFICATION: 1 hereby de proper shipping name and are classified, pack according to applicable international and natio	ed, marked, and labeled, and a	consignment are ful tre in all respects in	ly and accurately de proper condition for	escribed above by r transport by highway
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials (1997)	Signature			Month Day Y
Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of	Signature		de de la companya de la companya de la companya de la companya de la companya de la companya de la companya de	Month Day Y
Printed/Typed Name	Signature			Month Day Y
19. Discrepancy Indication Space				
20. Facility Owner or Operator: Certification of rec	ceipt of non-hazardous materia	ls covered by this M	lanifest except as n	oted in item 19.
Printed/Typed Name	Signature	 		Month Day Y





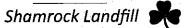
Shipping Manifest	1. Generate	or's US EPA ID No). (if any)	1		1	. Pag	e 1 of	pag	e(s)
Generator's Name and Facility Address			<u> </u>	 Mailing A	ddress					
MATERICA WATEL LISHT & FOWER	RICH MEMA	Du Mubat.	•	MP	RICE				POWER (30)
MILLAVE & STEVEN AVE DUPPE	10E, WI 548	40			HILL A	/ II. S	(PE)	rior, t	MESSAS IM	
. Generator's Phone(১৯-৩৩৯-১৮) . Transporter 1 Company Name				Fax:						
Transportor Toompany Hame										
alteration of	:		······································	Phone:						
Transporter 2 Company Name	•									
Designated Facility Name and Site Address		· · · · · · · · · · · · · · · · · · ·		Phone:						
Designated Facility Name and Site Address		namrock Env		ental, L	LC					
		I Highway 4:	5	•						
		, MN 55720			Phor	ne: 2	18-8	378-01	12	
U.S. DOT Description (including Proper Shippi	ng name)		9. Co	ontainers		10.		11.	12	
			No.	Туре		otal antity		Unit Wt/Vol	Waste F Shee	
Non Hazardone Industrial Waske				1						
CALHAPACTED SOLDDEBRIS)				1						
				<u> </u>						
			1 1		, ,	ı				
	•									
							-			
			111	1.1						
4										
. Additional Descriptions for Materials Listed Above (i		m Approval # below)	14. S	pecial Hand	dling Proce	dures f	or Was	stes Listed	Above	
CL 19-0049 OIL IMPACTED SOLES	LWB KIB									
CL	÷			** .						
CL	<u>.</u>		-							
i. Special Handling Instructions and Additional I	nformation						SKB	Use Onl	iy	
Emergency Contact:				-			Load	#		
							1			
GENERATOR'S CERTIFICATION: I hereby d	eclare that the	contents of this c	onsignn	nent are fu	illy and ac	curat	ely de	scribed a	above by	
proper shipping name and are classified, pack	ked, marked, ar	nd läbeled, and ar	e in all r	espects in	proper c	onditi	on for	transpor	t by highway	/
	aren Anacı ili ilel	it regulations.			- 2					
according to applicable international and nation								Mont	h Day	Ye
according to applicable international and nation		Signature	4	g to good	Complete Service	:		· · · · · · · · · · · · · · · · · · ·		1 77
according to applicable international and national and national and national architecture and printed/Typed Name Transporter 1 Acknowledged of Receipt of Markovitational and national architecture.		Signature	4.	17	(Au	3				\perp
according to applicable international and national and national and national architecture and printed/Typed Name Transporter 1 Acknowledged of Receipt of Marketine and national architectures are according to applicable international and national architectures are according to applicable international and national architectures are according to applicable international and national architectures are according to applicable international and national architectures are according to applicable international and national architectures are according to applicable international and national architectures are according to applicable international and national architectures are according to applicable international and national architectures are according to a possible ac			C.	199	C. Ass.	3				
Printed/Typed Name Pransporter 1 Acknowledged of Receipt of Ma		Signature Signature		22	C. Ass.			Mont		
according to applicable international and national architectors are printed/Typed Name Transporter 1 Acknowledged of Receipt of Market Printed/Typed Name	aterials			27	C. Ass.	3		Mont		
according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to a possible international according to a possible int	aterials			<u> </u>	(3		Mont	h Day	Ye
according to applicable international and na	aterials	Signature		1771 271	1 Ass.	3		//	h Day	Ye
according to applicable international and na	aterials	Signature)//)/)	1 Ass.	3		//	h Day	Ye
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name 9. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	aterials	Signature		<u> </u>	- A	3		//	h Day	Ye
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of	aterials	Signature			- Ass.			//	h Day	Ye
according to applicable international and na	aterials	Signature		177 177	- A			//	h Day	Ye
according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to a printed/Typed Name Printed/Typed Name Printed/Typed Name	aterials	Signature			- An.	3		//	h Day	Ye
according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international and national according to applicable international according to applicable international according to a possible int	aterials F Materials	Signature Signature	a covere	d by this N	Manifest e	xcept	as no	Mont	h Day	Ye



Non Hazardous Industrial Waste

Shipping Manifest	1. Generator's US EPA ID N	o. (if any)			1. Page 1 of	page(s)
Generator's Name and Facility Address SUPERIOR WATER LIGHT & POWER HILLAYE & STINSON AVE SUPERIOR						EPOWER (SO)
. Generator's Phone: 18-353-3191	they was interested	Fa		ulio Avu,	umenuk,	AAY 19 4/44/11
Transporter 1 Company Name						
. Transporter 2 Company Name		Ph	one:			
, management is company management		Ph	one:			
Designated Facility Name and Site Address	SKB/Shamrock Env		tal, L	LC		
	761 MN Highway 4		•	D1	N10 070 01	110
. U.S. DOT Description (including Proper Shipping	Cloquet, MN 55720	9. Conta	inore	Phone: 2	218-878-01	12.
. 0.0. Do i Description (moldaing riope) Shipping	у пашеу	1	Туре	Total Quantity	11. Unit Wt/Vol	Waste Profile Sheet#
Mon Hecordous Industrial Wester (OIL IMPACTED SOIL/DEERIS)						
			:			
•						
	• .			.		·
3. Additional Descriptions for Materials Listed Above (inc. CL-1,19-(049 OIL TAPACTED SOIL/D) CL CL CL CL		1-т. Орес	ац палу	lling Procedures	TOT VVISICS LISTO	AL ALLOYO
Special Handling Instructions and Additional Inf Emergency Contact:	ormation				SKB Use O	nly
er en en en en en en en en en en en en en						
 GENERATOR'S CERTIFICATION: 1 hereby dec proper shipping name and are classified, packe according to applicable international and nation 	d, marked, and labeled, and a					
Printed/Typed Name	Signature		12	, etc.	Мо	nth Day Ye
7. Transporter 1 Acknowledged of Receipt of Mate	erials	il day and the second		New of		1 1 1 1 1 1 1 1
Printed/Typed Name	Signature	And for	معمور منازع مساور	and a contract and the second recognitions	Mo	nth Day Ye
8. Transporter 2 Acknowledgement of Receipt of N					ė*	<i>₹</i>
Printed/Typed Name	Signature				Mo	nth Day Y∈ 〕 i I
9. Discrepancy Indication Space	· · · · · · · · · · · · · · · · · · ·					
				4		
						
0. Facility Owner or Operator: Certification of rece	eipt of non-hazardous materia	s covered b	y this N	Manifest excep	ot as noted in i	tem 19.





Shipping Manifest	1. Generato	r's US EPA ID No.	(if any)			1. Pag	ge 1 of	pag	e(s)
3. Generator's Name and Facility Address SUPERIOR WATER LIGHT & POWER DILL AVE & STIMSEN AVE SUBERF								: POWER (ML 34690	30
5. Transporter 1 Company Name		: '						***************************************	
5. Transporter 2 Company Name				Phone:					
7. Designated Facility Name and Site Address	SKB/Sh	namrock Envi		hone: ntal, LL	C				
		l Highway 45 s, MN 55720	-		Phone:	218-	878-01	12	
3. U.S. DOT Description (including Proper Shippin	ng name)		9. Cor No.	tainers Type	10. Total Quanti		11. Unit Wt/Vol	12 Waste F Shee	rofile
* Non Harmolous Industrial Weste (OIL: IMPACTED SOIL/DEBRIS)	:								
			·			h <u></u>			
3. Additional Descriptions for Materials Listed Above (i - CL _{CL 19} -0049 OR. IMPACTED) SOILA - CL - CL		m Approval # below)	14. Sp	ecial Handli	ng Procedure	es for W	astes Liste	d Above	
Special Handling Instructions and Additional In Emergency Contact:	nformation			<u> </u>			B Use Or ad #	nly	
6. GENERATOR'S CERTIFICATION: I hereby d proper shipping name and are classified, pack according to applicable international and nation	ked, marked, ar	nd labeled, and ar	onsignm e in all re	ent are full espects in	y and accur proper cond	rately o	lescribed or transpo	above by ort by highwa	У
Printed/Typed Name		Signature	· Japanese ·	part of the land	A Commission of the Commission	esp.	Mor	nth/ Day	/ /Ye
7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of		Signature	y Marie	Berry	1 stylin		Mor / /	oth Day	Ye
Printed/Typed Name		Signature					Mor	nth Day	Ye
9. Discrepancy Indication Space									21
20. Facility Owner or Operator: Certification of re	ceipt of non-ha	zardous materials	covered	by this M	lanifest exc	ept as	noted in it	em 19.	
Printed/Typed Name	· · · · · · · · · · · · · · · · · · ·	Signature					Mor	nth Day	Ye



Non Hazardous Industrial Waste

Shipping Manifest	1. Generat	or's US EPA ID N	o. <i>(if ar</i>	i <i>y)</i>]		1. Pa	ge 1 of	page(s)
3. Generator's Name and Facility Address SUPERIOR WATER LIGHT & POWER HELL AVE. & STRISEN AVE. BUVER						MOR:			DIFT &	POWER CO
4. Generator's Phone®(&-355-332)	- control of the second			F	ая (а т.: • ax:	are drugger of the	er sin n	4 "K & 11	mana Salahang Wi	2 A
5. Transporter 1 Company Name									•	
6. Transporter 2 Company Name	· · ·			F	Phone:					
or manapartor 2 dompany manie				F	hone:				•	
7. Designated Facility Name and Site Address	SKB/S	hamrock En	/irom			LC				
	761 M	N Highway 4	5							
		t, MN 55720				Pho	ne: 2	218-	878-011	.2
8. U.S. DOT Description (including Proper Shipping)	ng name)		9.	Con	tainers		10. Total		11. Unit	12. Waste Profile
· · · · · · · · · · · · · · · · · · ·			No		Туре		uantity	'	Wt/Vol	Sheet#
a. Non Hazardeus industrial Waste (CIL IMPACTED SOULDEERIS)			!							
6.										
	•									
G. · ·				1						
		* ************************************								
d		· · ·		L.					+ +	
								1		
13. Additional Descriptions for Materials Listed Above (In		· · · · · · · · · · · · · · · · · · ·		Й					astes Listed	
a. CLUI 19-0049 OIL IMI CUED SOIL II b. CL c. CL		аш хррочаг # овочу	17.	Оре	sciai (Tai)u	nig Fioc	edules	IOI VV	asies Listeu	ADOVE
 d. CL 15. Special Handling Instructions and Additional Ir Emergency Contact: 	nformation								B Use Onl	у
		•								
16. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, pack according to applicable international and natio	ed, marked, a	and labeled, and a ent regulations.								
Printed/Typed Name		Signature	مریز میده. مریز میده	are chief to	, · • • • • • • • • • • • • • • • • • •	1	2		Mont	h Day `
17. Transporter 1' Acknowledged of Receipt of Ma	terials	-	STEEL SERVICE STREET	res.F	e ^r		·/	E francisco p	1 / 1/	
Printed/Typed Name		Signature	the contract	<i>y</i>	ple.	id de			Mont	h Day \
18. Transporter 2 Acknowledgement of Receipt of	Materials				,					
Printed/Typed Name		Signature							Mont I	h Day `
19. Discrepancy Indication Space									1 1	
	•									
			•	-						
20. Facility Owner or Operator: Certification of rec	eipt of non-h	azardous materia	ls cove	red	by this M	//////////////////////////////////////	excer	nt as i	noted in ite	m 19.
· · · · · · · · · · · · · · · · · · ·	o.p. o. non-n	Signature	.5 5046					. 40 1		
Printed/Typed Name		Signature							Mont	h Day `



Non Hazardous Industrial Waste

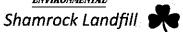
Shipping Manifest	1. General	tor's US EPA ID N	o. (if any)				1. Pa	ge 1 of	page(s)
Generator's Name and Facility Address				Mailing A	ddr	229	l	<u>-</u>		•
SUPERIOR WATER LIGHT & FOWE	R CO NEM	ADR SUBIT.		_			TAN	im I	ACHIY A	NOWER CO
HULLAVE & STAGEN AVE SUFER	108, WI 54	(44)								WI 34664)
Generator's Phone \$15-355-3191	•		,	Fax:						
Transporter 1 Company Name										
A) EXPRESS NI	36		4	Phone:						
Transporter 2 Company Name										
	i			Phone:						
Designated Facility Name and Site Address	SKB/S	hamrock Env	ironn	ental. I	L	<u> </u>				
		N Highway 4		,						
		et, MN 55720				Pho	ne: 2	18-	878-01	12
U.S. DOT Description (including Proper Shipp	 _	7, 1411 (33 / 20		ontainers	-		10.		11.	12,
o.o. Do a Docomption (moldaling i Topal Chilpp	ing namo,		-	Ĺ		7	lotal		Unit	Waste Profile
			No.	Type	_	QL	antity		Wt/Vol	Sheet#
· Men Herardone behakid Wests			1, ,	1			1	1		
(OII, IMPACTED BOIL/DÉBRIS)		-								
•					+	<u> </u>			+	
				1		1 1	1	, .		
			 		+					
			111			1 1	1	}		
	· 									
		•								
N 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		· · ·			<u> </u>	Ť		- 111		
3. Additional Descriptions for Materials Listed Above CLCL194049 OIL BARACTED SOIL		am Approval # below)	14. 3	speciai Han	aling	Proce	eaures	tor vva	astes Listed	ADOVE
.CL	Authorized Rithland									
CL - A-										
. CL 5. Special Handling Instructions and Additional	Information									
Emergency Contact:	mornation							1	B Use On	ly
								LO	ad#	
	•									
6. GENERATOR'S CERTIFICATION: I hereby of										
proper shipping name and are classified, pac according to applicable international and nati	kea, markea, a onal governme	and labeled, and a ent regulations.	re in all	respects	n pr	oper o	conait	юп то	r transpor	t by nighway
		Signature	i subsider .		j.					
Printed/Typed Name		Signature	Si .	Sandy Sandy Sandy Sandy	متر ۱۰۰۰	العدوم المستوان أداعا والمستوان			Mont	h Day Y
7. Transporter 1 Acknowledged of Receipt of M	aterials				Ć,	Carlo Carlo De La Carlo Carlo Carlo Carlo Carlo Carlo Carlo Carlo Carlo Carlo Carlo Carlo Carlo Carlo Carlo Car				
Printed/Typed Name		Signature	7-1	17 1 m	and the second				Mont	h Day Y
UNDIO LESNIY			Cole		V-17 1 1/2	3				
3. Transporter 2 Acknowledgement of Receipt of	f Materials	भी वि		A market						
Printed/Typed Name		Signature					-		Mont	h Day Y
D. Discrepancy Indication Space										
		<u></u> ·	•							
. Facility Owner or Operator: Certification of re	eceipt of non-h	azardous materia	s covere	ed by this	Mar	nifest	excep	t as r	noted in ite	m 19.
Printed/Typed Name		Signature							Mont	h Day Y
- · · · · · · · · · · · · · · · · · · ·										



Non Hazardous Industrial Waste

Shipping Manifest	1. Generate	or's US EPA ID No.	(if any)		· [1	I. Page 1 of	page(s)
•			<u> </u>				
3. Generator's Name and Facility Address SUPERIOR WATER LIGHT & FOWER HILL AVE A STINSIE AVE SUPERI				認為新用	eich Mai	ER LIGHT :	WE SEESO
4. Generator's Phone (19-355-3101			<u>F</u>	ax:	 		
5. Transporter 1 Company Name							
			F	hone:			
6. Transporter 2 Company Name							-
			F	hone:			
7. Designated Facility Name and Site Address		hamrock Envi N Highway 45		ntal, LI	LC .		-
	Cloque	t, MN 55720			Phone: 2	18-878-01	12
8. U.S. DOT Description (including Proper Shippi			9. Con	tainers	10.	11.	12.
	,				Total	Unit	Waste Profile
			No.	Туре	Quantity	Wt/Vol	Sheet#
a. Non Hezardous ladustrial Waste (OIL HAPACTED SOIL/DEBETS)		· .					
b.					:		
					1 1 1		
•							
С.	 .		·	<u> </u>			
			1 1		F 1 1		
d.							· · · · · · · · · · · · · · · · · · ·
			1 1		1 1 1		
		•					
13. Additional Descriptions for Materials Listed Above (14 65	onial Handli	ing Propodures	for Wastes Liste	d Abovo
a. Clc. 19-0049 OIL IMPACTED SOILA		ani Approvai # below)	14. 3p	eciai manuii	ing Flocedules	IOF VVasies Liste	a Above
b. CL	antitude statem.						
c. CL							
d. CL							
15. Special Handling Instructions and Additional I	nformation [:]					SKB Use O	nly
Emergency Contact:						Load #	
	·						.
16. GENERATOR'S CERTIFICATION: I hereby d proper shipping name and are classified, pack according to applicable international and nation	ked, marked, a	nd labeled, and are					
Printed/Typed Name	· ·	Signature	a a sa a co	-)	Moi	nth Day Yea
LUKHA MANNE		1 2 12	and the second	parade in products.	Villa francisco	2	7177717
17. Transporter 1 Acknowledged of Receipt of Ma	iterials				entiert.		, , , , ,
Printed/Typed Name	+ +	Signature				Mo	nth Day Yea
Jake Enders		1000	na na majaran katalan na majaran katalan	ia-		/	
18. Transporter 2 Acknowledgement of Receipt of	Materials	A STATE OF THE PARTY OF THE PAR	wr a			1	
Printed/Typed Name		Signature				Ma	nth Day Vaid
Timed Typed Name		Olgitatule				Moi	nth Day Yea
19. Discrepancy Indication Space		<u> </u>					
A Share (A) Contragues, whenever		•				•	
				. •			
			•				
20. Facility Owner or Operator: Certification of re-	ceipt of non-ha	azardous materials	covered	by this M	anifest excep	t as noted in i	tem 19.
		· · · · · · · · · · · · · · · · · · ·		_,			
Printed/Typed Name		Signature				Mo:	nth Day Yea
i e		1					





69661

Jok Zarrayini Jo	was to kind the part of		•					
Shipping Manifest	1. Generato	or's US EPA ID No.	(if any)		1. Pag	e 1 of	page(s	š)
Generator's Name and Facility Address JUTERNE WATER LIEBT & FOW! HHE AVE & STINSEM AVE, SUFFE	IE CO MERIA ROL, WI SAG	Lui BUBBT. 60	ħ\		oress ECOR WATEP LI TLL AVE. SUEE			ją.
Generator's Phone 218-253-3184			F	ax:				
Transporter 1 Company Name								
			F	hone:				
Transporter 2 Company Name			F	hone:				
Designated Facility Name and Site Address	761 M	hamrock Envi N Highway 45 t, MN 55720		ntal, LI	C Phone: 218-8	378-01	12	
. U.S. DOT Description (including Proper Ship			9 Cor	tainers	10.	11.	12.	
. O.S. DOT Description (including Proper Ship	ping name)		No.	Type	Total Quantity	Unit Wt/Vol	Waste Pro Sheet#	
Mon Harandone Industrial Wasts (OH, IMPACTED SOIL/ORBRIS)								
				1				
			i l					
·				ii		<u> </u>		
LCL_T_19-0049 OIL_IMPACTED SOIL CL CL CL CL S. Special Handling Instructions and Additiona					SKI	3 Use On	ıly	
Emergency Contact:					Loa	d#		
GENERATOR'S CERTIFICATION: I hereby proper shipping name and are classified, pa according to applicable international and na	cked, marked, a	and labeled, and ar	onsignme e in all re	ent are ful spects in	ly and accurately de proper condition fo	scribed a r transpor	above by t by highway	
Printed/Typed Name	· · · · · · · · · · · · · · · · · · ·	Signature		ar and a second	La marina de la companya della companya della companya de la companya de la companya della compa	Mont	th Day	Y (
7. Transporter 1 Acknowledged of Receipt of I	viaterials	and the second	10	<i>3</i>	Ga Ti			
Printed/Typed Name	·	Signature		<u>. </u>	<u> </u>	Mont	th Day	Y
8. Transporter 2 Acknowledgement of Receipt	of Materials	Cianatura		· · · · · · · · · · · · · · · · · · ·	· ·		ub. D:	
Printed/Typed Name		Signature				Mont	th Day	Y
9. Discrepancy Indication Space								
Facility Owner or Operator: Certification of	receipt of non-h	azardous materials	covered	l by this M	1anifest except as n	oted in ite	em 19.	_
Printed/Typed Name		Signature				Mon	th Day	Y

White - Return to Generator

Canary - Facility Copy



Non Hazardous Industrial Waste

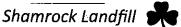
Shipping Manifest	1. Generat	or's US EPA ID No	o. (if any)			1. Page 1 of	page(s)
			<u>. L. L.</u>				
Generator's Name and Facility Address SUFERVER WATER LEGHT & FOWEX	ZWN EITHERIA	EVIC STEEDING	ľ	Aailing Ad		ento e reterio a	FOWIR CO
MILLAVE & STEERED AVE BUFFER	ORL WIT 549	azor escribert. Mo				me element.	
. Generator's Phone: 18-355-3191			i	- ax: Fax:	1900 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ಚಲನಗಳ ಪಡೆಗಳು ಸಂಪತ್ತಕ್ಕು	A.A.4 - 10-8-80/00/2
Transporter 1 Company Name			-				
				Phone:	•		
Transporter 2 Company Name				mone.			
Transporter 2 Company Name				*		•	
Designated Frank, Name and Oil- Add				Phone:		· · · · · · · · · · · · · · · · · · ·	
Designated Facility Name and Site Address		hamrock Env		ntal, L	LC		
		N Highway 4			•		
	Cloque	t, MN 55720			Phone:	218-878-01	12
U.S. DOT Description (including Proper Shippin	g name)		9. Cor	tainers	10.	11.	12,
	- •			I	Total	Unit	Waste Profile
Most Theory is are Industrial Wester			No.	Туре	Quantity	y Wt/Vol	Sheet#
e come meconocido colona apresidada sido e a citabra			l. i i				
(OILIMPACTIO SOIL/DEEKIS)							
			1				
	. *						
			<u> </u>				
				1			
		•					
			1 , ,		1 1 1		
Additional Descriptions for Materials Listed Above (in CLCL19-0019 ON, RMFACTED SOIL TO CLCL CL CL		am Approval # below)	14. 3p	eciai maric	ning Procedures	for Wastes Listed	Above
Special Handling Instructions and Additional In	formation					Torra II. o	
Emergency Contact:	IOITHALIOTT*					SKB Use On	ily
						Load #	
and the same of th							
i. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation	ed, marked, a	nd labeled, and a nt regulations.	consignme re in all re	ent are fu spects in	lly and accura proper condi	itely described a tion for transpo	above by rt by highway
Printed/Typed Name	20	Signature			$\gamma \sim 7$	Mon	
. Transporter 1 Acknowledged of Receipt of Mat			<u>kan saka sala</u>	The state of the s	<u> </u>		
<u> </u>	eriais	· ·					•
Printed/Typed Name	and the second s	Signature	A STATE OF THE STATE OF		and the second	Mon	
Transporter 2 Acknowledgement of Receipt of	Materials	The state of the s	<u> </u>	Section of	ov.	1/ 1	1191
Printed/Typed Name		Signature					ıь -
типеалуреа маше		olynature				Mon	th Day `
Discrepancy Indication Space		1		·			
·							
÷							
			•				
Facility Owner or Operator: Certification of rec	eipt of non-ha	zardous material	s covered	by this N	/lanifest excep	ot as noted in ite	em 19.
Printed/Typed Name		Signature				Mon	th Day
		O.g. Ideas				IAIOLI	Day



Non Hazardous Industrial Waste

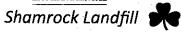
	14.0								·	
Shipping Manifest	1. Genera	tor's US EPA ID No). (if a	ny)				1. P	age 1 of	page(s)
3. Generator's Name and Facility Address			_	<u> -</u>	 Mailing A	ddros				<u> </u>
STRUCK WATER LIGHT & FOWE	IK CO INTUR	APOIT STREET						5 % G G	1 1/04/07 a	FOWER CO
BILL AVE. & EURINEN AVEL BUTES	CICIE, WI SU	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\							TRIOR. \	
4. Generator's Phone 212-333-3191	· · · · · · · · · · · · · · · · · · ·				Fax:				College (College) (40) 14	CANY TO WARRY TO THE
5. Transporter 1 Company Name	7								.	-
					Phone:					
6. Transporter 2 Company Name					,	•				
					Phone:					
7. Designated Facility Name and Site Address	SKB/S	hamrock Env	iron			LC	_			<u> </u>
		N Highway 4:								
		et, MN 55720				D	hone	210	-878-01	īn
8. U.S. DOT Description (including Proper Shipp		56, 14114 55 / 20	_	000	ntainers	<u> </u>				
	ing name)		9. ·	COI	ıtainers ı		10. Tota		11. Unit	12. Waste Profile
			No).	Туре		Quan	tity	Wt/Vol	Sheet#
a. Hen Harardean Industrial Waste			١.							
(FIL IMPACTIO SOIL/DEBRES)										i
b.		<u> </u>		J		<u>.</u>		<u> </u>		······
						İ				
).										
			ı			1	i	1 1		
				•				· · · · ·		
			1			- 1	1		.	
12 Additional Descriptions for Manual Little 4 Ab										
13. Additional Descriptions for Materials Listed Above a. CLUL 19-0039 OIL IMPACTED SOIL		am Approval # below)	14.	Sp	ecial Hand	ling Pr	ocedur	es for W	astes Listed	Above
b. CL	We want of Tallet's									
c. CL d. CL						-				
15. Special Handling Instructions and Additional	Information	· · · · ·								 .
Emergency Contact:	inomation							SH	B Use Onl	у
	, V							Lo	ad#	
6. GENERATOR'S CERTIFICATION: I hereby of	leclare that the	contents of this co	nsigr	nme	ent are ful	ly and	accu	rately o	described a	bove by
proper shipping name and are classified, pacl according to applicable international and nation	ked, marked, a onal governme	ind labeled, and are int regulations	e in al	re	spects in	prope	er con	dition fo	or transport	by highway
Printed/Typed Name		and the same of th	_/^_		· ·	i.e.				
/ Jane 1919		Signature	y 11"		S. S.				Month	
7. Transporter 1 Acknowledged of Receipt of Ma	aterials	- Carrier and Carr	a propert	-	April 1 Jack	E, -, '	James and	"No age " "	1/1/	
Printed/Typed Name	10	Signature	- 45 - 12		<u> </u>					· · ·
FMV Kun Val bons	WHAT I	Jignature /	id Je	P :	Just's	Salar Salar			Month	ו Day Year
8. Transporter 2 Acknowledgement of Receipt of	f Materials		(, .*			1	-		<u> </u>	1 1 1 1 1 1
Printed/Typed Name		Signature	_						Month	n Day Year
1.1										
9. Discrepancy Indication Space		-								
					• .					
No. of the second secon								٠		
		•								
0. Facility Owner or Operator: Certification of re-	ceipt of non-ha	zardous materials	cover	ed	by this M	anife	st exce	ept as r	noted in iter	n 19.
Printed/Typed Name		Signature		_						
Typou raino		olghature							Month I I	ı Day Year





Shipping Manifest	1. Generate	or's US EPA ID I	No. (if	any)	•			1.	Page 1 of		page(s)
· · · · · · · · · · · · · · · · · · ·				L							
J. Generator's Name and Facility Address	JOSEPH S MARKS OF	manda managa geograpi sebesah sebesah		ľ	Mailing A			:	or. Evening to		Committee of the committee of
SUPERIOF WATER LIGHT & POWER FILL AVE & STEEREN AVE, SUPERIO	AMARK CEL OLO TEL AV	TYL MURRIT.									INTER CO
Generator's Phone 218-35% 3191	MR, YT MAG	#O				III.I.	# \ .\/ {	t. 34	TPERSOR	, WI	94440
. Transporter 1 Company Name					Fax:						
, mansporter i company Name		·									
				ı	Phone:						
. Transporter 2 Company Name											
					Phone:						
. Designated Facility Name and Site Address	SKR/S1	hamrock En	wiron			IC					
				шис	111141, 1	LC					
		N Highway					.4				
		t, MN 5572	.0			P	hone	: 21	18-878-0)112	
 U.S. DOT Description (including Proper Shippin 	g name)	v	9.	Çor	ntainers		_10		11.		12.
		:		lo.	Туре		Tot Quar		Unit Wt/Vo		Waste Profile Sheet#
Fitner II romatribera an Periodernical Albarita.	•		1		, y De		- Gudi	y	VVI.VC	"	Jileet#
实现是是是一个的证据的对子是不是不够,这样是这种数据的主义的。 在是 超级的现在		4	,	ı	1	,	ı	ı	,		
(CHL IMPACTED SCIE/ISBSRIE)											
			+		ļ	Н					
				1		.		1			
		<u> </u>	+			 1		1		-	
	•					١,			.		
	· · · · · · · · · · · · · · · · · · ·				. [11			L		
			Ι,			١٠,		1	,		
				ı							
. Cl _{ex.} 19-0049 OIL IMPACTED SOIL <i>I</i> D . Cl . Cl . Cl	kishe dinden f										
5. Special Handling Instructions and Additional In	formation		_ļ						CVP Use	Owlea	
	·		. *						SKB Use	Offic	
									Load # _		
Emergency Contact:		4									
		4 			:						•
Emergency Contact:	ed, marked, a	nd labeled, and	s consi are in	gnme all re	ent are fu spects ir	ılly ar ı prop	nd acc	urate nditio	ly describe n for trans	ed abo	ve by highway
Emergency Contact: 5. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packet	ed, marked, a	nd labeled, and	s consi are in	gnme all re	ent are fu spects in	ılly ar	nd acc per con	urate nditio	n for trans	ed abo port by onth	/ highway
Emergency Contact: 5. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	ed, marked, a nal governme	nd labeled, and nt regulations.	s consi are in	gnme all re	ent are fu	ully ar	nd acc per co	urate	n for trans	port by	/ highway
Emergency Contact: 5. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	ed, marked, a nal governme	nd labeled, and nt regulations.	s consi are in	gnme all re	ent are fu spects in	ully ar	nd acc per co	urate	n for trans	port by	/ highway Day
Emergency Contact: 5. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	ed, marked, a nal governme	nd labeled, and nt regulations.	s consi	gnme all re	ent are fu spects in	ully ar	nd acc per co	urate	n for trans	port by	/ higȟway Day
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name	ed, marked, and government	nd labeled, and nt regulations. Signature	s consi	gnme all re	ent are fu spects in	ully ar	nd accorder con	urate	n for trans	onth	/ higȟway Day
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name	ed, marked, and government	nd labeled, and nt regulations. Signature	s consi	gnme all re	ent are fu	ully ar	nd accorder col	urate	n for trans	onth	Day)
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name	ed, marked, and government	nd labeled, and nt regulations. Signature	s consi	gnme all re	ent are fu	ully ar	nd accorder con	urate	n for trans	onth	Day Y
Emergency Contact: 5. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, and government	nd labeled, and nt regulations. Signature Signature	s consi	gnme all re	ent are fu spects ir	ully ar	nd accor co	urate	n for trans	onth	Day Y
Emergency Contact: 5. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, and government	nd labeled, and nt regulations. Signature Signature	s consi are in	gnme all re	ent are fu spects ir	ully ar	nd according	urate	n for trans	onth	Day Y
Emergency Contact: 5. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, and government	nd labeled, and nt regulations. Signature Signature	s consi	gnme all re	ent are fu spects ir	n prop	nd according to the contract of the contract o	urate	n for trans	onth	Day Y
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, and government	nd labeled, and nt regulations. Signature Signature	s consi are in	gnmall re	ent are fu	ully ar	nd accoer col	urate	n for trans	onth	Day Y
6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I	ed, marked, and government	nd labeled, and nt regulations. Signature Signature	s consi are in	gnmall re	ent are fu	ully ar	nd accoer col	urate nditio	n for trans	onth	Day Y
Emergency Contact: 5. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, and government	nd labeled, and nt regulations. Signature Signature	s consi are in	gnmeall re	ent are fu	ully ar	nd according	urate	n for trans	onth	Day Y
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name 9. Discrepancy Indication Space	ed, marked, an al government gove	nd labeled, and nt regulations. Signature Signature Signature	are in	all re	spects ir	n prop	Der Col	nditio	n for trans	onth	Day Day Day Day
Emergency Contact: 5. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	ed, marked, an al government gove	nd labeled, and nt regulations. Signature Signature Signature	are in	all re	spects ir	n prop	Der Col	nditio	n for trans	onth	Day Y





Shipping Manifest	1. Generator's	S US EPA ID No	. <i>(if any)</i>	· I	1 . 1	1. Page 1 of	page(s)
. Generator's Name and Facility Address SUFFRIOR WATER LIGHT & FOWER TILL AVE & STIMSEN AVE SUPPRIO Generator's Phone 218-335-3391	CO MEMAIN DE, WI 54880	a scest.			RFOR WAS	er light Superior	' & FOVER CO , WI M880
. Transporter 1 Company Name				Phone:			
. Transporter 2 Company Name							
Designated Facility Name and Site Address		mrock Env Highway 45	ironme	Phone: ental, L	LC		
	Cloquet, 1	MN 55720			Phone:	218-878-0)112
U.S. DOT Description (including Proper Shipping	g name)		9. Co No.	ntainers Type	10. Total Quantit	11. Unit ty Wt/Vo	
Non Hazardous Industrial Weste (OIL IMPACTED SOLLIVERSIS)		-					1
	·	. <u>.</u>			. , , ,		
3. Additional Descriptions for Materials Listed Above (inc CLT_19-0045 OIL IMPACTED SOIL.05 CL CL CL	licate weste stream A	pproval # below)	14. Sp	ecial Handl	ing Procedures	s for Wastes Lis	ted Above
5. Special Handling Instructions and Additional Inf Emergency Contact:	ormation					SKB Use (Only
GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packe according to applicable international and nation	d, marked, and I	labeled, and ar	onsignm e in all re	ent are ful espects in	ly and accura proper condi	ately describe	d above by port by highway
Printed/Typed Name	S	Signature	<u> </u>	و المعمد المعمد	, M. C. C. C. C. C. C. C. C. C. C. C. C. C.	Mo	onth Day Y
7. Transporter 1 Acknowledged of Receipt of Mate							
Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of N	ļ	Signature	<u> </u>	927		/Mc	onth Day Y
Printed/Typed Name		ignature	•	<u>(m</u>		 	onth Day Y
D. Discrepancy Indication Space							
D. Facility Owner or Operator: Certification of rece	int of b						h 40
	ipt of non-nazar	dous materials 	covered	by this M	anitest excer	ot as noted in	item 19.



Non Hazardous Industrial Waste

Shipping Manifest	1. Generat	or's US EPA ID No	. (if any)			1. Page 1 o	f page(s)
3. Generator's Name and Facility Address	- 			Mailing As			
SUPPRIE WATER LATER & FOWER	e emant luxum and	ক্রমে প্রাক্তি একতা আগ্রম্ম লাক্ষেত্র	ı	Mailing Ac		i Shamita I da da Like Kilis k	The second of th
HILLAVE & STORESH AVE DUPLE	A N. N. AVAL BASS Of NO. AVER BASS	选为任 新以出版证明。 《25					L & DOMEE CO.
	erer, vii dan	32.8°			MLL AVÆ.		à, VII laba
1. Generator's Phone 2 16 43 15 15 15 15 15 15 15 15 15 15 15 15 15				Fax:			· · · · · · · · · · · · · · · · · · ·
5. Transporter 1 Company Name							
		• * * * * * * * * * * * * * * * * * * *		DI			
3. Transporter 2 Company Name				Phone:			
. Hansporter 2 Company Name							
	•	•	1	Phone:			
7. Designated Facility Name and Site Address	CVD/CI	hamrock Envi					
				mai, L			
	761 MI	N Highway 45	5				
	Cloque	t, MN 55720			Phone:	218-878-	0112
. U.S. DOT Description (including Proper Shippin		0, 1111 (55 / 20	·	·		210-070-	
. 0.3. DOT Description (including Proper Snippir	ng name)		9. Cor	ntainers	10.	11.	
			No.	Туре	Total Quantity	Unit / Wt/V	
· Bleve Elingraminary Foundament of the mount			140.	Туре	Quantity		OI SHEEL#
20-28年至1000年4月2日 141日 152 152 152 152 153 153 153 153 153 153 153 153 153 153	•		: .				
(UIL IMPACTED SOIL/DEBRIC)						11.	
			,				
				.			
		·				-	
			,				
			1 1	1	1 1 1	1	
						 	
		'	İ				
	4					1 1	
3. Additional Descriptions for Materials Listed Above (in	ndicate waste strea	m Approval # below)	14. Spe	ecial Handli	ing Procedures	for Wastes Lis	sted Above
·CLT19-0949 OIL IMPACTED SCILAT ·CL	HBRIS -					.*	
. CL				* .		•	
•				`\$			• .
. CL							
	atormation	4.4				SKB Use	Only
5. Special Handling Instructions and Additional In	IIOIIIIalioii						·
Special Handling Instructions and Additional In Emergency Contact:	Hormation	:				Load #	
	HOMIAGON	:					
	nomation			,			
Emergency Contact:			<u> </u>		· .		
Emergency Contact: 3. GENERATOR'S CERTIFICATION: hereby de	oclare that the	contents of this co	onsignme	nt are full	y and accura	tely describe	ed above by
Emergency Contact: B. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packet	eclare that the	nd labeled, and are	onsignme e in all res	ont are full spects in	y and accura proper condit	tely describe	ed above by port by highway
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation	eclare that the	nd labeled, and are	onsignme e in all res	ont are full spects in	y and accura proper condit	tely describe	ed above by port by highway
Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packet	eclare that the	nd labeled, and are	onsignme o in all res	ont are full spects in	y and accura proper condit	tely describe	port by highway
Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	eclare that the	nd labeled, and are nt regulations.	onsignme e in all res	ont are full spects in p	y and accura proper condit	tely describe	ed above by port by highway
Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	eclare that the ed, marked, ar nal governmer	nd labeled, and are nt regulations.	onsignme e in all res	ont are full spects in p	y and accura proper condit	tely describe	port by highway
Emergency Contact: D. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mat	eclare that the ed, marked, ar nal governmer	nd labeled, and are tregulations.	onsignme e in all res	ont are full spects in p	y and accura proper condit	tely describe	port by highway
Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name	eclare that the ed, marked, ar nal governmer	nd labeled, and are nt regulations.	onsignme e in all res	ont are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway Ionth Day Y
Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mat	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are tregulations.	onsignme e in all res	ont are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway
Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mat	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are tregulations.	onsignme e in all rec	ont are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway Ionth Day Y
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 1. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 2. Transporter 2 Acknowledgement of Receipt o	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are not regulations. Signature Signature	onsignme e in all res	ont are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway onth Day Y / / / / onth Day/ Y
Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mat	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are tregulations.	onsignme e in all res	ont are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway Ionth Day Y
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are not regulations. Signature Signature	onsignme e in all res	ont are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway onth Day Y // / / / / / / onth Day/ Y
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are not regulations. Signature Signature	onsignme e in all res	ent are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway onth Day Y // / / / / / / onth Day/ Y
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are not regulations. Signature Signature	onsignme e in all re	ent are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway onth Day Y // / / / / / / onth Day/ Y
Emergency Contact: 3. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 9. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are not regulations. Signature Signature	onsignme e in all rec	ent are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway onth Day Y // / / / / / / onth Day/ Y
Emergency Contact: 3. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 9. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are not regulations. Signature Signature	onsignme e in all rec	ent are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway onth Day Y // / / / / / / onth Day/ Y
Emergency Contact: 3. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt o	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are not regulations. Signature Signature	onsignme e in all res	ent are full spects in p	y and accura proper condit	tely describe ion for trans M	port by highway onth Day Y // / / / / / / onth Day/ Y
Emergency Contact: 3. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 9. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, ar nal governmer cerials	nd labeled, and are not regulations. Signature Signature	onsignme e in all res	ont are full spects in	y and accura proper condit	tely describe ion for trans M	port by highway onth Day Y // / / / / / / onth Day/ Y
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Printed/Typed Name Discrepancy Indication Space	eclare that the ed, marked, ar nal governmer rerials	nd labeled, and are tregulations. Signature Signature Signature	e in all res	spects in	proper condit	tely describe ion for trans	port by highway onth Day Y onth Day Y onth Day Y
Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Printed/Typed Name Discrepancy Indication Space	eclare that the ed, marked, ar nal governmer rerials	nd labeled, and are tregulations. Signature Signature Signature	e in all res	spects in	proper condit	tely describe ion for trans	port by highway onth Day Y onth Day Y onth Day Y
Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, ar nal governmer rerials	nd labeled, and are tregulations. Signature Signature Signature	e in all res	spects in	proper condit	tely describe ion for trans	port by highway onth Day Y onth Day Y onth Day Y





Shamrock Landfill Non Hazardous Industrial Waste

Shipping Manifest	1. Generator's US EPA ID No. (if any)		1.1	1. Page 1 of page(s)		
3. Generator's Name and Facility Address SUPERIOR WATER LIGHT & POWEE HILL AVE. & STINSEN AVE. SUPERI 4. Generator's Phone219-333-3191			ddress (MACOR WIGT WI CMAL AVE. 1907			
5. Transporter 1 Company Name						
		Dhana				
6. Transporter 2 Company Name		Phone:	•			
o. Iransporter 2 Company Name	•		: .		. ` .,,	
7. Designated Facility Name and Site Address	OKD/01 1 E	Phone:				
Taboughtour dointy value and one reduces	SKB/Shamrock Env	•	LC			
	761 MN Highway 4:)				
	Cloquet, MN 55720		Phone: 21	8-878-01	12	
8. U.S. DOT Description (including Proper Shippi	ng name)	9. Containers	10.	11.	12.	
		No. Type	Total Quantity	Unit Wt/Vol	Waste Profile Sheet#	
a. Mon Hazandous Industrial Waste		,,,,,				
(OIL IMPACTED SOILTERRIS)						
b.						
	•					
물 일을 하는 것으로 되는 것 같다.					•	
	. · · · · · · · · · · · · · · · · · · ·					
13. Additional Descriptions for Materials Listed Above (a. CLCL19-0049 OIL IMPACTED SOIL/I b. CL c. CL d. CL		14. Special Hand	dling Procedures for	Wastes Listed	Adove	
15. Special Handling Instructions and Additional li	nformation			SKB Use On	152	
Emergency Contact:					Load #	
en en en en en en en en en en en en en e			'	Loau #		
16. GENERATOR'S CERTIFICATION: I hereby d proper shipping name and are classified, pack according to applicable international and nation	ked, marked, and labeled, and a					
Printed/Typed Name	Signature	Land Company		Mon	th Day Yea	
LUKAS BANGON		2.,	San San San San San San San San San San		<u> / / / / / </u>	
17. Transporter 1 Acknowledged of Receipt of Ma	terials	1				
Printed/Typed Name) Chard Far	Signature /	Alex	- Mariantella - Mariantella - Care	Mon	th Day Yea	
18. Transporter 2 Acknowledgement of Receipt of	Materials					
Printed/Typed Name	Signature			Mon	th Day Yea	
19. Discrepancy Indication Space						
	•					
	•				9	
20. Facility Owner or Operator: Certification of re-	ceipt of non-hazardous materials	s covered by this	Manifest except a	as noted in ite	em 19.	
Printed/Typed Name						
	Signature			Mon	th Day Yea	



Non Hazardous Industrial Waste

Shipping Manifest	1. Generato	or's US EPA ID No.	(if any)		1	. Page 1 of	page(s)
I. Generator's Name and Facility Address	1:			lailing Ad	Idrees		
	ምክርስ ኤምሃ ያው ቀ <i>ች</i> ነ	2 7公開第一個原介公司与中国程序	10	-		en energeen o	POWER CO
SUPERIOR WATER LIGHT & POWER HILLAVE, & STRISEN AVE. SUPERIO					III VAN 3		
Generator's Phone 218-355-3191	ವಾಮ್ಯ ಅದರಿ ಮಾಡುವಾದ	4. 4.	F	್ಷಪತ್ರವಾಣ ax:	ALIVANY IL O	ormanasti i	(V) 134 00 N (
Transporter 1 Company Name			<u>.</u>				
Hanoportor Company Ramo				•			
	·		P	hone:			
Transporter 2 Company Name			-	hone:	•		
Designated Facility Name and Site Address	SKB/Sl	namrock Envi			LC		
	761 MN	N Highway 45					
		t, MN 55720			Phone: 2	18-878-01	12
		i, IVIIN 33720					
U.S. DOT Description (including Proper Shippin	ng name)		9. Con	tainers	10. Total	11. Unit	12. Waste Profile
	1000	-	No.	Туре	Quantity	Wt/Vol	Sheet#
Non Hazardous Industrial Waste		·		-7:			
(OILIMPACTED SOULDEBRIS)							
						ĺ	
도본분기 활성 이 등 이 기가 하는 것이다.							
		÷					
新兴种岛的自由, 1985年			_	·			
Mark the second of the second							
						1	
			, ,	,	1 1 1	, [
			44 0				4 8 5
3. Additional Descriptions for Materials Listed Above (in		Im Approval # below)	14. Spt	ciai mario	ling Procedures t	or wastes lister	1 ADOVE
CL19-0049 OIL IMPACTED SOIL/D	mid KIB						
	•						
CL				-			
, CL							
CL,	nformation					SKB Hea Or	also
CL 5. Special Handling Instructions and Additional In	nformation	<u> </u>				SKB Use Or	nly
	nformation					SKB Use Or	nly
CL 5. Special Handling Instructions and Additional In	nformation		e e				nly
CL i. Special Handling Instructions and Additional In Emergency Contact:						Load #	
CL S. Special Handling Instructions and Additional In Emergency Contact: 3. GENERATOR'S CERTIFICATION: I hereby de	eclare that the	contents of this co	onsignme	ent are fu	lly and accurat	Load #	above by
CL S. Special Handling Instructions and Additional In Emergency Contact: 3. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packet	eclare that the	nd labeled, and are	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	Load #	above by
CL i. Special Handling Instructions and Additional In Emergency Contact: i. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation	eclare that the	nd labeled, and are nt regulations.	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	Load #	above by
CL S. Special Handling Instructions and Additional In Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packet	eclare that the	nd labeled, and are	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	Load #ely described on for transpo	above by rt by highway
CL Special Handling Instructions and Additional In Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	eclare that the ed, marked, a nal governme	nd labeled, and are nt regulations.	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	Load #ely described on for transpo	above by rt by highway
CL 5. Special Handling Instructions and Additional In Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name	eclare that the ed, marked, a nal governme	nd labeled, and are nt regulations.	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	Load #ely described on for transpo	above by rt by highway
CL 5. Special Handling Instructions and Additional In Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Contact	eclare that the ed, marked, a nal governme	nd labeled, and are nt regulations. Signature	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	ely described on for transpo	above by rt by highway hth Day Y
CL 5. Special Handling Instructions and Additional In Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name	eclare that the ed, marked, a nal governme	nd labeled, and are nt regulations.	onsignme e in all re	ent are fu	lly and accurat proper conditi	Load #ely described on for transpo	above by rt by highway rth Day Y
CL 5. Special Handling Instructions and Additional In Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Matter Printed/Typed Name	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature	onsignme e in all re	ent are fu	lly and accurat proper conditi	ely described on for transpo	above by rt by highway ith Day Y
CL 5. Special Handling Instructions and Additional In Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mat Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature Signature	onsignme e in all re	ent are fu	lly and accurat proper conditi	ely described on for transpo Mon	above by rt by highway th Day Y
CL 5. Special Handling Instructions and Additional In Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Matter Printed/Typed Name	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature	onsignme e in all re	ent are fu	lly and accurat proper conditi	ely described on for transpo	above by rt by highway ith Day Y
CL Special Handling Instructions and Additional In Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature Signature	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	ely described on for transpo Mon	above by rt by highway th Day Y
CL Special Handling Instructions and Additional In Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature Signature	onsignme e in all re	ent are fu	lly and accurat proper conditi	ely described on for transpo Mon	above by rt by highway th Day Y
CL Special Handling Instructions and Additional In Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature Signature	onsignme e in all re	ent are fu	lly and accurat proper conditi	ely described on for transpo Mon	above by rt by highway th Day Y
CL 5. Special Handling Instructions and Additional In Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature Signature	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	ely described on for transpo Mon	above by rt by highway th Day Y
5. Special Handling Instructions and Additional In Emergency Contact: 3. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mat Printed/Typed Name	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature Signature	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	ely described on for transpo Mon	above by rt by highway th Day Y
CL 5. Special Handling Instructions and Additional In Emergency Contact: 6. GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature Signature	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	ely described on for transpo Mon	above by rt by highway th Day Y
CL Special Handling Instructions and Additional In Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, a nal governme terials	nd labeled, and are nt regulations. Signature Signature	onsignme e in all re	ent are fu spects in	lly and accurat proper conditi	ely described on for transpo Mon	above by rt by highway ith Day Y
CL Special Handling Instructions and Additional In Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Matter Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Printed/Typed Name Discrepancy Indication Space	eclare that the ed, marked, a nal governme terials Materials	nd labeled, and are nt regulations. Signature Signature Signature Signature	e in all re	Serve.	proper conditi	ely described on for transpo Mor	above by rt by highway th Day Y th Day Y
CL Special Handling Instructions and Additional In Emergency Contact: GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packe according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	eclare that the ed, marked, a nal governme terials Materials	nd labeled, and are nt regulations. Signature Signature Signature Signature	e in all re	Serve.	proper conditi	ely described on for transpo Mor	above by rt by highway ith Day Y ith Day Y ith Day Y



Non Hazardous Industrial Waste

69669

Shipping Manifest	1. Generator's US EPA ID N	o. (if any)	1.	Page 1 of	page(s)
3. Generator's Name and Facility Address STIFERIOR WATER LIGHT & POWER HILL AVE. & STINSEN AVE. SUPERI 4. Generator's Phone \$18-335-3191 5. Transporter 1 Company Name	CO NEMAINI TUBUT. OR, WI 54810		ddress IRIOF, WATH IILL AV 8, 31		
NIC #4	<u> </u>	Phone:			
6. Transporter 2 Company Name		Phone:			
7. Designated Facility Name and Site Address	SKB/Shamrock Env 761 MN Highway 4 Cloquet, MN 55720	5		8-878-011	2
8. U.S. DOT Description (including Proper Shippin	ng name)	9. Containers No. Type	10. Total Quantity	11. Unit Wt/Vol	12. Waste Profile
a. Non Hasanlous Industrial Weste (CIL IMPACTED SOIL/DEBRIS)		No. Type	Quantity	VVVVOI	Sheet#
d.					
13. Additional Descriptions for Materials Listed Above (inc. a. CLCL19-0049 OIL IMPACTED SOL.4) b. CL c. CL d. CL		14. Special Handl	ing Procedures for	Wastes Listed A	Above
15. Special Handling Instructions and Additional Inf Emergency Contact:	formation		1	SKB Use Only _oad #	
16. GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packe according to applicable international and nation	id. Marked, and labeled, and ar	onsignment are full e in all respects in	ly and accurately proper condition	/ described ab for transport	pove by by highway
Printed/Typed Name LUE 1-3 DIX DIX 17. Transporter 1 Acknowledged of Receipt of Mate	Signature	March March	The second secon	Month	Day, Year
Printed/Typed Name	14 0,24.0	and the second		Month	Day Year
18. Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name	Materials Signature			Manth	
19. Discrepancy Indication Space				Month	Day Year
20. Facility Owner or Operator: Certification of rece	ipt of non-hazardous materials	covered by this Ma	anifest except as	s noted in item	19.
Printed/Typed Name	Signature	· · · · ·		Month	Day Year

White - Return to Generator

Canary - Facility Copy



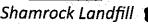
Non Hazardous Industrial Waste

63670

Shipping Manifest	1. Generato	or's US EPA ID No.	(if any)			1. P	age 1 of	page(s)
			<u> </u>	6.4 a 11 a a . A . d				
Generator's Name and Facility Address SUPERIOR WATER LIGHT & POWER	ር''ዓሜ እናናና አብል '	CAN STATESTA		Mailing Ad		373730	THURST A	FOWER CO
HILLAVE & STIMSEN AVE SUITERIC	DR WILL SASI	en en en en en en en en en en en en en e					eneri e Bereir	
Generator's Phone 218-355-3191		- T		Fax:	ందను ఈ కిక్క ఉందు	grap. y	estation in a	1.4.00.14.4.00000
Transporter 1 Company Name					•			
WINDON	in a ma	1		Phone:				
Transporter 2 Company Name	(1) C	Sand.		Priorie.				
Transporter 2 Company Name								
Designated Facility Name and Site Address				Phone:				
Designated Facility Name and Site Address		namrock Envi		ental, Ll	LC			
	761 MN	I Highway 45		•				
	Cloquet	t, MN 55720			Phone:	218	-878-01	12
U.S. DOT Description (including Proper Shipping	g name)		9. Co	ntainers	10.		11.	12.
			No.	Туре	Total Quant		Unit Wt/Vol	Waste Profil Sheet#
The state of the s			110.	Type	Quant	Ly	770 701	Опесия
Non Hazardous Industrial Waste		•	1 1		1 1 1	1		
(OIL IMPACTED SOIL/DEBRIS)	•							
				,				
	 	·						
			1.1			- 1		
		•						
			1.1			- 1		
				•				
Additional Descriptions for Materials Listed Above (Inc.		m Approval # below)	14. S	pecial Handl	ing Procedure	s for \	Vastes Listed	Above
CLCL19-0049 OIL IMPACTED SOIL/D	ebeij		17					
,CL	10 m		,	* *. *				
CL				•				
5. Special Handling Instructions and Additional Inf	formation					s	KB Use Οπ	lv
Emergency Contact:		et.					oad #	•
Balling Facility of the Albertain		•				-	Juliu	
	r.,							
GENERATOR'S CERTIFICATION: I hereby de-								
and the second of the second o	a, marked, ar	nd labeled, and an	e in ali r	espects in	proper cond	noitic	tor transpor	t by nignway
proper shipping name and are classified, packet according to applicable international and nation								
according to applicable international and nation		nt regulations.					<u> </u>	
according to applicable international and nation Printed/Typed Name			ari Sir	· · · · · · · · · · · · · · · · · · ·	 :		Mont	h Day
according to applicable international and nation	nal governmer	nt regulations.	ari Nas	f A	Control of the Contro		Mont	th Day
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mate	nal governmer	nt regulations. Signature		A sold	Contract of the Contract of th			
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name	nal governmer	nt regulations.	7. (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	John Jackson	No. of the last of		Mont	
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mate	nal governmer	nt regulations. Signature	16. 1 c	A. ga				
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of I	nal governmer	nt regulations. Signature Signature	(e) (44	3		Mont	th Day
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate	nal governmer	nt regulations. Signature	(e)	440				th Day
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name D. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	nal governmer	nt regulations. Signature Signature	2.6 62 c	200			Mont	th Day
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	nal governmer	nt regulations. Signature Signature	(6) (6) (6) (6) (6) (6) (6) (6) (6) (6)	La C			Mont	th Day
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	nal governmer	nt regulations. Signature Signature	8.6 <u>(2.7.</u> 6	HA.			Mont	th Day
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I	nal governmer	nt regulations. Signature Signature	<u>(6.23)</u>	44			Mont	th Day
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	nal governmer	nt regulations. Signature Signature	26 - C	44			Mont	th Day
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name Discrepancy Indication Space	erials Materials	Signature Signature Signature		44			Mont	th Day
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	erials Materials	Signature Signature Signature		d by this M	lanifest exce	ept as	Mont	th Day

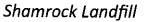
Pink - Transporter





Shipping Manifest	1. Generate	or's US EPA ID No	. (if any	()			1.	Page 1 of		page(s)
Generator's Name and Facility Address	74 75 75 2 2 2 2 3 4 2 4 2 4 2 4 2 4 2 4 2 4 2 4	off or grown authorities and account to		M	lailing Add		MEN AND	an was to all territory	T	1. 2.5 4.75 mm
SUITEROR WATER LIGHT A TOVER - RUL AVE & STIMBER AVE BURGER										OWIR CO
Generator's Phone: 18-335-3191	ART AND AND	(A)				LLI, AVE	. SH	USRICE	., <i>90</i> 0	(5年署4號)
. Transporter 1 Company Name				- [ax:					
Transportor T company Name										
				F	hone:					
. Transporter 2 Company Name										
	,			F	hone:					
. Designated Facility Name and Site Address	SKB/SI	namrock Env	ironn	ne	ntal. LL	C				
		N Highway 4:								
		t, MN 55720				Dhone	· ၁1	8-878-0	1112	
HO DOT Describing for holling Brown Object	-	t, MIN 33720	100						7112	
. U.S. DOT Description (including Proper Shipping	j name)	44	9. 0	on	tainers	10. Tota		11. Unit		12. Waste Profile
		•	No.		Type	Quant		Wt/Vo		Sheet#
· Vica Hazardona Andustrial Weste			,							
(Oil IMEACTIO FOR HEIDENS)					1]	1		
•										
	-				1	1 1	ı	ı		
		4			-					
	***		ļ	T		J J	٠	' -		
					1		ļ	l		
					:					
		1								
3. Additional Descriptions for Materials Listed Above (ind	licate waste stree	ım Approval # below)	14.	Spe	ecial Handlii	ng Procedur	es fo	r Wastes Lis	ted At	ove
·CL*1.19-0049 OE IMPACTED SOLLDI ·CL	MBRIB									
. CL										
. CL					•					
5. Special Handling Instructions and Additional Inf	ormation				·			SKB Use	Only	
Emergency Contact:								Load # _		
								Loud //		
		· · · · · · · · · · · · · · · · · · ·			·				*	
6. GENERATOR'S CERTIFICATION: I hereby dec	clare that the	contents of this of	onsign	me	ent are fully	y and accu	rate	ly describe	ed abo	ve by
proper shipping name and are classified, packed according to applicable international and nation	o, markeo, ai al governme	na iapeiea, ana a nt regulations.	re in aii	re	spects in p	proper con	αιτιο	n for trans	port b	y nignway
			,a4 ,a- " _1.							
Printed/Typed Name		Signature				A.			onth	Day Y
7. Transporter 1 Acknowledged of Receipt of Mate			1 200	<u></u>	The same of the sa	get to the same of	-i ₁		<u> </u>	
	ais									
Printed/Typed Name		Signature						М	onth	Day Y
									٠	
Transporter 2 Asknowledgement of Popoint of N	Antoriala									
	/laterials									
Printed/Typed Name	/laterials	Signature	, s., 11 ^{ma}		مستجدة كالمسترين	er- er-minister ender e		М	onth	Day Y
Printed/Typed Name	//aterials	Signature	7-4-17 mm		. And the second	er-miner control		M	onth	Day Y
Printed/Typed Name	Materials	Signature	,		A Company	or adaptive section of		M '	onth	Day Y
Printed/Typed Name	Materials	Signature	المعاول إليان		and the second second	Prophys and a		M	onth	Day Y
Printed/Typed Name	Materials	Signature	ya, yan		- All Paris	er engles			onth	Day Y
	Materials	Signature	معور پین		A STATE OF THE STA	erreger van v		M	onth	Day Y
Printed/Typed Name	Materials	Signature	yes trans		en de la companya de la companya de la companya de la companya de la companya de la companya de la companya de	ernemen auto e		M	onth	Day Y
Printed/Typed Name / / / / / / / / / / / / / / / / / / /			3 COVER	ed	by this M	anifest exc	ent:		<u></u>	<u> </u>
Printed/Typed Name			s cover	ed	by this Ma	anifest exc	ept:	as noted in	<u></u>	<u> </u>

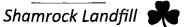




Shamrock Landfill Non Hazardous Industrial Waste

Shipping Manifest	1. Generat	or's US EPA ID N	o. (if any)			1. Pa	age 1 of	page(s)
		·			1 1			
Generator's Name and Facility Address	and all in species, is a	to a library description and the	i	Mailing A				
CUPERIOR WATER LIGHT & POWER HILL AVE. & STINGER AVE. SCHIED	AND METAL Officer was com-	ADI TUBET.						POWER CO
Generator's Phone: 15.33%-319)	THE WAS SELECT	2031.4		- 2315 t Fax:	HLL AVE	SUF	reer, s	a janno
Transporter 1 Company Name				rax.				
and the second s								
		·		Phone:	·			
Transporter 2 Company Name	•				•			
		-		Phone:				
Designated Facility Name and Site Address	SKB/S	hamrock Env	/ironme	ental, L	LC			
	761 M	N Highway 4	5	ŕ				
		t, MN 55720			Phone	218	-878-011	2
U.S. DOT Description (including Proper Shippin		76, 14114 33720		ntainers		210	,	
0.5. DOT Description (including Froper Shippin	ig name)	*	9. Cor	namers	10. Tota	l	11. Unit	12. Waste Profile
			No.	Туре	Quant	ity	Wt/Vol	Sheet#
Man Hasardeen bedrebiel Wente								
(OIL IMPACTIED FOR ADEBRIE)		·						
						l_		
				. :			ľ	
•			111			1		
•								
	•							
		•						
:	•	· · · · · · · · · · · · · · · · · · ·						
Additional Descriptions for Materials Listed Above (in CLTLLS-0049 OTLLS)		am Approval # below)	14. Sp	ecial Hand	ling Procedure	s for W	astes Listed	Above
CL 19-0049 OIL IMPACTED SOIL D	TATION OF THE PARTY OF THE PART							
CL		•						
CL								
. Special Handling Instructions and Additional In	formation					SH	(B Use Only	
Emergency Contact:			•				ad #	•
	•					"		
			<u> </u>	<u> </u>				
GENERATOR'S CERTIFICATION: I hereby de	clare that the	contents of this	consignme	ent are fu	lly and accur	ately o	described at	ove by
proper shipping name and are classified, packed according to applicable international and nation	au, markeu, a nal governme	no labeleo, ano a nt regulations.	ire in all re	spects in	proper cond	iltion ti	or transport	by highway
			eo					
Printed/Typed Name		Signature	· Commence	1 1	13 P		Month	n Day N
Transporter 1 Acknowledged of Receipt of Mat-	oriale	4-24-2	<i>A</i>	and the second	Transfer of			
	o iaio	Lo	· · ·	•				
Printed/Typed Name		Signature	and the same	and the second	art.		Month	
Transporter 2 Acknowledgement of Receipt of I	Materials	I the state of the	AND THE RESERVE TO TH	n Andrews			1/1	1 9 (
	VIGIOTICIS	1 0:						<u> </u>
Printed/Typed Name		Signature					Month	Day Y
Discrepancy Indication Space		<u> </u>	<u> </u>					
opario, maioanon opaos								
	•							
		1.0	•					
Facility Owner or Operator: Certification of rece	eipt of non-ha	zardous material	s covered	by this M	lanifest exce	pt as i	noted in iten	n 19.
Facility Owner or Operator: Certification of receivered/Typed Name	eipt of non-ha	zardous material	s covered	by this N	lanifest exce	pt as i	noted in iten Month	





Shipping Manifest	1. Generato	or's US EPA ID N	o. (if any)			1. F	Page 1 of	page(s)
			<u> </u>	1 1				*.
S. Generator's Name and Facility Address SOPERIOR WATER LIGHT & POWER	errecht männer ist wicht.	rm TV exv vsa rbit	P	Vailing A		i venetores	্ত কলেন্দ্ৰ বিষয় কৰ	80% C 58 880880 A 1880
HILL AVE. & STOTEND AVE. SUPERIC	CLEA DO ASSEMBLES. TO A LOS ALBADA	iyi arind. 						POWER (P)
k. Generator's Phone 219-335-3191	cald? Any healths	3.3		ુ&⊮≀કા Fax:	331 4 5 6 4 1	h, andah	perior, v	AT DAVED
5. Transporter 1 Company Name	• • • • • • • • • • • • • • • • • • • •		·	un.				
·								
<u> </u>		:		² hone:				
3. Transporter 2 Company Name								
			ı	² hone:				
7. Designated Facility Name and Site Address	SKB/Sł	namrock Env	ironme	ntal. L	LC			
		N Highway 4						
					T01	011	0.070.01	10
· · · · · · · · · · · · · · · · · · ·		t, MN 55720			Phone	: Z1	8-878-01	12
U.S. DOT Description (including Proper Shipping	j name)		9. Cor	ntainers	10 Tot		11. Unit	12. Waste Profile
			No.	Туре	Quan	ai itity	Wt/Vol	Vvaste Prome Sheet#
a. Mar Hazardour Industrial Waste	· · · · · ·		1	,,,,,			1 - 1 - 1	
·				1		1		
(OIL IMPACTED SOIL/DESRIS)								
b.		2 -	 		1 1	1 1		
				11		, ,		
				<u> </u>				
C.			1	١.				
and the second of the second o								
1.		<u> </u>		<u></u>				
d.								
	-							
		·	<u> </u>	<u> </u>				
13. Additional Descriptions for Materials Listed Above (ind		m Approval # below)	14. Sp	ecial Hand	lling Procedu	res for	Wastes Listed	l Above
a. CLOT 19-0049 — OIL IMPACTED SOIL/DI b. CL	eeri:		'					
c. CL		* * * * * * * * * * * * * * * * * * * *						
d. CL		and the second						
15. Special Handling Instructions and Additional Inf	ormation						SKB Use On	.fv.
Emergency Contact:								ıı y
16. GENERATOR'S CERTIFICATION: I hereby dec	clare that the	contents of this	consianm	ent are fu	IIIv and acc	urately	described a	above by
proper shipping name and are classified, packet	d, marked, ar	nd labeled, and a						
according to applicable international and nation	ai governmer	nt regulations.						
		Signature	The same		1 1		Mon	th Day Y
Printed/Typed Name				J.*	and the second	Sec. 11.	-171	71/1/
Printed/Typed Name	α.	The state of the s	parke (* 1) P	. where		10000	<u></u>	
	≈. ∍rials	The second secon	garder (C.)	ENGR. P. P.	1.7.			
17. Transporter 1 Acknowledged of Receipt of Mate		The second of th	,	Something of the state of the s	7.7.		Mon	th Day V
17. Transporter 1 Acknowledged of Receipt of Mate		Signature	16	er Jak	luks -		Mon	th Day Y
17. Transporter 1 Acknowledged of Receipt of Mate	ep?	The second of th	16	y Jak	lefty -		Mon	th Day y
Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Mate	ep?	Signature	16	Jál	lully -		, , , , , , , , , , , , , , , , , , , ,	<u>' </u>
Printed/Typed Name	ep?	The second of th	16	y Jak	lifty -		Mon / / Mon	<u>' </u>
Printed/Typed Name B. Transporter 2 Acknowledgement of Receipt of Name Printed/Typed Name	ep?	Signature	R	Jal	leff-		, , , , , , , , , , , , , , , , , , , ,	<u>' </u>
17. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name 18. Transporter 2 Acknowledgement of Receipt of Name Printed/Typed Name	ep?	Signature	IG	Jak	luly -		, , , , , , , , , , , , , , , , , , , ,	<u>' </u>
Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Materials (1997) 18. Transporter 2 Acknowledgement of Receipt of Name Printed/Typed Name	ep?	Signature	10	Jak	lufty -		, , , , , , , , , , , , , , , , , , , ,	<u>' </u>
17. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name	ep?	Signature	R	Jak	weg -		, , , , , , , , , , , , , , , , , , , ,	<u>' </u>
Printed/Typed Name 17. Transporter 1 Acknowledged of Receipt of Materials (1997) 18. Transporter 2 Acknowledgement of Receipt of Name Printed/Typed Name	ep?	Signature	K	y Joh	lefty -		, , , , , , , , , , , , , , , , , , , ,	<u>' </u>
7. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Name Printed/Typed Name	ep?	Signature		y Jak	lufty -		, , , , , , , , , , , , , , , , , , , ,	<u>' </u>
7. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Name 9. Discrepancy Indication Space	Materials	Signature Signature	S COVERED	y Jak	Wanifest	cent a	/ <i>i</i>	th Day Y
7. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Name Printed/Typed Name	Materials	Signature Signature	s covered	y Jak	Manifest exc	cept a	/ <i>i</i>	th Day Y



Shamrock Landfill Non Hazardous Industrial Waste

GORTA

<u> </u>											`
Shipping Manifest	1. Generat	tor's US EPA ID I	No. (if an	y)				1.1	Page 1	of	page(s)
3. Generator's Name and Facility Address				N	lailing Ad	dress		_			
STREETOR WATER LIGHT A FOWER	CONEMA	DH SUBST.			_			\?'77T	e e e e	TT B 1	OWER CO
THIL AVE A SCHOOL AVE STREET	(CIR, WI 348	40									I 34860
l. Generator's Phone없음~중중중중단당		1.		F	ax:						
i. Transporter 1 Company Name											
	•			Р	hone:						
3. Transporter 2 Company Name						••					
				P	hone:						
. Designated Facility Name and Site Address	SKB/S	hamrock En	vironn								
•		N Highway		LIQ.	, 1/1	20				-	
						D1		0.1	0.070	0.011	<u>-</u>
HO POT Paradal Control		t, MN 5572				Pr			8-878	3-011	2
. U.S. DOT Description (including Proper Shipping	ng name)		9. C	on	tainers		10 . Tota		1 Ur		12. Waste Profile
			No.		Туре		Quan			Vol	Sheet#
· Mon Hazardoge Industrial Warts								· -			
(CHAMPACTED SOL/DEBRIS)				Ĭ		- 1					
				ĺ	Γ						
•					.] [1				
			1 1 1			1					
	· · · · · ·		<u> </u>			.					<u></u>
•	3			1							
							i				
Additional Descriptions for Materials Listed Above (in	ndicata waste atrac	See Approved # below?	14 6						144		
· CLTAD-ROLD CALIBARACIED SOLA	TOTALE WASTE STOR		17. \	op e	cial Handli	ng Pic	ceaur	es for	vvastes	Listed A	Dove
. CL											
CL CL									٠.		
. GL 5. Special Handling Instructions and Additional In	oformation.	·									
Emergency Contact:	normation	•						S	KB Us	e Only	
zmorgonoy contact.		٠						L	oad #		
GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packed according to applicable international and nation	ed, marked, ar	nd labeled, and a	consigni are in all	mei res	nt are fully pects in p	y and prope	accu r con	rately dition	descrii for trar	bed ab	ove by by highway
Printed/Typed Name		Signature	11 July 12 12 12 12 12 12 12 12 12 12 12 12 12		p."	, r	, get			Month	Day Y
. Transporter 1 Acknowledged of Receipt of Mat	toriale	L	<u></u>							<u> </u>	<u> </u>
	aio	Olan -t-			Survey		Sain Atra				
Printed/Typed Name		Signature	Land Control of the C	eggant ast	A second	ا المعالم المامالية المامالية المامالية المامالية المامالية المامالية المامالية المامالية المامالية المامالية	aria da la la la la la la la la la la la la la	التنافية المناولات المناولات	er descention !	Month	Day Y
Printed/Typed Name	li li	iel"	of the same		المنظل الإعام الإدارية الموالية عام الإدارية	300	200	AP Sec.		1 1	1 / 149 1
	Materials	Section of the Sectio	A Constitution of the State of	en en en en en	THE CONTRACTOR OF THE PARTY OF	.se					· · · · · · · · · · · · · · · · · · ·
. Transporter 2 Acknowledgement of Receipt of	Materials	Signature	Secretary of the second	en en en en							
	Materials	Signature	A Transport of A College	nestect	or all the second second	30 31		•		Month	Day Y
Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	Materials	Signature	A TORREST AND A STATE OF THE ST	LEAST CO.	a side the same of	3° 3'				Month	Day Y
Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	Materials	Signature	A Company of the Comp	umment						Month	Day Y
Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	Materials	Signature	Andrew Control	zemilen						Month 	Day Y
. Transporter 2 Acknowledgement of Receipt of	Materials	Signature	A Company of the Comp	zeminen						Month 	Day Y
Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	Materials	Signature	And the second second	Lenger						Month	Day Y
Transporter 2 Acknowledgement of Receipt of Printed/Typed Name Discrepancy Indication Space			The second secon	uenet.							
Transporter 2 Acknowledgement of Receipt of Printed/Typed Name			ls covere	ed t	by this Ma	nifes	t exce	əpt as			



Non Hazardous Industrial Waste

		of the total
11. P	1. Page 1 of	page(s)
MITER	TER LIGHT	& POWIER CO
	. HUERROR	
		······
e: 218	218-878-0)112
0.	11.	12.
tal ntity		Waste Profil
·····	11210	- GIIGGE
1 1	1	
4 1		
1 1		
1 1		
ures for V	s for Wastes List	ted Above
SI	SKB Use (Only
Lc	Load #	. •
	<u> </u>	 .
urately o	ately described	d above by ort by highway
IGILIOII I	mon for dansp	Ort by highway
	· Mc	onth Day N
	, ,	
	N4-	math Day 1
	VIC محمدا	onth Day Y
	Ma	onth Day Y
		onth Day Y
		
-	<u> </u>	
ept as r	pt as noted in i	tem 19.
	Мо	nth Day Y
	cel	cept as noted in i



Non Hazardous Industrial Waste

			in a									E _{sp} J	A 10 8 10
Shipping Manifest	1. Gener	rator's I	US EPA	ID No.	(if an	y)					1. Pa	age 1 of	page(s)
3. Generator's Name and Facility Address							dailin = 0						
JUFFEIOR WATER LIGHT & POWER	r ^a ra Eathau	KA TSTT	500. *E) <0	***		N	/lailing A			S 4 36 73	27775	F 777727000 1	L POWER CO
HULLAVE SESTIVEERIAVE BUPDELC	M. WILL	17 Minera 13現合	na gorana	A.,									e fower co
Generator's Phone2 8-355-3 (9)						F	ax:	1 2.4 1-4	let d'A	V 40%	53(JA:	was.us.,	871 [748](U
Transporter 1 Company Name					_								
Tropes at a Co.			·			F	hone:						
Transporter 2 Company Name						F	Phone:	71	L.	·414		782.	7561
Designated Facility Name and Site Address	SKB/	Sharr	rock	Envi	m	ne	ntal I	$\frac{1}{C}$	1		*** 1	**************************************	
	761 N				OIII	LIO.	11ta1, L		,				
								_					
	Cloqu	iet, M	IN 55	720				I	Pho	ne:	218	-878-01	.12
U.S. DOT Description (including Proper Shipping	y name)				9. (on	tainers			10.		11.	12.
T.				1	No.	Ì	Time			īotal iantit	.,	Unit Wt/Vol	Waste Profil
35 and Thomas week a new Secretarian & 527 . Sec.					140.	'	Type	+	QU	ariui	<u>у</u>	MATAOI	Sheet#
THE STANDARD WAS THEN SHILLS AND SHEET					1 1			١.,	, ,				
(OIL IMPACTED SOU/DEDRIE)							ļ	-				1	
						-		-			l		
				-				İ					
					\perp	ŀ				1	-		
											,		
							1		1	1	1		
					_1_1								
			*										
			•			ŀ	ľ] [1	1	1	
<u> </u>		.5		İ	11			[·]			- [
Additional Descriptions for Materials Listed Above (ind	icate waste st	ream App	roval # be	low)	14.	Spe	cial Hanc	iling F	⁻roce	dures	for W	astes Lister	d Above
CLULIS COLS CELIMPACTED SOR /OI	BRIT		*-										
CL													
CL	**		٠,	İ									
· ·							·						
 Special Handling Instructions and Additional Info Emergency Contact: 	ormation										SK	(B Use Or	nly
Enlergency Contact.											Lo	ad #	
GENERATORIS CERTIFICATION I have	in the sale										Щ.		
GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packet	lare that th	ne cont	ents of t	this cor	nsign:	me	nt are fu	illy ar	nd ac	cura	tely c	lescribed :	above by
according to applicable international and national	al governm	and iai ent rec	ulations	no are S.	ırı an	res	pects in	prop	oer c	олап	ion to	or transpo	n by highway
Printed/Typed Name			nature	N. W.			, , ,	7				Mon	th Day Y
. Transporter 1 Acknowledged of Receipt of Mater		-2,- F			e ^c	_00						/	11/1/1/
	riais				Α,		****	41.3					
Printed/Typed Name		Sig	nature			· Sidney	***	- 3				Mon	th Day Y
TO CONTRACT CONTRACT		,01	1-s					أمسي ومعاني	. T. T. S. S. S. S. S. S. S. S. S. S. S. S. S.			× 1 / 1.	7 H 19 H
Transporter 2 Acknowledgement of Receipt of M	laterials			ý	من ا		3.47.77						· • •
Printed/Typed Name		Sia	nature	مومورز	.,,,,,,						_	Man	
		9		-								Mon	th Day Y
Discrepancy Indication Space					_					-			
							-						
				**									
	•												
Facility Owner or Operator: Certification of recei	nt of non 1	1970-4	VIC 755	oriolo		الم		40-11			.		
	рсог п о л- г	iazard(us mate	eriais c	overe	ea t	y this M	ranife	est e	xcep	t as r	noted in ite	em 19.
Printed/Typed Name		Sia	nature					,				Mon	th Day Y
		"											<u>- </u>



Non Hazardous Industrial Waste

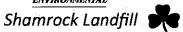
Shipping Manifest	1. Generat	tor's US E	PA ID No	. (if any)				1. Pa	ge 1 of	page(s)
3. Generator's Name and Facility Address	-				Mailing A	ddress		<u> </u>		
SUPERIOR WATER LIGHT & POWER	COMERN	a ul iun	esti :	1	_			ray i	o Terra	FOWER CO
MILLAVE & STIMBEN AVE. STEMBER	DE ON SAF	W.A	W-10" A-1	٠,						M MAN
. Generator's Phone: \$34-335-3391					Fax:				· ·	The service of the se
. Transporter 1 Company Name										
A some Course Course				1	Phone:					
. Transporter 2 Company Name										,
					Phone:					
Designated Facility Name and Site Address	SKB/S	hamroc	k Envi			IC				
		N High			iliai, L	LC				
		_	-	٠		D1		410	050.01	10
HC DOT Day of the Barrier	Cloque	T, MIN	33/20			19	ione:	218-	878-01	12
. U.S. DOT Description (including Proper Shipping	g name)			9. Cor	ntainers		10. Total		11. Unit	12. Waste Profile
				No.	Туре		Quanti		Wt/Vol	Sheet#
Vion Hozardous Industrial Waste							-			
(OILIMPACIED SON/DEBENT)	•									
	_	· ·								
								I		
						-				
	:		.					- 1	1 1	
									 	
					,					
Additional Descriptions for Materials Listed Above (ind	licate waste stre:	am Approval	# below)	14. Sp	ecial Hand	lling Pr)	s for W	astes Listed	Above
CLCLAS-0049 OIL IMPACTED SOIL OF							o o o o o o o	5 101 111	10100 LIOTEG	710040
CL CL										
CL		**.								
								-		
	ormation	1.							B Use Onl	У
 Special Handling Instructions and Additional Inf Emergency Contact; 	ormation									
. Special Handling Instructions and Additional Inf	ormation							LO	ad#	
i. Special Handling Instructions and Additional Inf Emergency Contact:					· .		<u>.</u>	ļ		
i. Special Handling Instructions and Additional Inf Emergency Contact: GENERATOR'S CERTIFICATION: hereby dec	clare that the	contents	of this co	onsignme	ent are fu	lly and	l accur	ately d	escribed a	bove by
Special Handling Instructions and Additional Inf Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decompoper shipping name and are classified, packet	clare that the	nd labeled	t, and are	onsignme e in all re	ent are fu spects in	lly and	l accurr	ately d	escribed a	bove by by highway
Special Handling Instructions and Additional Information Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packet according to applicable international and nation	clare that the	ind labeled nt regulati	d, and are ions.	onsignme e in all re	ent are fu spects in	lly and prope	accura er cond	ately d	escribed a	bove by by highway
Special Handling Instructions and Additional Information Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name	clare that the	nd labeled	d, and are ions.	onsignme e in all re	ent are fu spects in	lly and prope	accurr er cond	ately d	escribed a	by highway
Special Handling Instructions and Additional Information Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name	clare that the d, marked, a al governme	ind labeled nt regulati	d, and are ions.	onsignme e in all re	ent are fu spects in	lly and prope	accura er cond	ately d	escribed a or transpor	by highway
Special Handling Instructions and Additional Information Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packed according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Transporter	clare that the d, marked, a al governme	nd labeled nt regulati	d, and are ions.	onsignme in all re	ent are fu spects in	lly and prope	l accurr er cond	ately d	escribed a or transpor Mont	by highway
. Special Handling Instructions and Additional Inf Emergency Contact: . GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name . Transporter 1 Acknowledged of Receipt of Mate	clare that the d, marked, a al governme	ind labeled nt regulati	d, and are ions.	onsignme in all re	ent are fu spects in	lly and prope	f accurred a	ately d	escribed a or transpor	by highway
. Special Handling Instructions and Additional Inf Emergency Contact: . GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packer according to applicable international and nation Printed/Typed Name . Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name	clare that the d, marked, a al governme erials	nd labeled nt regulati	d, and are ions.	onsignme in all re	ent are fu spects in	lly and prope	f accurrence of	ately d	escribed a or transpor Mont	by highway
Special Handling Instructions and Additional Information Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decorate proper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Materials Printed/Typed Name	clare that the d, marked, a al governme erials	nd labeled int regulati Signatu Signatu	re	onsignme in all re	ent are fu spects in	lly and prope	l accurrer cond	ately d	escribed a r transpor Mont	h Day Y
Special Handling Instructions and Additional Inference Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name Printed/Typed Name	clare that the d, marked, a al governme erials	nd labeled nt regulati	re	ensignme in all re	ent are fu spects in	lly and prope	f accurrer cond	ately d	escribed a or transpor Mont	h Day Y
Special Handling Instructions and Additional Information Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Materials of the Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Materials of Typed Name Printed/Typed Name	clare that the d, marked, a al governme erials	nd labeled int regulati Signatu Signatu	re	ensignme	ent are fu spects in	lly and prope	f accumer cond	ately d	escribed a r transpor Mont	h Day Y
i. Special Handling Instructions and Additional Inf Emergency Contact: i. GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Mate Printed/Typed Name	clare that the d, marked, a al governme erials	nd labeled int regulati Signatu Signatu	re	onsignme in all re	ent are fu spects in	lly and prope	f accumer cond	ately d	escribed a r transpor Mont	h Day Y
i. Special Handling Instructions and Additional Information Emergency Contact: i. GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Materials of the Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Instructional Information	clare that the d, marked, a al governme erials	nd labeled int regulati Signatu Signatu	re	onsignme in all re	ent are fu spects in	lly and prope	f accurrence cond	ately d	escribed a r transpor Mont	h Day Y
i. Special Handling Instructions and Additional Inf Emergency Contact: i. GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Mate Printed/Typed Name	clare that the d, marked, a al governme erials	nd labeled int regulati Signatu Signatu	re	onsignme in all re	ent are fu	lly and prope	f accurrence on d	ately d	escribed a r transpor Mont	h Day Y
i. Special Handling Instructions and Additional Inf Emergency Contact: i. GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Mate Printed/Typed Name	clare that the d, marked, a al governme erials	nd labeled int regulati Signatu Signatu	re	onsignme in all re	ent are fu	lly and prope	f accurrence cond	ately d	escribed a r transpor Mont	h Day Y
Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decorate proper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Mate Printed/Typed Name Discrepancy Indication Space	clare that the d, marked, a al governme erials	Signatu Signatu Signatu Signatu Signatu	re	in all re	spects in	prope	y A	ately d	Mont	h Day Y
Special Handling Instructions and Additional Information Emergency Contact: GENERATOR'S CERTIFICATION: I hereby decorproper shipping name and are classified, packet according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Materials of the Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Materials of Typed Name Printed/Typed Name	clare that the d, marked, a al governme erials	Signatu Signatu Signatu Signatu Signatu	re	in all re	spects in	prope	y A	ately d	Mont	h Day Y



Non Hazardous Industrial Waste

1. Generate	or's US EPA ID N	o. (if any)			1.	Page 1	of	page(s)
Ya umana nchin ne ecc	Order and the service of the service					1 000 mm	ngay dip and agreement	100 P 100	
KALIDDSOAL WWW.XXX EAG	LAI SUMBY								
20 5 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0.0			E127 A	. 8N	i., 134.	JEDNY)	HE, WIL	,54190
	:		i ux.						
1	I make	کانوه موسیع از ای							
<u> </u>		. R	Phone:				-		
	•								
	· · · · · · · · · · · · · · · · · · ·		Phone:						
	and the second s		ental, I	LC					
								•	
Cloquet	t, MN 55720			P	hone	e: 21	18-878	-0112	
ing name)		9. C	ontainers		_10.		11		12.
		No	Type						Waste Profile Sheet#
		140,	iype	+	Guai	y	440	AÓI	SHEEL#
* - w		1.1			1	ı			
		1					'		
	•				ı	1	,		
		1 1 1	- 	-		1	-		
		111	ı	1 - 1	ı		ıl		
· · · · · · · · · · · · · · · · · · ·	· .								
							•		
9		111	1	1	I				
	· ·			\square				_	
DEGRIS									
Information		1				Т	SKB Use	Only	
								,	
						ŀ		-	
ked, marked, an	nd labeled, and a	re in all r	respects in	ily an prop	er cor	urate Iditio	n for tran	sport by	/ highway Day
	And the second second	Trace of	Andreas Contraction					j y	
TET I GIS	Clave	A STATE OF THE STA							
	oignature	The state of the s	A STANCE OF THE	عاتب الخايم	والتجووب		· · · · · · · · · · · · · · · · · · ·	Month _/	Day Y
f Materials	- Jan Marie	are give him	Stop The manual of	Part .		- 40 Lang .		\$ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	
	Signature								
	Olgi latule							Month ⊢ i	Day Y
		-					-		
ceipt of non-had	zardous material	s covere	d by this N		est exc	ept a	as noted	in item 1	19.
	SKB/SI 761 MN Cloque ing name) indicate waste strea	SKB/Shamrock Env 761 MN Highway 4 Cloquet, MN 55720 ing name) indicate waste stream Approval # below) CNB RIS information leclare that the contents of this ced, marked, and labeled, and a conal government regulations. Signature sterials Signature	SKB/Shamrock Environm 761 MN Highway 45 Cloquet, MN 55720 ing name) 9. Co No. 14. S 15. Signature Signature Signature Signature	Fax: Phone: SKB/Shamrock Environmental, I 761 MN Highway 45 Cloquet, MN 55720 ing name) 9. Containers No. Type Indicate waste stream Approval # below) Information Info	Fax: Phone: SKB/Shamrock Environmental, LLC 761 MN Highway 45 Cloquet, MN 55720 Ing name) 9. Containers No. Type 14. Special Handling P 16. Special Handling P 16. Special Handling P 17. Special Handling P 18. Special Handling P 18. Special Handling P 18. Special Handling P 19. Special Handling P	Fax: Phone: SKB/Shamrock Environmental, LLC 761 MN Highway 45 Cloquet, MN 55720 Phone ing name) 9. Containers No. Type Quar No. Type Quar 14. Special Handling Procedu DRBRIS eclare that the contents of this consignment are fully and accided, marked, and labeled, and are in all respects in proper coronal government regulations. Signature Signature	Phone: SKB/Shamrock Environmental, LLC 761 MN Highway 45 Cloquet, MN 55720 Phone: 2 ing name) 9. Containers No. Type Quantity 14. Special Handling Procedures to DESE3 Information leclare that the contents of this consignment are fully and accurate ked, marked, and labeled, and are in all respects in proper conditional government regulations. Signature Signature	SUPPLIER WATER LITE 215 HD L AVE 30 FERCE Fax: Phone: SKB/Shamrock Environmental, LLC 761 MN Highway 45 Cloquet, MN 55720 Phone: 218-878 ing name) 9. Containers 10. U1 No. Type Quantity Wt/ Wt/ Indicate waste stream Approval # below) 14. Special Handling Procedures for Wastes to DB B B B B B B B B B B B B B B B B B B	SUPERIOR WATER LETHE 6 PACE SUPERIOR, WI Fax: Phone: SKB/Shamrock Environmental, LLC 761 MN Highway 45 Cloquet, MN 55720 Phone: 218-878-0112 Ing name) 9. Containers No. Type Quantity WtvVol Indicate waste stream Approved # below) 14. Special Handling Procedures for Wastes Listed Ab DEBASS Information SKB Use Only Load # Load # Load # Load # Reclare that the contents of this consignment are fully and accurately described above (ed, marked, and labeled, and are in all respects in proper condition for transport by onal government regulations. Signature Month Month Month





69679

Shipping Manifest	1. Generator's US EPA ID	No. (if any)		1	,	I. Pag	ge 1 of	р	age(s)
Generator's Name and Facility Address SUPERIOR WATER LASHT & POWE HILL AVE. & STEERSON AVE. SUPE			29151	MOR				(POWEI Si Jassi	
. Generator's Phone: 18 63563491 . Transporter 1 Company Name	<u> </u>		Fax:						
			Phone:						
. Transporter 2 Company Name		•	i ilolie.						
. Designated Facility Name and Site Address	SKB/Shamrock B		Phone:	IC					
	761 MN Highway		/11ta1, L	LC					
	Cloquet, MN 557			Pho	one: 2	218-	878-01	12	
. U.S. DOT Description (including Proper Ship	* '		ntainers		10.		11.		12.
		No.	Туре	С	Total luantity		Unit Wt/Vol		eet#
· Non Hazarious Industrial Waste (OH. IMPACTED SOHADEERIS)									
					-!				
	•								
							-		
•				-	1 !	1			
•						•			
3. Additional Descriptions for Materials Listed Above	O finally and a street American American American	14 92	nacial Harr	dling Pro	codurae	for W	astes Lister	d Above	
- Cl _{CL} 19-0049 OIL IMPACTED SOII - CL - CL I CL									
 Special Handling Instructions and Additional Emergency Contact: 	I Information					1	(B Use Or ad #	ıly	
						·			
 GENERATOR'S CERTIFICATION: I hereby proper shipping name and are classified, pa according to applicable international and na 	icked, marked, and labeled, ar	id are in all re	ient are fi espects i	ully and n proper	accura r condit	tely o	described or transpo	above by ort by high	way
Printed/Typed Name	Signature	e . ·	, , ,	ar Park			Mor	nth Da	y. _{, ,} Y
7. Transporter 1 Acknowledged of Receipt of I	Materials	1,12	Be week						
Printed/Typed Name	Signature		<u> </u>	<u> </u>			Mor	nth Da	у. <u>Ү</u>
/ Cイウン カナララくと 8. Transporter 2 Acknowledgement of Receipt	of Materials	10 1 6 B	6 /						# 201
Printed/Typed Name	Signature	· .					Mor	nth Da	v Y
									<u> </u>
9. Discrepancy Indication Space			1:						
	to the second								
er en en en en en en en en en en en en en		,							
Facility Owner or Operator: Cortification of	receipt of non-bazardous mat	riale covere	d by this	Manifee	t excer	nt ae	noted in it	em 19	
 Facility Owner or Operator: Certification of Printed/Typed Name 	receipt of non-hazardous mat	erials covere	d by this	Manifes	t excep	ot as	noted in it Mor		y Y

White - Return to Generator

Canary - Facility Copy



Non Hazardous Industrial Waste

Shipping Manifest	1. Generat	or's US EPA ID No	o. (if a	ny)	1			1.	Pag	e 1 of	page(s
B. Generator's Name and Facility Address SUFERIOR WATER LIGHT & FOWER HULL AVE. & STERSOM AVE. SUFERI L Generator's Phone 218-335-319)						1,10	R W				POWER CO
5. Transporter 1 Company Name			:	·	Phone:						
. Transporter 2 Company Name				F	Phone:						
. Designated Facility Name and Site Address	761 M	hamrock Env N Highway 4	5	me	ntal, L						
	Cloque	t, MN 55720				P	hone	: 2]	18-8	378 - 013	12
 U.S. DOT Description (including Proper Shippin 	ig name)		9. No		tainers Type		10 Tot Quar	al		11. Unit Wt/Vol	12. Waste Pro Sheet#
Hon Hazardove Indontrial Weste (OR, IMFACTIO) SOL/DIERIS)				- -							
								.			
					1	 					<u>-</u>
-Cleangadoag — Oil Impacted Soil Ad . Cl . Cl . Cl	HE RIG										•
Special Handling Instructions and Additional In Emergency Contact:	formation								SKE	B Use Oni	
					:						
 GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packet according to applicable international and nation 	ed, marked, a	nd labeled, and a									
Printed/Typed Name		Signature	ir Andrew	٠.'		./				Mont	h Day
7. Transporter 1 Acknowledged of Receipt of Mat	erials										
Printed/Typed Name		Signature	مو گار مو	ing Lame	A.m. c	المالاسية				Mont	h Day / / 🤆
Above Hickory	Materials	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1									
	Materials	Signature								Mont	h Day
8. Transporter 2 Acknowledgement of Receipt of	Materials	Signature								Mont	h Day
3. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	Materials									Mont	h Day
3. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name			S COVE	ered	by this N	<i>N</i> anife	est exc	cept	as no		



Non Hazardous Industrial Waste

Shipping Manifest	1. General	tor's US EPA ID No	o. (if any)				1. P	age 1 of	page(s)
Generator's Name and Facility Address			<u> </u>	 Mailing Ad	ddrooo		<u>L</u> .		
BUPTERCH WATER LIGHT & FOWER	COPEM	adu suest.					THE	LEGHT	& POWER CO
HILL AVIT & STIMSOH AVE STIPHER	ust IW , EV.	(#4 34)							Wi Sassio
- Generator's Phone216-353-3191 - Transporter 1 Company Name			 	Fax:					
* *	and the second								
<u> 州) らメアスでらら</u> Transporter 2 Company Name	10/60			Phone:					
. Iransporter 2 Company Name									
Designated Facility Name and Site Address				Phone:	_				
. Designated Facility Name and Site Address		hamrock Env		ental, L	LC				
		N Highway 4:	5						
		et, MN 55720			Ph	ione:	218	-878-0 1	12
. U.S. DOT Description (including Proper Shipping	j name)		9. Cor	ntainers		10.		11.	12,
&-			No.	Туре		Total Quanti		Unit Wt/Vol	Waste Profile Sheet#
· Mon Hexardone Industrial Wester		7.77					<u> </u>		
(OIL IMPACTED SOILADEDERS)		**.				1 1	- 1		
						-			
						1 1	Ì		
			<u> </u>						
			, ,		1	1 1	ı		
		•				\perp			
3. Additional Descriptions for Materials Listed Above (ind			14.0		·	لمل			
CLC1.19-0049 Off. IMPACTED ROLLING		am Approval # below)	14. Sp	ecial Hand	ling Pro	cedure	s tor W	/astes Liste	d Above
· CL	(n netser is, handa tiy		i						
CL CL									
5. Special Handling Instructions and Additional Info	ormation						- Cr	(B Use O	-f
Emergency Contact:		2.00						ad #	пу
	•								
GENERATOR'S CERTIFICATION. I have been						_	1_		-
S. GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packet	lare that the d. marked. a	contents of this cand and are	onsignme e in all re	ent are ful spects in	lly and prope	accura r cond	ately (ition f	described or transpo	above by
according to applicable international and nation	al governme	nt regulations.			ріоро			or transpo	it by mgmway
Printed/Typed Name		Signature	46.5	, ,				Mor	nth Day Ye
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	<u> </u>	The second secon		<u> </u>		Security and Security			
. Transporter 1 Acknowledged of Receipt of Mate	rials 								
Limited / Turned Name		Signature	a bat	10 mg				Mor	
Printed/Typed Name			2011 6	روان المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع المراجع ا المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة المراجعة ال	!				<u>/ / 7 / </u>
DAUNG LESNY	laterials	I William	31.129	17				•	
DAUNG / CS ルソ b. Transporter 2 Acknowledgement of Receipt of N	laterials	Signature	3.149	(·	•			.,
DAUNG LESNY	laterials	Signature		(mark)		•	<u>-</u>	Mor	ith Day Ye
DAUNG / CS N Y Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name	faterials	Signature				•		Mor	ith Day Ye
DAUNG / CS ルソ b. Transporter 2 Acknowledgement of Receipt of N	laterials	Signature						Mor	oth Day Ye
DAUNG / CS N Y Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name	laterials	Signature						Mor	ith Day Ye
DAUNG / CS N Y Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name	faterials	Signature			-			Mor	ith Day Ye
DAUNG / CS N Y Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name	flaterials	Signature						Mor	nth Day Ye
DAUNO / CS N Y Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name			covered	by this M	anifes	t exce	ot as		



Non Hazardous Industrial Waste

Chinning Manifest	1. Generat	tor's US EP/	A ID No	. (if a	ny)						1.	Pag	e 1 of	page(s)
Shipping Manifest		. 1 1	1	ı	ı	ı	1	ì	1					
. Generator's Name and Facility Address				1	1	viailing	a Ad	dres	SS		1			
SOFERIOR WATER LANGE & POWER	COM MA	DA BUE	WE.							MA	TE	e ij	EGHT A	EFORMIK CO
FILL AVE. A STEED ON AVE. STOTELD	CAR, VI SAS	200												Wi 54660
. Generator's Phoneয়ের ্ডাইন্টা					ļ	Fax:			-	,				2 - 10 10 S - 2 10 10 He
. Transporter 1 Company Name														···
T	·	- · · · · · · · · · · · · · · · · · · ·		<u>. </u>		hone	:							. <u>.</u>
Transporter 2 Company Name				-										
	- •		* "		F	² hone	:							
. Designated Facility Name and Site Address	SKR/S	hamrock	Envi	ron				\overline{C}						
					1110	ıııaı,	ניבו							
		N Highw	-	'				•						
	Cloque	et, MN 5:	5720					P	ho	ne:	21	8-8	378-01	12
. U.S. DOT Description (including Proper Shipping	g name)			9.	Cor	ntainer	's I			10.			11.	12.
	,					ı	- 1		٦	otal		ľ	Unit	Waste Profil
· · · · · · · · · · · · · · · · · · ·				No).	Тур	e		Qι	anti	ty		Wt/Vol	Sheet#
· Mon Hazardous Industrial Waste												ł		
(CIL IMPACTED HOULDEIRIS)	÷					1				ł				
			i				_							
				•	-									
				ı	i	1		÷	J	1			1	
					İ									
				Щ.,	ــــــــــــــــــــــــــــــــــــــ									
			·									ļ		
· ·	·	<u> </u>												<u>_</u>
		·												
	** *												·	
							1	ĺ	İ					
CLCL 19-0049 OIL IMPACTED BOILAN CL CL	BESKLIV													
5. Special Handling Instructions and Additional Inf	ormation										Т	SKR	Use On	ılv
Emergency Contact:											- 1			ш у
												Load	J#	
			7											
5. GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packe according to applicable international and nation	d, marked, a	nd labeled.	and are	nsig in a	nme li re:	ent are spects	full s in p	y an orop	d ad er c	ccur	atel litio	y de: n for	scribed a transpor	above by t by highway
		Cianotus	•					j.					Mon	th Day `
Printed/Typed Name		Signature				1		e V					1/1	. [/ [ˈ] [/
The Harrison Commence		Signature				Art .						-		
The Harrison Commence	rials	Signature				- John								
. Transporter 1 Acknowledged of Receipt of Mate	rials		•										h Ann	th Day
. Transporter 1 Acknowledged of Receipt of Mate	erials	Signature				100 100 100 100 100 100 100 100 100 100	2.	Tit Share -					Mon	th Day
. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name)				2.	Transaction of					Mon	th Day \(\frac{1}{2} \)
. Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name . Transporter 2 Acknowledgement of Receipt of Mate		Signature					2.	Transaction					Mon	/// <u>//</u>
. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name							<u>Z.</u>	The same of the sa	-				Mon	/// <u>//</u>
. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name . Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name		Signature					<u>Z.</u>	The second second	-				/_	/// <u>//</u>
. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name . Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name		Signature					<u>Z.</u>	Trans.	-				/_	/// <u>//</u>
Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Name		Signature						The same of the sa	-				/_	/// <u>//</u>
Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name Transporter 2 Acknowledgement of Receipt of N		Signature						France of	-				/_	/// <u>//</u>
7. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name 7. Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name		Signature						Transaction of the second					/_	/// <u>//</u>
Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name		Signature						T No. o.	-				/_	/// <u>//</u>
Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name Discrepancy Indication Space	//aterials	Signature	3				<u> </u>		-				Mon	th Day
Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Mater Printed/Typed Name Discrepancy Indication Space	//aterials	Signature	3	cove	red	by thi	s M	anife	est e	exce	pt a	s no	Mon	th Day
. Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name . Transporter 2 Acknowledgement of Receipt of N Printed/Typed Name	//aterials	Signature	aterials	cove	red	by thi	s M	anife	est e	×ce	pt a	s no	Mon	th Day \



Non Hazardous Industrial Waste

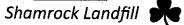
Shipping Manifest	1. Generat	or's US EPA ID	No. <i>(if any)</i>			1. Pa	ge 1 of	page(s)
. Generator's Name and Facility Address				A 4 - 195				
STOPPENDE VALUE LAGHT & FORE HILL AVE & STINSON AVE. SLIFFE	r co nema 102, wi sa	DJI MEST. 80						POWIER CO VI 34880
. Generator's Phone: 18-355-3191 . Transporter 1 Company Name				Fax:				,
. Iransporter i Company Name								
			 	Phone:				
Transporter 2 Company Name								
Designated English, Name and Otto Adulture	· · · · · · · · · · · · · · · · · · ·	<i>y-</i>		Phone:				
Designated Facility Name and Site Address		hamrock Er		ental, L	LC			
		N Highway			•			
	_	t, MN 5572	0 .		Phone:	218-	·878-01	12
. U.S. DOT Description (including Proper Shipp	ing name)		9. Co	ntainers	10.		11.	12.
			No.	Туре	Total Quant		Unit Wt/Vol	Waste Profile Sheet#
· Mon Harardous Industrial Wester								
(VIL IMPACTED SON (DEBRIS)				·				
			•					
				<u> </u>				
						ı		
	•							
·								
2 Additional Description (control of the control of								
3. Additional Descriptions for Materials Listed Above (CLULES-0049 OIL IMPACTED FOIL OIL IMPACTED FOIL OIL OIL OIL OIL OIL OIL OIL OIL OIL	indicate waste stres	ım Approval # below	14. Sp	oecial Hand	lling Procedure	s for W	astes Listed	Above
. CL	hir Siyesi ASAFKI	•						
CL CL	•							
5. Special Handling Instructions and Additional I	nformation						· D.H O. 1	
Emergency Contact:	· iioiiiiaiioii						B Use Onl	У
						LO	ad#	
	<u>.</u>	-						
GENERATOR'S CERTIFICATION: I hereby deproper shipping name and are classified, pact	leclare that the	contents of this	consignm	ent are fu	lly and accur	ately d	escribed a	bove by
according to applicable international and nation	onal governme	nt regulations.		opcots in	proper conc	nuon ic	л папъроп	. by mgnway
Printed/Typed Name		Signature	, 	///			Mont	h: Dave V
CLOKHS MIX.	<u> </u>		<u>ma</u> pril	American (1977)	$\tilde{\xi}_{\mu+\mu}(g)$		1/ 1/	h Day Y
7. Transporter 1 Acknowledged of Receipt of Ma	iterials			1,000				1, 1
Printed/Typed Name		Signature,	<i>*</i>	,	Le ¹¹		Mont	• -
3. Transporter 2 Acknowledgement of Receipt of	Matoriala	A Company of the Comp	1. C. 1	Section Sections	astria in the		€ 1	<u> </u>
Printed/Typed Name	iviaterials	Ciarra - to -						71
minten typen rasifie	·	Signature					Mont	h Day Y
Discrepancy Indication Space								
		ν.						
				<u>_</u>				
 Facility Owner or Operator: Certification of re- 	ceipt of non-ba	zardous materi	ils covered	hy this M	lanifast avoc	nt se s	oted in its	m 10
D. Facility Owner or Operator: Certification of re- Printed/Typed Name	ceipt of non-ha	zardous materia Signature	als covered	by this M	Manifest exce	pt as n	oted in ite	



Non Hazardous Industrial Waste

Generator's Name and Facility Address		or's US EPA ID	No. (It any))	_	1. Page 1 of	page(s)
			_	Mailing Ad	ddress		
SUPERIOR WATER LIGHT & FOWER O	ONEMA	OM SUBST.	٠	_		EE LICHT &	POWING CO
FILL AVE. & STRISOM AVE. STEVENOR	2, WI 540	90				BEFERRY, T	
Generator's Phone; (8-355-315) Transporter 1 Company Name		<u> </u>		<u>Fax:</u>			
nansporter i Company Name							
				Phone:	•		
Transporter 2 Company Name		· .					
				Phone:			
Designated Facility Name and Site Address	SKB/Sł	namrock E	nvironm	ental, L	LC		
	761 MN	N Highway	45	ĺ	4		
		t, MN 5572			Phone:	218-878-01	12
U.S. DOT Description (including Proper Shipping r				ntainers	10.	14.	12.
	,			1	Total	Unit	Waste Profile
			No.	Type	Quantity	y Wt/Vol	Sheet#
Non Harardona Industrial Weste							
(MLIMPACTED SOIL/DEBEIS)							
		•					٦
	·			1			
						,	
				 	·		 -
					1 1 1		
Additional Descriptions for Materials Listed Above (indica				.			
CL _{TL} 19-0049 OH. IMPACTED SOIL/DEF CL CL CL							
Special Handling Instructions and Additional Infor	mation					SKB Use On	 ly
Emergency Contact:						Load #	
		·					
GENERATOR'S CERTIFICATION: I hereby deale							
GENERATOR'S CERTIFICATION: I hereby declar proper shipping name and are classified, packed,	marked, an	id labeled, and	s consignm I are in all re	ient are fui espects in	ly and accura proper condit	tely described a tion for transpor	ibove by t by highway
according to applicable international and national	governmen	nt regulations.		·		,	,g.,
Printed/Typed Name		Signature		77	· · · · · · · · · · · · · · · · · · ·	Mont	h Day V
- Lukara arking			177	And water	and the second	1 7 17	h Day Y
Transporter 1 Acknowledged of Receipt of Materia	als	, <u>, , , , , , , , , , , , , , , , , , </u>		, , , , , <			
Printed/Typed Name		Signature	1/	197	A	Mont	h Day Y
1 / May 1/2 M Pers haldring	න 🐪		Lingue	(M) XX (14)	Little of the	1	
Transporter 2 Acknowledgement of Receipt of Man	terials		· '	:	1	1 1	1 / -
Printed/Typed Name	T	Signature				Mont	h Day Y
		·	· .				
Discrepancy Indication Coase							
Discrepancy Indication Space							
Discrepancy Indication Space							
Discrepancy Indication Space		•					
Discrepancy Indication Space							
	· .						
Discrepancy Indication Space Facility Owner or Operator: Certification of receipt	t of non-haz	zardous mater	als covered	d by this M	anifest excep	t as noted in ite	m 19.





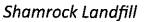
Shipping Manifest	1. Genera	itor's US EPA I	D No.	(if any)		ı		1. P	age 1 of	page(s)
Generator's Name and Facility Address JUPPELOR WATER LIGHT & FOWER	CONEM	ALM SUBSI		<u> </u>		RIO	W.			: POVIER CO
HILL AVE. & STINSON AVE. SUPERIO Generator's Phone (18-255-219)	Mt, WI 54	(960)			3915) Fax:	HLL	AVII.	BUI	ERIOR, V	Mt 34090
Transporter 1 Company Name					٠					
				ı	Phone:					
Transporter 2 Company Name										
Designated Facility Name and Site Address	CVD/C	Thomas als I	7		Phone:	TO				
		Shamrock I N Highwa		ronme	ntai, L	,LC				
		et, MN 557	-			D1	onai	219	-878-01	12
U.S. DOT Description (including Proper Shipping	_		720	9 Cor	ntainers	rı	10.11e.	210	· · · · · · · · · · · · · · · · · · ·	
The state of the s	<i>y</i> (10)			-	1 .		Total		11. Unit	12. Waste Profile
Where Thereinered in one free dres days to Filmaker.			-	No.	Type	. '	Quanti	ty	Wt/Vol	Sheet#
Min Harmings behavid Wash (OIL IMPACTED SOIL/DEBRES)		*.								
		* .								
	•			H		 	1 1	í		
			•							
						,				
	1. 1		.							
Additional Descriptions for Materials Listed Above (ind	icate waste stre	eam Approval # bel	ow)	14. Spe	ecial Hand	lling Pro	ocedure	s for V	Vastes Listed	Above
CLAIR-0049 OE IMPACTED SOILÉDE	EBRII		ŀ							
CL			-							
CL	•			•						
Special Handling Instructions and Additional Inf	ormation			\ \ \				SI	(B Use On	ly
Emergency Contact:		**		1				Lo	ad #	
				Α.	÷					
 GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packed according to applicable international and nation 	d, marked, a	and labeled, ar	nd are	nsignme in all re	ent are fu spects in	illy and prope	accur cond	ately lition f	described a for transpor	bove by t by highway
Printed/Typed Name		Signature	s.*						Mont	h Day , Y
<u> EURHO</u> UJENOAL —		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		. F		Mary Jack	·			
Transporter 1 Acknowledged of Receipt of Mate	rials		and the same of th	***		je ^{ji} nganaja nakasa nganaja				
Printed/Typed Name		Signature	أمقاعا والديبية والما	Con James Con Con Con Con Con Con Con Con Con Con	is their sections.	and the first		به و مدانه این این است. ما	Mont	h Dayo Y
「たん」 こんしょうこう Transporter 2 Acknowledgement of Receipt of M	laterials	Register of the second of the	L'ALL	em landerfram em	J. D. Sandania Contraction	الموسوطا موسوطا	and the State of the law of the state of the		, ,	r v / §
Printed/Typed Name		Signature			•					h Da
		Signaturo							Mont	h Day Y
Discrepancy Indication Space										<u> </u>
Caribba Ourren en Orangel III o 100 10										
Facility Owner or Operator: Certification of rece	ipt of non-h	azardous mate	erials o	covered	by this N	/lanifes	t exce	pt as	noted in ite	m 19.



Non Hazardous Industrial Waste

Chinaina Maniferat	1. Genera	ator's US EPA ID	No. (if any)					1. Pac	ge 1 of	i tail in l	page(s
Shipping Manifest			1		[ı	1		·	J		F-5-(*
3. Generator's Name and Facility Address		,	-		Mailing A					•	 -	
SUPERIOR WATE LIGHT & POWER BULLAVIL & STEFTON AVE. SUPER:	COMEN	AUJI SUBST										vir co
4. Generator's Phone 150 3-3101	enter has been	1846			29131 Fax:	HLL	- 12	7 B. E	江川	RIOR,	M.M	080
5. Transporter 1 Company Name					rax.							
6. Transporter 2 Company Name					Phone:							
or manoportor z company name												
7. Designated Facility Name and Site Address	~	<u> </u>	:		Phone:					.=		
11 Doughated Lability Wallie and Oile Address		Shamrock Er		onmo	ental, L	LC						
•		N Highway										
		et, MN 5572	0			F	hor	ne: 2	218-	878-0	112	
U.S. DOT Description (including Proper Shipping)	ng name)		1	9. Co	ntainers			10.		11.		12.
				No.	Туре			otal antity	,	Unit Wt/Vol	W	aste Prof/ Sheet#
a. Man Haustrian bringstill Wase					7,7,					112 701		
(OIL IMPACTED SCIL/DESCIE)				ΙТ.	1 1	1 4	. [ļ	1			
		- · · · · · · · · · · · · · · · · · · ·	\perp				_	_		j i		
).												
				1			-		Ι.			,
	· · · · · · · · · · · · · · · · · · ·			\perp		•						
		i							,			
							.					
				<u>L</u>			- (L_				
				1 1	1				,			
										1		
3. Additional Descriptions for Materials Listed Above (in	idicate waste stre	eam Approval # below	1	4. Sc	ecial Hand	llina P	rocer	dures 1	for Was	etee l iete	d Above	
a Clcilia-coma — Oth impacted soilje	MDFH									otoo Libte	. C. COOVE	
o. CL o. CL												
i. CL			ĺ									
5. Special Handling Instructions and Additional In	formation								eve	lles O		
Emergency Contact:										3 Use O	nıy	
									Load	a#		
: : : : : : : : : : : : : : : : : : :		· .	_									-
GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packet	clare that the	e contents of this	cons	signm	ent are ful	lly an	d ac	curat	ely de	scribed	above l	by
according to applicable international and nation	nal governme	ent regulations.	are ii	ı alı re	spects in	prop	er co	onaiti	on tor	transpo	nt by h	ghway
Printed/Typed Name		Signature	7.	<u></u>								
17845 11168 1		Signature		part .	1	1				Mor	nth 	Day
7. Transporter 1 Acknowledged of Receipt of Mat	erials	10	- N	3, .	-/ -/-	<u>د د آه</u> کړ	10 may 10	Same Comment		1/1	1 1 1	
Printed/Typed Name		Signature	·	-				•••		Mor		Dau.
Transport to a direct		and the state of t	د معرود برزی	and I						JVIOI	ıun 	Day
8. Transporter 2 Acknowledgement of Receipt of I	Materials	Land Landing	F	1880	12.200				-		7 1 +	1 1 1 1
Printed/Typed Name		Signature							_	Mor	ıth l	Day
9. Discrepancy Indication Space										'		'
												Ė
		-										
0. Facility Owner or Operator: Certification of rece	eipt of non-h	azardous materia	ls co	vered	by this M	lanife	est ev	cent		ted in it.	em 10	
Printed/Typed Name		· · · · · · · · · · · · · · · · · · ·		- 	~, tino (v)		J. 67		25 110			
пплеси турестванте		Signature								Mon	th [Day '
		.1								1 1	1	1 1





Shamrock Landfill Non Hazardous Industrial Waste

Shipping Manifest	1. Generator's US EPA ID	No. (if any)			1. Page 1 of	page(s)
Generator's Name and Facility Address **TOPISMOR** WATER LIGHT & PUWI	ማጀጋ ለማስጥ ጨዋታያዊ ም ል ምስጥር የመታማው ለማማ		Mailing Ad		ariere e Torroma	A POWER CO
THE AVE A STENOOR AVE SHE					um langi. Superna,	
. Generator's Phone 218-245-3191	and the second of the second o		= ೩೪೩೪೪ Fax:	Albada Mey Jo.	STATEST STATES	A. 18 - 12 - 24 - 24 - 24 - 24 - 24 - 24 - 24
Transporter 1 Company Name						
Alak.	MMSS A1	17	Phone:		9.50 9.	
Transporter 2 Company Name	7 1 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	· · · · · · · · · · · · · · · · · · ·	i none.		· · · · · · · · · · · · · · · · · · ·	
			Phone:			
Designated Facility Name and Site Address	SKB/Shamrock E			LC		-
	761 MN Highway		· ,		-	
	Cloquet, MN 557			Phone:	218-878-01	12
. U.S. DOT Description (including Proper Ship	~ .		ntainers	10.	11.	12.
7° (ping namo,	1	1	Total	Unit	Waste Profile
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		No.	Туре	Quantii	ty Wt/Vol	Sheet#
· Don Fissardous Industrial Waste (OT, IMPACTED SCILIDEDRES)			ı	1 1 1	1	
ng na na biri andaninan na na na na na dagasari na hina dadada bari Shakari Basal da da daga	and the second s					
•		. ' '			1	
		[F				
•						
		1 1	1	1 1 1		
3. Additional Descriptions for Materials Listed Above	indicate waste stream Approval # belo	w) 14. Sp	ecial Hand	ling Procedure	s for Wastes Liste	d Above
CLULIS-0049 OH IMPACTED SOIL	ADED RIS					
o. CL s. CL						
i. CL	•					
5. Special Handling Instructions and Additiona	Information				SKB Use O	nly
Emergency Contact:					Load #	
	•		-			
C GENERATOR'S CERTIFICATION: I homely	declare that the contents of th	io sonolana	ant are fu	lly and analy	otali dagaribad	chave by
GENERATOR'S CERTIFICATION: I hereby proper shipping name and are classified, pa	cked, marked, and labeled, an	d are in all re	ent are iu espects in	proper cond	lition for transpo	ort by highway
according to applicable international and na	tional government regulations.					
Printed/Typed Name	Signature	21	7 /		Moi	nth Day Y
626-1878 JJAN 1178			1.00	y _k : : "		<u> </u>
7. Transporter 1 Acknowledged of Receipt of N						
Printed/Typed Name	Signature	San San San San San San San San San San	S. Johnson	H.L.	Moi	ith Day Y
8. Transporter 2 Acknowledgement of Receipt	of Materials			<u>let st.</u> St.		1 1 1 1
Printed/Typed Name	Signature		<u>₹./*</u>		Moi	nth Day Y
			•			lii Day
9. Discrepancy Indication Space					· · · · · · · · · · · · · · · · · · ·	
			<u> </u>	<u> </u>		
0. Facility Owner or Operator: Certification of	receipt of non-hazardous mate	rials covered	by this N	1anifest exce	ept as noted in it	em 19.
Printed/Typed Name	Signature		:		Мог	nth Day Y
· · · · · · · · · · · · · · · · · · ·	3.9.12.010					, , , , , , , , , , , , , , , , ,





Shipping Manifest	i. Generator	r's US EPA ID No	. (ır any)		1	ı. Pa	ge 1 of	page(s)
3. Generator's Name and Facility Address			P	Mailing Ad	ddress	<u> </u>	·	
HOPERIOR WATER LIGHT & FOYER O THE LAVE & STRISON AVE SUFERIOR				2012 1212				YOWIR CO 41 54830
. Generator's Phone: 1993 5-3194 . Transporter 1 Company Name				Fax:				- Maria
A) (C	**************************************		!	Phone:	7/5-	المراجعة	A Sun Same	7561
i. Transporter 2 Company Name					<u> </u>		Ninger /	
. Designated Facility Name and Site Address	SKB/Sh	amrock Envi		Phone: ental, L	LC			
		Highway 45		•				
		, MN 55720			Phone:	218-	-878-011	12
3. U.S. DOT Description (including Proper Shipping)		, 1,11, 00, 20	9. Co	ntainers	10.		11.	12.
2. C.C. DOT Decomption (mondaing report on pping)	iaoy	·	No.	Туре	Total Quant		Unit Wt/Vol	Waste Profile Sheet#
a. For Hezardes, a control Waste (OH, IMPACTED MONAMERIS)								
o.								
3.						ı		
d.	*	·				1		
13. Additional Descriptions for Materials Listed Above (indic a. CLT, 19-0019 Off, TMF; TED SOR /DE b. CL c. CL d. CL								
15. Special Handling Instructions and Additional Info Emergency Contact:	rmation	_ 					KB Use On	ly
						100	oad #	
16. GENERATOR'S CERTIFICATION: I hereby decl proper shipping name and are classified, packed according to applicable international and national	l, marked, ar	nd labeled, and a	consignm re in all r	nent are fu	ully and accu n proper con	rately dition f	described a or transpor	above by t by highway
Printed/Typed Name		Signature	est.		<i>)</i>		Mon	th Day
17. Transporter 1 Acknowledged of Receipt of Mater	iale				الر العن معارد العارد العارد			/
Printed/Typed Name	IGIO	Signature	-		<u>/</u>		Mon	th Day
	l				Ti'n, Ma			
18. Transporter 2 Acknowledgement of Receipt of M	aterials							
		Signature	ś.:	<u> </u>	1		Mon	th Day `
Printed/Typed Name	aterials	Signature	hange Jackson and Jackson and American	an agent agent of the second	Andrew Control of the			th Day `
· · · · · · · · · · · · · · · · · · ·		Signature	Section 1985	The same of the sa		, :	Mon →	th Day \
Printed/Typed Name		Signature	Service Servic		and the second		M on	th Day \
Printed/Typed Name	And the second s		s covere	d by this		ept as		<u>/ 1 / 19 11</u>





Shipping Manifest	1. Generato	r's US EPA ID No	. (IT a ny) :		1	1	'	. Pag	ge 1 of	page	(S)
. Generator's Name and Facility Address		<u> </u>	L	Mailing A	ddre	SS	L_				
SUPERORY TERIBUIT & FOWER				SUPE	O.	W W				EPOWER C	()
HILLAVE & THISON AVE SIDER	1012, VII 548	Sis			JII J	. AV.	E. 3	ME	more,	WI 54830 +	
. Generator's Phone:□9-385-3393 . Transporter 1 Company Name		•		Fax:							
111 C	•										
			•	Phone:							
Transporter 2 Company Name	•										
Designated Facility Name and Site Address	GTTT /01			Phone:	- ~						
besignated Facility Name and Site Address		amrock Envi		ental, L	LC						
		Highway 45	•			. 4	_	10		10	
	_	, MN 55720			ŀ			18-	878-01		
. U.S. DOT Description (including Proper Shippi	ing name)		9. Co	ntainers		10 Tot			11. Unit	12. Waste Pro	ofile
			No.	Type		Quai			Wt/Vol	Sheet	
- Mon Monardots Industrial Waste											
(CIL IMPAC) DEOR (DEDECE)	*	•									
				ļl	ļJ	<u> </u>		Ц	-		
				,	,	1	1				
					•						
				 	1						
							1	1			
						i_					
		•									
3. Additional Descriptions for Materials Listed Above (findicate waste etres	m Approval # belows	14 Sr	ecial Hand	llina l		lree f	or Wa	astes Listed	d Above	
CLOSSIP-OND OF BARACTED F	11 138		•					· · · · ·			
. CL . CL											
. GL											•
5. Special Handling Instructions and Additional I	Information							SK	B Use Or	ıly	
Emergency Contact:	-								ad #		
	•										
6. GENERATOR'S CERTIFICATION: I hereby d	loclam that the	contents of this o	oneiane	ont are fi	ıllı a	nd and	urot	olv d	acaribad	abovo by	
proper shipping name and are classified, pack	ked, marked, ar	nd labeled, and ar									
according to applicable international and nation	onal governmer	nt regulations.		-		1					
		Signature	25 F		. ,	J			Моп		Y
Printed/Typed Name				. 31	San Straight	, in lands	A Party of the	<i>e</i> '			<u>ز</u> ا
The state of the s	atoriale		1,	A Property	-	,					
7. Transporter 1 Acknowledged of Receipt of Ma	aterials	Slanet & V	i,								
7. Transporter 1 Acknowledged of Receipt of Ma	aterials	Signature /		A Commence of the Commence of	er grant play and	general San San S			Mon	ithy Day	Y
7. Transporter 1 Acknowledged of Receipt of Ma		Signaturé /	T To an arrangement of the second	Prince of the second	nggos phrah	ar Turken saken k	, ,		Mon	nth Day	Y
7. Transporter 1 Acknowledged of Receipt of Ma		Signature Signature		John John Strameron	dgg to play wa	general characters					
7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name B. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Comment of Superior		fritte Landstoneren	dgg to PM sh	garantik i Personalitat P			Mon Mon		Y
7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name B. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Comment of Superior	a de la companya de l	John John Strammer	dga od gali ma	yene and a					
7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name 6. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Comment of Superior		- John Steineren	Agging PAC wa	ware the own of					
7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name 6. Transporter 2 Acknowledgement of Receipt of		Comment of Superior		- Prince	Agging PAT AA	ggeneral characters of the					
7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name B. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Comment of Superior		A Stanton	ayyota viva	general constitution and the					
7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Comment of Superior			Agg (c) p (c) and	and the control of					
7. Transporter 1 Acknowledged of Receipt of Ma Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	f Materials	Signature		d by this I	Mani	fest ex	cept	asr	Mon	oth Day	



Non Hazardous Industrial Waste

69696

Chinning Manifost	1. Generate	or's US EPA	ID No.	(if any)	· Jones Gra			1.	Page 1	of	page(s)
Shipping Manifest			1 11			I	1				
Generator's Name and Facility Address			<u> </u>	- 1	Mailing A						
JUPERIOR MATURILIDHY & POWER	COMEMA	DH GUBY	T.								OVERCO
III.L. AVE. & STILLSCOLE, JE. SUPERIO	las, ve 1946	3.0				Hill	JAV	E. St	HURK:	F. 701	54 680
. Generator's Phone 318-238-2311 . Transporter 1 Company Name					Fax:				·.		
. Transporter 2 Company Name	111	£			Phone:						
. Transporter 2 Company Name	y i van	Mayor"									
		•			Phone:						
Designated Facility Name and Site Address	SKB/S1	hamrock	Envir	onme	ntal I	LC					
		N Highw		Ç11111E	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
		_	•			т	1	1 1	10 070	Δ112	
110 0000	-	t, MN 55	720			_ r			18-878	-0112	
. U.S. DOT Description (including Proper Shipping	g name)			9. Cor	ntainers		10 Tot). tal	11 Un	. .i+	12. Waste Profile
			.	No.	Туре		Quai		Wt/		Sheet#
Mess (Lazardenia Indicatrici Maste											
(OIL DEPACTED SOURDEDRIS)	100			1.1			1	1	1		
The second secon	<u> </u>	·									
				-							
					1		ļ	1			
				-							
						<u> </u>	· · · · · · · ·		-		
•			İ	11.				ŀ	[
	•	100				-1					
3. Additional Descriptions for Materials Listed Above (inc	dicate waste stres	ım Approval # b	elow)	14. Sp	ecial Hand	lling F	roced:	res fo	r Wastes I	isted At	00V 0
CLC1.19-0019 OIL IMPACTED SCILAD	EBRU										
CL											
CL										٠	
5. Special Handling Instructions and Additional Inf	formation				-				SKB Use	e Only	
Emergency Contact:				٠					Load #	o Omy	
									LOAU #		
		·									
6. GENERATOR'S CERTIFICATION: I hereby dec	clare that the	contents of	this cor	nsignm	ent are fu	illy ar	nd acc	urate	ly descrit	oed abo	ove by
proper shipping name and are classified, packe	d, marked, ai	nd labeled, nt regulation	and are	in all re	spects in	prop	er co	nditio	n for tran	sport b	y highway
according to applicable international and nation	95.01111161										
according to applicable international and nation						- 7				Month	Day \
according to applicable international and nation Printed/Typed Name		Signature	المانية مانية	Secretary of the second	100	26.				- No. 1	
according to applicable international and nation Printed/Typed Name		Signature	A STATE OF THE STA	STATE OF THE STATE	A STATE OF THE STA	garak .				1 1	1 / 1 / 1
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Materials	erials		The second second second second second second second second second second second second second second second se	September 1	No. of Section 1		Silver Silver		į	<i>f</i>	- / - / - / - /
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name	erials	Signature Signature	The same of the sa	Grand Control of Contr			ast Saye		ş	/ / Month	Day Y
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate	V		The second second	A CONTRACTOR OF THE PARTY OF TH			Solvye		, ,	Month	Day \
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Mate	V	Signature	A CONTRACTOR OF THE PARTY OF TH	A CONTRACTOR OF THE PARTY OF TH		en en en en en en en en en en en en en e	St. ye		ý	Month	Day Y
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate	V		A CONTRACTOR OF THE PARTY OF TH	Service Control of th		and the second	Territoria 1955 Selvinger			Month Month	Day Y
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Mate	V	Signature	A CONTRACTOR OF THE PARTY OF TH	Service Servic		A CONTRACTOR OF THE CONTRACTOR	alf somewhat				1/91/
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Materials and Printed/Typed Name	V	Signature	A CONTRACTOR OF THE PARTY OF TH	2 2 2		And the second s	The second				1/91/
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Mate	V	Signature	A CONTRACTOR OF THE PARTY OF TH	2 2 2		A Company of the Comp	S. y				1/9/
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Mate	V	Signature	A CONTRACTOR OF THE PARTY OF TH	<u> </u>		and the second s					1/9/
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Mate	V	Signature	A CONTRACTOR OF THE PARTY OF TH	3 1		And the second s	The second secon				1/91/
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Materials and Printed/Typed Name	V	Signature	A CONTROL OF THE PARTY OF THE P	32 25		A CONTRACTOR OF THE PARTY OF TH	est See, ye				1/9/
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mate Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Mate Printed/Typed Name Discrepancy Indication Space	./ Materials	Signature	<u> </u>	3-2			\$4. Ju		<u> </u>	Month	Day Y
according to applicable international and nation Printed/Typed Name Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name Transporter 2 Acknowledgement of Receipt of Materials and Printed/Typed Name	./ Materials	Signature	<u> </u>	covered	by this M	Manif	\$4. Ju	cept a	<u> </u>	Month	Day Y

White - Return to Generator

Canary - Facility Copy



Non Hazardous Industrial Waste

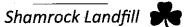
69691

Chinning Monifort	1. Genera	ntor's US EPA ID No	o. (if any)	-	1	I. Page 1 of	page(s)
Shipping Manifest		1 1	1 1 .				
. Generator's Name and Facility Address			, <u> </u>	lailing Ac			
- STEPEKOË WATER LI ME AFOW FULL AVE, A STEPENIKAVE, SUE							POWER CO
Generator's Phone 34 383 4181	SANATONIA 1994 FI	\$ \$25 \$. 7 \$_\$		i ati turiti Fax:	Hida Ay Kas	UPERGR, (AN DARBARA
Transporter 1 Company Name		1		un.			
				Phone:			
. Transporter 2 Company Name		<u> </u>		-HOHE,			
				Phone:			
Designated Facility Name and Site Address	SKB/S	Shamrock Env			. C		
		IN Highway 4		11tai, L			
		et, MN 55720			Phone: 2	18-878-01	12
U.S. DOT Description (including Proper Ship		Ct, 19119 55720		ntainers			
5.5. DOT Description (including Proper Snif	white traine)			ı	10. Total	11. Unit	12. Waste Profile
			No.	Туре	Quantity	Wt/Vol	Sheet#
Usen Hazzudean Inchestrial Weste					1		
(OIL-BAFACIED SOIL/DEERID)	:						
•			1				
			1 1				
:			1			1	
	•						
					1 1		
, Additional Descriptions for Materials Listed Above	e (indicate waste str	eam Approval # below)	14. Sp	ecial Handl	ling Procedures	or Wastes Listed	Above
CLULIPONO OR IMPACTED SC.	LAMBRIB						
CL							
CL							
5. Special Handling Instructions and Addition	al Information					SKB Use On	ly
Emergency Contact:					1	Load #	
. GENERATOR'S CERTIFICATION: I hereby	/ declare that th	e contents of this	onsignme	ent are ful	lv and accurat	elv described a	above by
proper shipping name and are classified, pa	acked, marked,	and labeled, and a	re in all re	spects in	proper conditi	on for transpor	t by highway
according to applicable international and na	auonai governm	· -	Marie Marie		<u>~~</u>		
Printed/Typed Name	1.19	Signature	- 75 - 75		Japane Paris	Mon	th Day >
Transporter 1 Acknowledged of Receipt of	<u>Materials</u>	Joseph Co.	* Section Walls	no sec	Constitution of the second	,	1 1 1 1
Printed/Typed Name		Signature	, , , , , , , , , , , , , , , , , , , 		*** ***		u. D
Timed typed realite	A. C. Louis	Signature	4.		n. H	Mont ⊢ -	th Day Y △ I ∠ I ∠ I
. Transporter 2 Acknowledgement of Receipt	of Materials				2 (1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Printed/Typed Name		Signature	:			Mont	th Day
Discrepancy Indication Space							
•							
<u> </u>						<u> </u>	
Facility Owner or Operator: Certification of	receipt of non-h	nazardous material	s covered	by this N	lanifest except	as noted in ite	m 19.
Printed/Typed Name		Signature			• • • • • • • • • • • • • • • • • • • •	Moni	th Day Y
						1 1	'

White - Return to Generator

Canary - Facility Copy





69692

Shipping Manifost	1. Generate	or's US EP	A ID No.	(if any)			1. Pa	age 1 of	page	(s)
Shipping Manifest				1	1 1					
. Generator's Name and Facility Address				, ,	/lailing Ad					
SOMETHOR WATER LIGHT & POTTER	COMENA	mi sob	ST.						POWE C	()
IGO AVE A STATEON AVE SUERK	CK, WI SE	50	. :			Hi.avi		erior, v	ME SHEETE	
. Generator's Phone: 18				1	ax:					
. Transporter 1 Company Name										
				F	Phone:					
. Transporter 2 Company Name										
			- 14 	F	Phone:					
Designated Facility Name and Site Address	SKB/S	hamrocl	k Envi			·C	•	12 200		
		N Highv			11tu1, L1					
			•			D1	. 410	0.70 01:	10	
	-	t, MN 5	5/20			Pnone	: 218	-878-01	12	
. U.S. DOT Description (including Proper Shipping	ng name)			9. Cor	ntainers	10. Tota		11. Unit	12. Waste Pr	مانام
				No.	Туре	Quan		Wt/Vol	vvaste Pr Sheet	
- Figs. The surfaces Industrial Waste	-				7,1-1					
(OU. DAFACTED BOILD ATRIS)				111		1 1	1			
Sign of the state							.			
							·			
			[1 1				
	•		. [1 1		i i	1 1			
							· ·			
				1.1		1 1	1 1			
	•									
3. Additional Descriptions for Materials Listed Above (i	ndicate waste stre	am Approval #	t below)	14. Sp	∟L ecial Handl	ina Procedu	res for V	Vastes Listed	l Above	
. CLTL19-0019 OH. DAPACTEL BOILE										
. CL	2 4 a 3 a 3 a 4 a 3 A 5					•				
. CL										
. CL										
5. Special Handling Instructions and Additional I	nformation						SI	KB Use On	ly	
Emergency Contact:	•	1					. Lo	oad #		· · · · · · · · · · · · · · · · · · ·
O OFNIED ATODIC OFDITION TONIS I havely d								ماد د مالد د ما	-b-w- b	
GENERATOR'S CERTIFICATION: I hereby deproper shipping name and are classified, pack	eciare iriai irie ked. marked. a	nd labelec	i ins co	in all re	ent are iui spects in	Drober cor	idition f	described a for transpor	t by highway	
according to applicable international and natio				_				•		
Printed/Typed Name		Signatu	re ///	e ger		7		Mon	th Day	Y
11/18/6 1/1/2	J. 7		. In many page 1	10 July 200 18 10 10 10 10 10 10 10 10 10 10 10 10 10		and the second			Day	3
7. Transporter 1 Acknowledged of Receipt of Ma	uterials	مسمد میروند. نوی	And Branch Control	1 2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	* /	*12°		1 / 1	1 2 2	, per
Printed/Typed Name		Signatu						Mon	th Day	
i mitour typou realite		Signatur						IVION	th Day	Y I
and the second of the second o		1 20 20		o o o o o o o o o o o o o o o o o o o					1 2 3	
B. Transporter 2 Acknowledgement of Receipt of	Materials	Carp Mark								
	Materials	Signatur		•		•		h 4	th D	
B. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	Materials	Signatu	re			·		Mon	th Day	Y 1
Printed/Typed Name	f Materials	Signatu	re					Mon	th Day	
Printed/Typed Name	f Materials	Signatu	re					Mon	th Day	
Printed/Typed Name	f Materials	Signatu	re					Mon	th Day	
8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name 9. Discrepancy Indication Space	f Materials	Signatu	re					Mon	th Day	
Printed/Typed Name	f Materials	Signatu	re		<u> </u>			Mon	th Day	
Printed/Typed Name	f Materials	Signatu	re					Mon	th Day	<u> </u>
Printed/Typed Name 9. Discrepancy Indication Space				covered	by this M	lanifest exc	cept as			Y
Printed/Typed Name			materials	covered	l by this M	lanifest exc	cept as		em 19.	T

White - Return to Generator

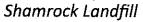
Canary - Facility Copy



Non Hazardous Industrial Waste

Shipping Manifest	1. Generat	tor's US EPA ID No	o. (if any)		1	_	1. Pa	ge 1 of	page(s)
3. Generator's Name and Facility Address ACCEPTION WASHESTERN AND STORY HELD AVE. & STORY AND STORY Concrete's Phonesis.	ERCOMEN MOR, VASS	nda Wiese. Reg		79157		: WA:			POWER CO
l. Generator's Phone 3 (5-335-3 (9)) i. Transporter 1 Company Name	•		F	ax:					
. Transporter 2 Company Name	· · · · · · · ·		F	Phone:					
			F	Phone:					
Designated Facility Name and Site Address	SKB/S	hamrock Env			LC			·	,
		N Highway 43		, , , ,					
		t, MN 55720			Ph	one:	218-	878-011	2
. U.S. DOT Description (including Proper Ship		,	9. Con	tainers		10.		11.	12.
			No.	Туре		Total Quantit	v	Unit Wt/Vol	Waste Profile Sheet#
· Don Hamplons Industrial Wester (AL Department Son Appendis)									
•									
						1 1	ı		
			.						
•		"							,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
		<u> </u>						 	
	1					1 1	1		
	<u> </u>								
3. Additional Descriptions for Materials Listed Above CL T. 19-00-00 CL BAPACTED SOF CL CL CL CL		ип Арргочаі # веложу	14. Spe	eciai Handi	ling Pro	cedures	tor W	astes Listed	Above
Special Handling Instructions and Additional Emergency Contact:	Information						ľ	B Use Only	y
GENERATOR'S CERTIFICATION: I hereby proper shipping name and are classified, page 2.	cked, marked, ai	nd labeled, and ar	onsignme e in all res	nt are ful	lly and	accura	tely d	escribed at	pove by by highway
according to applicable international and nat	ional governme	<u> </u>		j.F)			
Printed/Typed Name) N	Signature	. Janaan Jana	, 4		/ 		Month	
7. Transporter 1 Acknowledged of Receipt of M	laterials	L state that	المرسوبية الموا	la diserri	AND THE PERSON NAMED IN	Age of the second	, , , , , , , , , , , , , , , , , , ,	<u> </u>	6-17
Printed/Typed Name		Signature	1 18		1. 1			Month	n Day Y
- Herry John 1806	ere, e Newson			6.420	<u> </u>				
3. Transporter 2 Acknowledgement of Receipt	of Materials								
Printed/Typed Name		Signature						Month	Day Y
Discrepancy Indication Space	•	<u> </u>		·					
· ,		1							
Facility Owner or Operator: Certification of n	eceipt of non-ha	zardous materiale	covered l	ov thie M	lanifort	OVCOT	t ac c	oted in Hen	
	p			⊸v u na iVi				осеч ин пеп	1 177.
Printed/Typed Name	· · · · · · · · · · · · · · · · · · ·	Signature			-			Month	

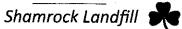




Shamrock Landfill Non Hazardous Industrial Waste

Shipping Manifest	1. Generate	or's US EPA ID No	. (if any)			I. Page 1 of	page(s)
B. Generator's Name and Facility Address			. <u> </u>	 /lailing Ad	dress		
SUPERIOR VIATUR LIGHT & FOWER	e COO ETELMA	on ener	,,	•		or light o	FOWER CO
HILL AVIL & STRISON AVE SUPPLY	100, VI 348	igl):				HERRIOL, V	
Generator's Phone®(\$-355-319)			· F	-ax:	periode per a dels es	The fire often a treat ent as large. The	and the control of the section
. Transporter 1 Company Name							
	*	4		3h			
Transporter O Common Name			- F	Phone:			
Transporter 2 Company Name							
			F	hone:			
. Designated Facility Name and Site Address	SKB/Sl	namrock Envi	ronme	ntal, Ll	LC		
	the second second	N Highway 45		,			
		t, MN 55720	,		Dhone, 7	10 070 01	10
	•	t, IVIIN 33720				.18-878 - 01	12
 U.S. DOT Description (including Proper Shipping) 	ng name)	4	9. Con	itainers	10.	11.	12.
			No.	Туре	Total Quantity	Unit Wt/Vol	Waste Profile Sheet#
· Clarles Bloom rated range Ton Broke Sail & Shearthan			140.	1,50	Gaariary	112 101	01100111
表示公子 (2)(2)(2)(2)(2)(2)(2)(2)(2)(2)(2)(2)(2)(1 .	1 1 1		
(COLUMNACTED SOGLADMENT(S)							
	 			 		_	
	4						
•							
		·					
•		•					
	*	Sec. 16	11		1 1 1		
		•					
-CLOLIS-0049 OR IMISA PED FORA . CL . CL . CL)KO #13						
5. Special Handling Instructions and Additional In	nformation					SKB Use On	
Emergency Contact:						-	ıy
				-		Load #	
			•				
 GENERATOR'S CERTIFICATION: I hereby do proper shipping name and are classified, pack according to applicable international and national Printed/Typed Name 	ed, marked, a	nd labeled, and ar	onsignme e in all re	ent are ful spects in	ly and accurat proper conditi	on for transpor	t by highway
I DEN DIVERN	ſ	Jigi icial C	n L	الراجي	, / 	Mont	th Day) / I ②I · 〉I /
7. Transporter 1 Acknowledged of Receipt of Ma	١, .	High Section 1975 - The Control of t	J.,	in the property	Page Commence and according	- - - 	South to the
Printed/Typed Name		Signature	a				L 5
		Signature	parina Parina			Mont	
8. Transporter 2 Acknowledgement of Receipt of	Materials	TO THE STATE OF TH	All our Mileson	nyagasi mengeri		1 #	1361
Printed/Typed Name		Signature				Mont	th Day Y
Discrepancy Indication Space			•				
эт расстерансу писсаноп эрасе					4		
		•					
							Þ
		* *					
Facility Owner or Operator: Certification of rec	ceipt of non-ha	zardous materials	covered	by this M	lanifest excep	t as noted in ite	m 19.
Printed/Typed Name		Signature				Mont	h Day Y
		Jigirature					∟ay 1





	Shipping Manifest	1. Generate	or's US EPA ID No	. (if any)			1. Page 1	of	page(s)
3. (Generator's Name and Facility Address			<u> </u>	 /lailing Ad	ddress			
	THE PROPERTY OF THE PARTY OF THE PARTY.	CÓUMBA	ini uusir.	,		arios Arion mai	THE LIVE	HT & F	OPHIE GO
	FILE AVE & STEWART AVE STARES	Mi, VII Sas	80	-		HLLAVE.			
_	Generator's Phone 213-335-335.			F	ax:				
. !	ransporter 1 Company Name				•		W.		
_				F	Phone:	·			
٦.	ransporter 2 Company Name								
				Ė	hone:				
. C	Designated Facility Name and Site Address	SKB/S]	namrock Envi	ronme	ntal, L	LC			
		761 M	N Highway 45	;					
		Cloque	t, MN 55720			Phone: 2	218-878	3-0112)
	J.S. DOT Description (including Proper Shipping	_		9. Con	tainers	10.	1	1.	12,
				No.	Туре	Total Quantity	Ų	nit ∕Vol	Waste Profile Sheet#
_	Man Masardone industrial Warts			INO.	туре	Quaning	/ ۷۷۱	/VOI	SHEER
	MOLIMPACTED SCHAREFIEY	,		$ \cdot $			1		
_	o prosperior on a substituti de la compania del compania del compania de la compania del la compania de la compania de la compania de la compania de la compania de la compania del la compan								
						<u> </u>	•		
				$\lfloor \cdot \rfloor$					

			·			, , ,	.		
C	Additional Descriptions for Materials Listed Above (Ind Language Color Baractrico de Danado) Cl		m Approval # below)	14. Spe	ecial Hand	lling Procedures	for Wastes	Listed At	oove
	L		• .						
j. :	Special Handling Instructions and Additional Inf	ormation					SKB U	se Only	
	Emergency Contact:						Load #	-	
	CENEDATODIS CEDTIFICATIONS 1 have	lava 35 -4 41	aantanta af iti			Out and the	<u> </u>	n	
	GENERATOR'S CERTIFICATION: I hereby dec proper shipping name and are classified, packet	d. marked. aı	nd labeled, and an	onsignme e in all re:	ent are tul spects in	ny and accura proper condit	tely descr tion for tra	iped abo nsport h	ove by vy highwav
i	according to applicable international and nation	al governme	nt regulations.	,	• •			• • •	. 0 : :=0
	Printed/Typed Name		Signature	and the second	1			Month	Day Y
			Same and the second	marine and the second	an gadada sa	garagas (c. d. d. d. d. d. d. d. d. d. d. d. d. d.		g 8	12 7 4/
	Transporter 1 Acknowledged of Receipt of Mate	rials	,		2.1	1 0			
	Printed/Typed Name	and francisco	Signature		li La Jak	Market Comment	1	Month	Day Y
	Transporter 2 Acknowledgement of Receipt of N	/laterials							
	Printed/Typed Name		Signature			-		Month	Day Y
١. ا	Discrepancy Indication Space			1					
		•							
			* .						
_	English Owner or Operator Oction				L AL 1	416			
. 1	Facility Owner or Operator: Certification of rece	ipt of non-ha	zardous materials	covered	by this M	//anifest excep	t as noted	d in item	19.



Non Hazardous Industrial Waste

Shipping Manifest	1. Generato	or's US EPA ID No.	(If any)			1. Pa	ge 1 of	page(s)
Generator's Name and Facility Address				 Mailing Add	lrece	_		
CHARGON WATER LIGHT & POWER	PERMITS	DESTRUCT				tra i	Liuter a	14492200
THE AVE & STITION AVE SUPED					M. AYR.			
Generator's Phone \$15-35373191				Fax:				
Transporter 1 Company Name								
				Phone:				
Transporter 2 Company Name		**		rnone.				
. Hansporter 2 Company Name								
Designated Facility Name and Site Address	CIZD/CI			Phone:	<u>C</u>			
. Designated 1 acinty Name and Ord Address		namrock Envi		entai, LL	,C			
		N Highway 45						
	Cloque	t, MN 55720			Phone:	218	-878-01	12
. U.S. DOT Description (including Proper Shippin	ig name)		9. Co	ntainers	_10.		11.	12.
			No.	Type	Total Quanti		Unit Wt/Vol	Waste Profile Sheet#
The an U.S. care Service Conservation of Watershoe				1,500		-,		
\$45% C \$2 30 50 55 54566 12 \$5 50 50 50 1 16 5 5 60 5					1 1 1	1		
Continuescrib edinderada) -		*.						
·								
		·	1 1			1		
	•	4.14						
		- · · · · · · · · · · · · · · · · · · ·			<u> </u>			
		, , , , , , , , , , , , , , , , , , ,	11		1 1 1	1.		
•								
	-							
3. Additional Descriptions for Materials Listed Above (in		am Approval # below)	14. S	pecial Handli	ng Procedure	s for V	Vastes Liste	d Above
· <mark>Cl</mark> elligacas — cal bydaethid (b ilae	ZELEN							
. CL . CL								
. CL								
5. Special Handling Instructions and Additional In	nformation					SI	KB Use O	าไV
Emergency Contact:							ad #	.
							- Lau π	
	*		1					
6. GENERATOR'S CERTIFICATION: 1 hereby de	eclare that the	contents of this c	onsignr	nent are full	y and accui	rately	described	above by
proper chipping name and are classified pack	ed, marked, a	ind labeled, and at	e in all i	espects in	proper cond	dition	for transpo	ort by highway
proper shipping name and are classified, pack	manguverrine	regulations.		,				
according to applicable international and natio		.79					Mor	
according to applicable international and natio Printed/Typed Name		Signature	. gradi //3	11	an entre		1 7 .	
according to applicable international and nation	L	Signature		La Langue	3.J.			/ 31(1)
according to applicable international and natio Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Ma	terials		;	1. 1. 2	24			· · · · · · · · · · · · · · · · · · ·
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name	terials	Signature	The second secon	de la company de	Building.		Mon	nth Day Y
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name				Land Brown	<u> </u>	1 + 2	Mor	· · · · · · · · · · · · · · · · · · ·
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of		Signature		Late of the second	2.34			nth Day Y
according to applicable international and nation Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name		Signature		<u> </u>			Mon	nth Day Y
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Signature		Jahren Ber				nth Day Y
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Signature		Andrew Bree				nth Day Y
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Signature		Lander Berry				nth Day Y
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mare Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of		Signature		Lander Breeze	2.24			nth Day Y
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Signature		Sandar Breeze	2.24			nth Day Y
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name		Signature		Samuel Comment				nth Day Y
Printed/Typed Name 7. Transporter 1 Acknowledged of Receipt of Mar Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of Printed/Typed Name	Materials	Signature Signature			anifest exc	ept as	Moi	nth Day Y



Non Hazardous Industrial Waste

Shipping Manifest	1. Generator's l	JS EPA ID No.	(if any)			1. Pa	ge 1 of	page(s)
		· ·		4-111 2				
Generator's Name and Facility Address	THE STOP DATE OF	- #1 (55 harm	N	failing Ac		r dona	t Zeitschieb de	FOWER CO
FILLAVE & CUSTOM AVE SUPERIO	ng matanganan Ng Matangan	231.34.257.3 ·			raal we. Walayik			
. Generator's Phone: এট-এর ঠ-র চেন	a and a contract of the contra		F	ax:	SEESTING VIII.	4.34 A.S. A	de Pallibacijalija - N	V4 - V4-2019
Transporter 1 Company Name								
			_	·				
Transporter 2 Company Name	<u> </u>		F	hone:				
transporter 2 Company Name				•				
				hone:				
Designated Facility Name and Site Address	SKB/Shan	ırock Envi	ronme	ntal, Ll	LC			
	761 MN H	ighway 45						
	Cloquet, M	IN 55720	*		Phone:	218-	878-01	12
U.S. DOT Description (including Proper Shippin			9. Con	tainers	10.		11.	12.
	9		1		Total		Unit	Waste Profile
			No.	Туре	Quantit	y	Wt/Vol	Sheet#
 Mon Thesaydons industrial Wisdo 				_				
(DIL IMPACTED BUILDEBRES)								
	•							
								·
				.			ļ .	
	· · · · · · · · · · · · · · · · · · ·							
A deliverage of the second of								
3. Additional Descriptions for Materials Listed Above (in CLALTE (2015—COLLTATE ACTUAL) (2016)(7)	dicate waste stream Ap মুখ্যানে চাই	proval # below)	14. Spe	ecial Handi	ing Procedure	s for W	astes Listed	Above
CL	and the matter							
CL								
CL.								
5. Special Handling Instructions and Additional In	formation			:		SK	B Use On	ly
Emergency Contact:						Loa	ad#	•
		·						
 GENERATOR'S CERTIFICATION: I hereby de proper shipping name and are classified, packet 	clare that the cont	tents of this co	nsignme	ent are ful	ly and accur	ately d	lescribed a	bove by
according to applicable international and nation	nai government re	gulations.	ili an re	shecre III	brober cond	ILIOIT IL	or uanspor	L by migriway
Printed/Typed Name								· · · · · · · · · · · · · · · · · · ·
Frinted/Typed Ivaille	Si _ξ ∠√(ξ -	gnature	To a	. se ^{pt}	1 100		Mont	h Day Y
ニーン・モノ4の かとり オー・・・ キュー・ベント	6 20 No. 1	** 24.70°*	1 - A 6 - 11 -		Come Bush Com			
Q 467	erials	ga" ,						
Transporter 1 Acknowledged of Receipt of Mate		/*						
Transporter 1 Acknowledged of Receipt of Mater Printed/Typed Name	Sig	gnature					Mont	
'. Transporter 1 Acknowledged of Receipt of Mate	Sig	gnature	a service and an area	y and the			Mont	n Day Ye
7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I	Sig Materials	align at the state of the state	A STATE OF THE STA	× ===* 1				
7. Transporter 1 Acknowledged of Receipt of Mate	Sig Materials		A September of	,			Mont Mont	
7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	Sig Materials	align at the state of the state	A Company of the Comp					
7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	Sig Materials	align at the state of the state	of the second second	y and T				
7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	Sig Materials	align at the state of the state	e e e e e e e e e e e e e e e e e e e					
7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 2. Control of Receipt of Interest of Receipt of Interest of Receipt of Interest of Receipt of Interest of Receipt of Interest of Receipt of Interest of Receipt of Interest of Receipt of Interest of Receipt of Interest of Receipt of Interest of Interest of Receipt of Interest of I	Sig Materials	align at the state of the state	A Company of the Comp					
7. Transporter 1 Acknowledged of Receipt of Materials Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	Sig Materials	align at the state of the state	and the second					
7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 3. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	Sig Materials	align at the state of the state	and the second of					
7. Transporter 1 Acknowledged of Receipt of Material Printed/Typed Name 8. Transporter 2 Acknowledgement of Receipt of I Printed/Typed Name	Materials Sig	gnature	Covered	by this M	lanifest evce	nt as r	Mont	h Day Y



Non Hazardous Industrial Waste

· · · · · · · · · · · · · · · · · · ·											16.7°	الهيبة الاستهارة أدريا أسها	
Shipping Manifest	1. Generat	or's US E	PA ID No). (if an	y)	i l		1		l. Pa	ge 1 of	pag	e(s)
3. Generator's Name and Facility Address					М	lailing Ad	ddres	SS		—-			
4. Generators Phone	ener afarksa	THE SET	goetrati			981 TENS	kin della	.rr (8)	(A no)	Yo Y	1003324 B	e forsesesses in	ta "s
Generator's Phone. Transporter I Company Name	TOTAL MARGINERS IN TOTAL MERRY IN SOM URBAN, MERRY IN SOR	리마에 되시하기 - 1525 - 1527년	F. 2862 Ch. 1		F	ax.	anazu Milit a	35. TE	5 L.E. 3	131-21	.aa.z.a. a. a. a. Se 11 143	E (NOVER) C WE NAME	P 4 F
5. Transporter 1 Company Name	Ť					33 . 17		, , , ,	1-14 -16	104.4 40	est tree tree for	84.5 1 . \$ 0.0027 s	
					Р	hone:							
6. Transporter 2 Company Name	at .												
				-	Р	hone:							
7. Designated Facility Name and Site Address	SKB/S	hamro	ck Env	ironn	ner	ntal, L	LC						
•	761 M												
	Cloque	_	-				P	hon	e- 2	18-	878-01	12	
8. U.S. DOT Description (including Proper Shipping	_	, 1,111			`ont	tainers			0.	.10	11.	12.	
er e je e e e e e e e e e e e e e e e e	g		•		í			To	tal		Unit	Waste P	rofile
		*		No.	.	Туре		Qua	intity		Wt/Vol	Shee	t#
a.			2	, ,		, !							
Her Success Industrial Waste											1. 1		
b. (St. 1865-Cliff SOUDIDECRIS)						-		L			 		
						_ ,							
									ļ				
C.										Щ			
				1		,	1	1	1	1			
•			4	·				i			1		
d.	1	1											
							ĺ	1	1	1			
13. Additional Descriptions for Materials Listed Above (incl. a. CL	licate waste stre	ат Арргоча	l # below)	14.	Spe	cial Hand	ling F	roced	ures	for Wa	astes Liste	d Above	
b. CL													
c. CCL 19-0049 OR BAFA/ T.10 301L/06	abrio .												
d. CL	•												
15. Special Handling Instructions and Additional Inf	ormation			•						SK	B Use O	nly	
Emergency Contact:				:						Los	ad#		
16. GENERATOR'S CERTIFICATION: I hereby dec	olaro that the	oontont	of this o	opoles		nt om fu	lluar	nd 00	01 JK 04	ام برام		ahaya bu	
proper shipping name and are classified, packe	d, marked, a	ind labele	ed, and ar	e in ali	res	spects in	prop	per co	ondit	ion fo	r transpo	above by ort by highway	,
according to applicable international and nation	ial governme	nt regula	tions.	•									
Printed/Typed Name		Signat	ure ,	.2			7				Mor	nth Day	Yea
LIRAY DIX W	<u> </u>	42 4 7 7					Z Zas				1/1	7 1210	
 Transporter 1 Acknowledged of Receipt of Mate 	erials	· popul	£	,									,
Printed/Typed Name	 ,	Signat	ure 🦿	25	, C		11/11				Mor	nth Day	Ye
Jarry Carroll		۵.	7	y' or '		والمعرض فأوجع أويا	1				$\perp \perp / \perp$	150	1 / 1
18. Transporter 2 Acknowledgement of Receipt of N	//aterials		*	•									,
Printed/Typed Name		Signat	ure			-					Mor	nth Day	Yea
10 Discrepancy Indication Const													
19. Discrepancy Indication Space													
•													
		. •											
												,	
												,	
	ipt of non-ha	azardous	materials	s cover	red l	by this N	1anif	est ex	сер	t as r	noted in it	em 19.	
20. Facility Owner or Operator: Certification of rece Printed/Typed Name	aipt of non-ha	azardous Signat	·	s cover	ed	by this N	1anif	est ex	сер	t as r	noted in it Mor		Yea



Non Hazardous Industrial Waste

	· · · · · · · · · · · · · · · · · · ·		455 1			T		
Shipping Manifest	1. Generat	or's US EPA ID N	lo. (if any)		. 1	1. Pa	age 1 of	page(s)
. Generator's Name and Facility Address				 Mailing Ad	ddress	٠		
STEELOR WATER LIGHT A DOWN THE AVE. A STEELOH AVE. BUFE	MOR WEST	lm suest. 20		SUPE	RIOR WA			POWERCOO
l. Generator's Phone的原因是是是	<u> </u>			Fax:		2 17 17,24	* 10 00 Con 20	ent e le le revett y,
. Transporter 1 Company Name								
				Phone:				
. Transporter 2 Company Name				Priorie:				
- manoportor 2 company Marie				•				
Designated Carille, Name and Oile Address				Phone:				
. Designated Facility Name and Site Address		hamrock En		ental, L	LC			
	761 M	N Highway 4	5					
	Cloque	t, MN 55720)		Phone	218	-878-011	12
. U.S. DOT Description (including Proper Ship				ntainers	10.		11.	12.
				I -	Tota	į	Unit	Waste Profile
the season is a first training to			No.	Туре	Quant	ity	Wt/Vol	Sheet#
· Hon Reservices Industrial Wester			1,,					
(OII IMPAUTED SOIL/DEBRIS)								
		:		 				
• •1								
		:						
<u> </u>	· · · · · · · · · · · · · · · · · · ·			<u> </u>		<u> </u>		
			1					
		-			1 1			
		•						
CL-LIS-COAS OR RAPACTED SOL CL CL	ADEBRIN							
. Special Handling Instructions and Additional	Information					SH	(B Use Onl	v
Emergency Contact:							ad#	•
And the same								
	<u></u>							
B. GENERATOR'S CERTIFICATION: I hereby proper shipping name and are classified, par according to applicable international and nat	cked, marked, a	nd labeled, and	consignm are in all re	ent are fu espects in	Ily and accu proper con-	rately o	described a or transport	bove by by highway
Printed/Typed Name		Signature	- A 5	garage .	ž.		Mont	h Day, Y
Street Land	1-+:-!-	A CONTRACTOR OF THE PARTY OF TH	of an Salatina security as an	Marian Marian	La ham a series		<u> </u>	
Transporter 1 Acknowledged of Receipt of M	rialerials							<u> </u>
Printed/Typed Name	ŧ	Signature	or State of the second	-	_		Mont	
Jake Endings Transporter 2 Acknowledgement of Receipt	of Matarials	The second secon	an - sample	Care per a la servicio			1 1	1.00 K. S. J.
	or waterials							
Printed/Typed Name		Signature					Mont	h Day Y
Discrepancy Indication Space								
•				•				
: *								
Facility Owner or Operator: Certification of r	eceipt of non-ha	zardous materia	ls covered	by this N	/lanifest exc	ept as	noted in ite	m 19 .
Printed/Typed Name				- '				
Hamiled Machine		Signature					Monti	h Day Y

Attachment D – Maintenance Plans and Photographs

- D.1 Description of Maintenance Actions (Not Applicable)*
- D.2 Location Maps (Not Applicable)*
- D.3 Photographs (Not Applicable)*
- D.4 Inspection Log (Not Applicable)*

^{*}There is no site maintenance in relation to the site

Attachment E – Monitoring Well Information

Not Applicable - All monitoring wells on-site are part the Husky Energy facility-wide monitoring program and were not installed as part of the site investigation.

Attachment F – Source Legal Documents

- F.1 Property Deed
- F.2 Certified Survey Map*
- F.3 Verification of Zoning
- F.4 Signed Statement
- * There is no certified survey map to include

845763

SPECIAL WARRANTY DEED

Document Name

Document Number

THIS DEED, made between MURPHY OIL USA, INC., a Delaware corporation, as to Tracts A, D, E, F, G, H and J; MURPHY OIL USA, INC.. a Delaware corporation, f/k/a New Murphy Oil USA, Inc., f/k/a Murphy Oil Corporation, as to Tracts B and I; and MURPHY OIL USA, INC., a Delaware corporation, f/k/a Murphy Corporation, a Louisiana corporation, as to Tract C and Tract K ("Grantor," whether one or more), and

CALUMET SUPERIOR, LLC, a Delaware limited liability company ("Grantee"),

for and in consideration of good and valuable consideration paid by Grantee, Grantor hereby grants, sells and conveys to Grantee the following described real estate, together with the rents. profits, fixtures, improvements, structures and other appurtenant interests constituting real property, located in Douglas County, State of Wisconsin ("Property"); subject, however, to (i) all casements, rights-of-way, covenants, restrictions, agreements, claims or other matters, rights or encumbrances of record (or referred to or described or discoverable in recorded documents or otherwise known to Grantee), (ii) liens for governmental taxes, assessments or charges, (iii) public or private rights used, laid out or dedicated for road or highway purposes, (iv) rights of owners and governmental regulation of pipelines through public rights of way or privately owned land, respectively, (v) rights of easement, or any encroachments, in and to all railroad switches, sidetracks, spur tracks or similar rights of way, and (vi) any or all reservations of minerals and mineral rights (collectively, "Permitted Encumbrances").

See Attachment A - Legal Description.

Together with all of Grantor's rights and interests in and to all pipelines serving the Property described in Attachment A and all easements and rights appurtenant thereto, and all interest of Grantor, being no less than a 12% interest, in a 7.5 mile 10" gas main extending from the Great Lakes Gas Transmission mainline to a delivery point near the Superior Refinery as more fully described in the Construction, Ownership & Operating Agreement for a Natural Gas Main in Superior, WI, dated as of November 1, 2000, between Superior Water Light & Power Company and Murphy Oil USA. Inc.

Recorded or Filed on October 04, 2011 9:15 AM
GAYLE I. WAHNER

GAYLE I. WAHNER
DOUGLAS COUNTY RECORDER
SUPERIOR, WI 54880-2769
Fee Amount: \$30.00
Transfer Fee: \$47.052.00
Total Pages 13

Recording Area	
Name and Return Address	
Tamarah R. Feigl, Esq.	
Fulbright & Jaworski L.L.P.	
Fulbright Tower	1 int am
1301 McKinney, Suite 5100	Trust com
Fulbright Tower 1301 McKinney, Suite 5100 Houston, TX 77010-3095	30ck

See Attachment "A"

Parcel Identification Number (PIN)

This is not homestead property.

(is) (is not)

Grantor does hereby bind Grantor and Grantor's successors and assigns to forever warrant and defend that the title to the Property is good, indefeasible, in fee simple and free and clear of all encumbrances arising by, through, or under Grantor, except for Permitted Encumbrances.

Dated September 30, 2011	MURPHY OIL USA, INC.	
	By: the Way	[(SEAL)]
	Name: Thomas McKinlay	SCHOOL STANK
	Title: President	WASHING TO A CONTROL OF THE PARTY OF THE PAR
	ACKNOWLEDGMENT	S S S S S S S S S S S S S S S S S S S
	STATE OF ARKANSAS	PUBLIC SA
	COUNTY COUNTY	CO ARKANS
	Personally came before me on September 30, 2011	Minne
	the above-named Thomas McKinlay	
	to me known to be the person(s) who executed the instrument and acknowledged the same.	e foregoing
THIS INSTRUMENT DRAFTED BY:	* Lim Gutiener	···
Bryan C. Esch, Esq. DeWitt Ross & Stevens S.C.	Notary Public, State of ARKANSAS My Commission (is permanent) (expires: 2-1-6	20<u>(3</u>)

Attachment A to Special Warranty Deed from Murphy Oil USA, Inc. to Calumet Superior, LLC dated September 30, 2011

Legal Description

TRACT A:

Lots 354 through 368, even numbers inclusive, West 18th Street, Bay Front Division. (Doc. No. 805831).

Parcel No. 02-802-01033-00.

Lots 322 through 352, even numbers inclusive, West 19th Street, Bay Front Division. (Doc. No. 766342).

Parcel No. 01-801-04149-00.

Fractional Lots 345 through 351, odd numbers inclusive, West 19th Street, Bay Front Division. (Doc. No. 806050).

Parcel No. 01-801-04161-00.

Lots 353 through 367, odd numbers inclusive, on West 19th Street, Bay Front Division. (Doc. No. 805831).

Parcel No. 02-202-01041-00.

Lots 354 through 384, even numbers inclusive, on West 19th Street, Bay Front Division. (Doc. Nos. 766342 & 805831).

Parcel No. 02-202-01054-00.

Lots 290 through 320, even numbers inclusive, West 20th Street, Bay Front Division. (Doc. No. 766342).

Parcel No. 01-801-04169-00.

Lots 321 through 352, inclusive, West 20th Street, Bay Front Division. (Doc. Nos. 766342 & 806050).

Parcel No. 01-801-04185-00.

Lots 386 through 400, even numbers inclusive, West 20th Street, Bay Front Division. (Doc. Nos. 805831, 806050 & 807145).

Parcel No. 02-802-01099-00.

Lots 353 through 384, inclusive, West 20th Street, Bay Front Division. (Doc. Nos. 766342 & 806050).

Parcel No. 02-802-01066-00.

Lots 289 through 319, odd numbers inclusive, West 21st Street, Bay Front Division. (Doc. Nos. 766342 & 805069).

Parcel No. 01-801-04218-00.

Lots 321 through 351, odd numbers inclusive, West 21st Street, Bay Front Division. (Doc. Nos. 766342 & 800813).

Parcel No. 01-801-04250-00.

Lots 353 through 415, odd numbers inclusive, West 21st Street, Bay Front Division. (Doc. No. 766342).

Parcel No. 02-802-01105-00.

Lots 385 through 416, inclusive, Herrick's Subdivision of Block 25, West 15th Street. (Doc. No. 794160).

Parcel No. 02-802-02810-00.

Lots 321 to 351, odd numbers inclusive, Linler Place, West 15th Street. (Doc. No. 794160).

Parcel No. 01-801-04630-00.

Lots 289 through 293, Block 20, McBean Blocks, West Thirteenth Street, Lots on West Fourteenth Street; together with that part of the alley which accrued thereto by reason of the vacation thereof. (Doc. Nos. 766592 & 802863).

Parcel No. 01-801-04674-00.

Lots 338 through 352, even numbers inclusive, Block 21, 16th Street, McBean Blocks West 17th Street. (Doc. No. 794160).

Parcel No. 01-801-04738-00.

Lots 1 through 18, inclusive, and Lots 20 through 26, inclusive, Block 5; Lots 1, 2 and 3 and Lots 21 through 26, inclusive, Block 6, Lots 15, 16, 17, 18, and 19, Block 4, all in Dudley Park Addition to South Superior; together with that part of the alleys, Caitlin Avenue, Fisher Avenue & Fifty-Third Street which accrued thereto by reason of the vacation thereof. (Doc. Nos. 835187 & 837523).

Parcel Nos. 08-808-03384-00, 08-808-03409-00, 08-808-03372-00 & 08-808-03412-00.

Lots 23, 24, 25 and 26, Block 5, Lots 2 through 9, inclusive, Block 6, all in Harriet Place Addition to South Superior; together with that part of Caitlin Avenue and Fifty-Third Street which accrued thereto by reason of the vacation thereof. (Doc. Nos. 835187 & 837523).

Parcel Nos. 08-808-04104-00 & 08-808-04109-00.

Lots 329 through 351, odd numbers inclusive, West 13th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Lots 322 through 352, even numbers inclusive, West 13th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Lots 321 through 351, odd numbers inclusive, West 14th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Lots 322 through 330, even numbers inclusive, West 12th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Lots 321 through 327, odd numbers inclusive, West 13th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Together with that part of 12th Street which accrued thereto by reason of the vacation thereof.

(Doc. Nos. 806050, 806973 and 723202).

Parcel Nos. 01-801-04426-00, 01-801-04442-00, 01-801-04410-00, 01-801-04397-00 & 01-801-04412-00.

Lots 225 through 271, odd numbers inclusive, Frey's Subdivision of Block 16 and of the Southeasterly One Half of Block 18, on West 19th Street. (Doc. No. 766342).

Parcel No. 01-801-04551-00.

Lots 226 through 272, even numbers inclusive, Frey's Subdivision of Block 16 and of the Southeasterly One Half of Block 18, on West 19th Street. (Doc. No. 766342).

Parcel No. 01-801-04528-00.

Lots 273 through 287, odd numbers inclusive, Hanson and Streatfield's Subdivision of Block 18 West Thirteenth Street, Lots on West Fourteenth Street. (Doc. No. 803730).

Parcel No. 01-801-04593-00.

Lots 257 through 265, inclusive, and Lots 267 through 271, odd numbers inclusive, Hanson and Streatfield's Subdivision of Block 18 West Thirteenth Street, Lots on West Fourteenth Street. (Doc. No. 804858).

Parcel Nos. 01-801-04583-00 and 01-801-04566-00.

Blocks 17, 19 and 22 and the Northeast Quarter and the South Half of Block 21, Townsite of Superior West 17th Street. (Doc. No. 794160).

Parcel No. 01-801-03209-00.

The Northeast Quarter of Section 12, Township 48 North, Range 14 West, except that part thereof lying North of County Highway A, and except Railroad Rights of Way, and except the following described property: That part of the Southeast Quarter of the Northeast Quarter of Section 12, Township 48 North, Range 14 West, described as follows: Beginning at the Southeast corner of the Northeast Quarter of Section 12; thence North 0 degrees 35 minutes 7 seconds East, along the East line of said Northeast Quarter, a distance of 362.02 feet; thence South 39 degrees 47 minutes 53 seconds West, a distance of 466.60 feet to the South line of said Northeast Quarter; thence South 89 degrees 19 minutes 05 seconds East, along said South line, a distance of 294.98 feet to the point of beginning; and except the following described property: That part of the Southeast Quarter of the Northeast Quarter of Section 12, Township 48 North, Range 14 West, described as follows: Commencing at the Southeast corner of the Northeast Quarter of Section 12, thence North 0 degrees 35 minutes 07 seconds East, along the East line of said Northeast Quarter, a distance of 362.02 feet to the point of beginning; thence continuing North 0 degrees 35 minutes 07 seconds East, along said East line, a distance of 656.36 feet; thence South 34 degrees 03 minutes 51 seconds West a distance of 1219.58 feet to the South line of said Northeast Quarter; thence South 89 degrees 19 minutes 05 seconds East, along said South line, a distance of 377.78 feet; thence North 39 degrees 47 minutes 53 seconds East a distance of 466.60 feet to the point of beginning. (Doc. No. 832177)

Parcel Nos. TS-030-01326-00, TS-030-01329-00, TS-030-01327-00 & TS-030-01328-00.

Lots 14 through 26, inclusive, Block 5, Lots 1 through 17, inclusive, Block 6, Lots 5 through 8, inclusive, Block 7, Lots 1 through 8, inclusive, Block 8, all of Block 9, all in Short Line Addition to South Superior;

together with that part of the alleys, Fifty-Fourth Street, Fifty-Fifth Street, Clough Avenue and Weeks Avenue which accrued thereto by reason of the vacation thereof. (Doc. Nos. 835187 and 837523).

Parcel Nos. 08-808-07179-00, 08-808-07197-00, 08-808-07214-00, 08-808-07218-00 & 08-808-07226-00.

Lots 481 through 512, inclusive, Lots on West 20th and West 21st Streets, in W.H. Webb's Subdivision of Block Thirty-one (31) on West 21st Street. (Doc. No. 805831).

Parcel No. 02-802-06749-00.

The Southeast Quarter of the Northeast Quarter of the Northwest Quarter of Section 2, Township 48 North, Range 14 West. (Doc. No. 835187).

Parcel No. 08-808-09932-00.

Block 13, Townsite of Superior West 13th Street, City of Superior. (Doc. No. 794162). Parcel No. 01-801-03032-00.

Lots 258 through 288, even numbers inclusive, and Lots 257 through 287, odd numbers inclusive, SW 17th Street, Subdivision of Block 18 West 17th Street, City of Superior. (Doc. No. 794160).

Parcel No. 01-801-04019-00.

Block 23, West 13th Street, Townsite of Superior. (Doc. Nos. 803374, 804371 & 806050).

Parcel Nos. 02-802-00698-01, 02-802-00698-00, 02-802-00699-00, 02-802-00734-00, 02-802-00736-00 and 02-802-00700-00.

Lots 300, 302, 304, 1301, 1303 and 1305, Subdivision of Part of the Northeast Quarter of Block 20, West Thirteenth Street, Lots on Becker Avenue, City of Superior; together with the alley which accrued thereto by reason of the vacation thereof. (Doc. Nos. 802863 and 806050)

Parcel Nos. 01-801-03856-00 & 01-801-03852-00.

All of Block 31 on West 14th Street, except right of way for Bardon Avenue, Townsite of Superior. (Doc. No. 801654).

Parcel No. 02-802-00735-00.

Lots 225 through 255, odd numbers inclusive, in the Subdivision of Blocks 16 and 17, West 12th Street, Townsite of Superior. (Doc. Nos. 808863, 812595 & 819919).

Parcel Nos. 01-801-03808-00, 01-801-03814-00 & 01-801-03815-00.

The Southeast Quarter and the Southwest Quarter and the East Half of the Northwest Quarter and the West 150 feet of the Northeast Quarter, Block 18, Townsite of Superior, West 15th Street.

The West Half of the Northwest Quarter, Block 18, West Fifteenth Street, Townsite of Superior. The Westerly Quarter of the Northeast Quarter of Block 20, Townsite of Superior, West Fifteenth Street.

The East 3/8ths of the Northeast Quarter and the East 2/5ths of the West 5/8ths of the Northeast Quarter, Block 20, West Fifteenth Street, Townsite of Superior.

The East 25 feet of the West 3/8ths of the Northeast Quarter of Block 20, West Fifteenth Street, Townsite of Superior.

The Northwest Quarter, Block 20, Townsite of Superior, West Fifteenth Street. The Southwest Quarter, Block 20, Townsite of Superior, West Fifteenth Street. The Southeast Quarter, Block 20, Townsite of Superior, West Fifteenth Street. The North Half of Block 21, Townsite of Superior, West Fifteenth Street. Block 22, Townsite of Superior, West Fifteenth Street.

(Doc. Nos. 794160 and 801793)

Parcel Nos. 01-801-03133-00, 01-801-03147-00 & 01-801-03148-00.

A certain piece of land located in the Northeast Quarter of Block Twenty, on West Thirteenth Street, in Townsite of Superior, City of Superior, Douglas County, Wisconsin, described as follows: Beginning at a point on the Westerly side of Becker Avenue Seventy-eight feet Southerly from the Northeasterly corner of the Northeasterly Quarter of Block 20 on West Thirteenth Street; thence running Southerly along Becker Avenue Fifty feet to the Southeasterly corner of said Quarter Block; thence Westerly along the Southerly line of said Block and at right angles to Becker Avenue One Hundred Seventeen feet; thence Northerly and parallel to Becker Avenue Fifty feet; thence Easterly and parallel to West Thirteenth Street One Hundred Seventeen feet to the place of beginning; together with that portion of vacated alley abutting Block.

(Doc. Nos. 766592 and 802863) Parcel No. 01-801-03855-00.

Block 23 & East 14th Street Vacated, Townsite of Superior, West 15th Street.

Block 24, Townsite of Superior, West 15th Street.

Block 26, Townsite of Superior, West 15th Street.

Block 27 & Bardon Avenue Vacated, Townsite of Superior, West 15th Street.

Block 28 & Bardon Avenue Vacated, Townsite of Superior, West 15th Street.

Block 29, Townsite of Superior, West 15th Street.

SW 1/4, Block 30, Townsite of Superior, West 15th Street.

Fractional Block 31, Except R/W, Townsite of Superior, West 15th Street.

Block 32, Except R/W, Townsite of Superior, West 15th Street.

Block 34, Except R/W, Townsite of Superior, West 15th Street.

(Doc. Nos. 794160, 801654 & Volume 508, Page 705).

Parcel No. 02-802-00736-00.

The Southwest Quarter of Block 23 on West 17th Street, Townsite of Superior.

The Northwest Quarter of Block 24 on West 17th Street, Townsite of Superior.

Block 29 on West 17th Street, Townsite of Superior.

The South Half of Block 30 on West 17th Street, Townsite of Superior.

The Northwest Quarter of Block 32 on West 17th Street, Townsite of Superior.

Block 36, except Railroad right of way and North 28th Street, on West 17th Street, Townsite of Superior.

(Doc. No. 801654)

The East Half of Block 23 on West 17th Street, Townsite of Superior.

The Northwest Quarter of Block 23 on West 17th Street, Townsite of Superior.

The West Half of the Northeast Quarter of Block 24 on West 17th Street, Townsite of Superior.

The East Half of the Northeast Quarter of Block 24 on West 17th Street, Townsite of Superior.

The South Half of Block 24 and Bardon Avenue Vacated on West 17th Street, Townsite of Superior.

Block 25 and Bardon Avenue Vacated on West 17th Street, Townsite of Superior.

Block 27 on West 17th Street, Townsite of Superior.

The North Half, the Southeast Quarter and the East Half of the Southwest Quarter of Block 28 on West 17th Street, Townsite of Superior.

The West Half of the Southwest Quarter of Block 28 on West 17th Street, Townsite of Superior.

The Northwest Quarter of Block 30 on West 17th Street, Townsite of Superior.

The West Half of the Northeast Quarter of Block 30 on West 17th Street, Townsite of Superior.

The East Half of the Northeast Quarter of Block 30 on West 17th Street, Townsite of Superior.

Block 31 on West 17th Street, Townsite of Superior.

The Northeast Quarter of Block 32 on West 17th Street, Townsite of Superior.

The South Half of Block 32 on West 17th Street, Townsite of Superior.

The Fractional Block 33, except Right of Way, on West 17th Street, Townsite of Superior.

The Southwest Quarter and the Southeast Quarter of Block 34 on West 17th Street, Townsite of Superior.

The East Quarter of the Northwest Quarter of Block 34 on West 17th Street, Townsite of Superior.

The East 3/4 of the Northeast Quarter of Block 34 on West 17th Street, Townsite of Superior.

(Doc. No. 794160)

Parcel No. 02-802-00763-00.

Blocks 15, 17 and 19, Townsite of Superior on West 19th Street.

The West Half of Block 18, Townsite of Superior on West 19th Street.

The Fractional Blocks of 20 and 21, Townsite of Superior on West 19th Street.

Blocks 13 and 14, Townsite of Superior on West 19th Street.

(Doc. No. 766342)

Parcel No. 01-801-03246-00.

Lots 353, 355 and 371, Bay Front Division, West 23rd Street.

Lots 401 and 403, Bay Front Division, West 22nd Street.

Lots 380, 382 and 384, Bay Front Division, West 22nd Street.

(Doc. Nos. 624956, 603131, 630951 and 807780).

Parcel No. 02-802-00872-00.

TRACT B:

Lots 354 through 416, even numbers inclusive, West 21st Street, Bay Front Division. (Doc. No. 528677).

Parcel No. 02-802-01104-00.

Blocks 28, 30 and 32, Townsite of Superior, West 21st Street.

Blocks 25, 27, 29, 31 and 32, Townsite of Superior, West 23rd Street.

Lots 354 through 400, even numbers inclusive, Bay Front Division, West 21st Street.

Lots 353 through 383, odd numbers inclusive, Bay Front Division, West 22nd Avenue.

Lots 385 through 399, odd numbers inclusive, Bay Front Division, West 22nd Street.

Lots 405 through 415, odd numbers inclusive, Bay Front Division, West 22nd Street.

Lots 354 through 378, even numbers inclusive, Bay Front Division, West 22nd Street.

Lots 357 through 369, odd numbers inclusive and Lots 373 through 383, odd numbers inclusive, Bay Front Division, West 23rd Street.

(Doc. Nos. 505366, 518749 and 528677).

Parcel No. 02-802-00872-00.

Lots 290 through 320, even numbers inclusive, Bay Front Division, West 21st Street.

Lots 322 through 352, even numbers inclusive, Bay Front Division, West 21st Street.

Lots 305 through 351, odd numbers inclusive, Bay Front Division, West 22nd Street.

Lots 314 through 352, even numbers inclusive, Bay Front Division, West 22nd Street.

Lots 321 through 341, odd numbers inclusive, Bay Front Division, West 23rd Street.

Lots 344 through 352, even numbers inclusive, Bay Front Division, West 23rd Street.

Lots 347, 349 and 351, Bay Front Division, West 23rd Street.

Lots 289 through 303, odd numbers inclusive, Nobles Subdivision of Block 20, West 21st Street.

Block 18, Townsite of Superior, West 21st Street.

Southwest Quarter of Block Seventeen, Townsite of Superior, West 23rd Street.

Lots 343 through 351, odd numbers inclusive, Bay Front Division, West 24th Street.

(Doc. Nos. 505366, 513195, 514949, 520340 and 528677).

Parcel No. 01-801-03339-00.

TRACT C:

Blocks 24, 26, 28 and 30, Townsite of Superior, West 23rd Street;

Blocks 22, 23, 24, 25, 26, 27, 28, 29 and 30, Townsite of Superior, West 25th Street;

Block 32, Townsite of Superior, West 26th Street;

Blocks 23, 24, 25, 26, 27, 28, 29, 30, 31 and 32, Townsite of Superior, West 27th Street, together with that part of West 27th Street which accrued thereto by reason of the vacation thereof.

Blocks 23, 24, 25, 26, 27, 28, 29, 30 and 31, Townsite of Superior, West 29th Street, together with that part of West 29th Street which accrued thereto by reason of the vacation thereof, except those parts of Blocks 30 and 31 lying East of the East line of the Wisconsin Central Railway Company Right-of-Way.

(Doc. Nos. 453215, 405966 and 458930).

Parcel No. 02-802-00872-00.

Blocks 15, 16, 18, and 20, Townsite of Superior, West 23rd Street.

The North Half and the Southeast Quarter of Block 17, Townsite of Superior, West 23rd Street.

Blocks 19 and 22, Townsite of Superior, West 23rd Street, except Lots 314, 316, 318 and 320, Bay Front Division, West 22nd Street, and Lots 343 through 352, inclusive, Bay Front Division.

Blocks 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22, Townsite of Superior, West 25th Street.

Blocks 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22, Townsite of Superior, West 27th Street.

Blocks 13, 15, 17, 19 and 21, Townsite of Superior, West 29th Street.

Together with that part of the streets and avenues which accrued thereto by reason of the vacation thereof.

(Doc. Nos. 405966 and 453215).

Parcel No. 01-801-03339-00.

TRACT D:

Lots 354 through 384, even numbers inclusive, Bay Front Division, West 23rd Street. (Doc. No. 453215).

Parcel No. 02-802-00872-00.

Lots 330 through 342, even numbers inclusive, Bay Front Division, West 23rd Street.

Lots 337, 339 and 341, Bay Front Division, West 24th Street.

(Doc. No. 453215). Parcel No. 01-801-03339-00.

TRACT E:

Lot 386, Bay Front Division, West 22nd Street. (Doc. No. 315814).

Parcel No. 02-802-00872-00.

TRACT F:

Block 23, Townsite of Superior, West 23rd Street (V 143 P 609).

Parcel No. 02-802-00872-00.

TRACT G:

That certain triangular shaped tract of land described last in deed dated August 30, 1957, from Northwestern Improvement Company to Northern Pacific Railway Company recorded January 2, 1958, in Book 254, Page 427, records of Douglas County, Wisconsin, said tract being described in said deed for reference as follows:

"A triangle of land comprising all of the Northwest Quarter Southwest Quarter (NW 1/4SW 1/4) of Section 36, Township 49 North, Range 14 West, Fourth Principal Meridian, which is situated Northwesterly of the right of way of the Northern Pacific Railway Company, being the same premises described as Parcel No. 1 in deeds recorded in Book 109 of Deeds on Pages 526 and 528, as Document Nos. 186157 and 186158 respectively, records of said county." (Document No. 840739)

Parcel No. 08-808-10047-00.

TRACT H:

The Southeast Quarter of Block 30 on West Nineteenth Street, Townsite of Superior, Douglas County, Wisconsin. (Document No. 840739)

Parcel No. 02-802-00830-00.

TRACT I:

North Half (N 1/2) of Fractional Block Thirteen (13), West Thirty-fifth (35th) Street, Townsite of Superior, according to the recorded plat or plats thereof on file and of record in the Office of the Register of Deeds in and for Douglas County, Wisconsin; together with that part of West 34th Street which accrued thereto by reason of the vacation thereof.

Block 18, West 21st Street, Townsite of Superior, Douglas County, Wisconsin.

(Doc. Nos. 522304, 528677 & 777319).

Parcel Nos. 08-808-09743-00 & 01-801-03304-00.

TRACT J:

The Southwest Quarter (SW 1/4) of Block Twenty-five (25), Townsite of Superior West 31st Street, according to the recorded plat or plats thereof on file and of record in the Office of the Register of Deeds in and for Douglas County, Wisconsin.

The Southeast Quarter (SE 1/4) of Block Fifteen (15), Townsite of Superior West 37th Street, according to the recorded plat or plats thereof on file and of record in the Office of the Register of Deeds in and for Douglas County, Wisconsin.

The Southeasterly One Hundred Seventy-five feet (SEly 175') of the Southwesterly Half (SWly 1/2) of Block Twenty (20), West Eleventh Street, Township of Superior (Southwestern Division), in the City of Superior, Douglas County, Wisconsin.

The Northwesterly One Hundred Twenty-five feet (NWly 125') of the Southwesterly One-Half (SWly 1/2) of Block Twenty (20), West Eleventh Street, Townsite of Superior, in the City of Superior, Douglas County. Wisconsin, being that part of said Block 20 which is bound on the Southwest by West Twelfth Street (now East Twelfth Street); on the Northeast by a line running midway between and parallel with West Eleventh Street and West Twelfth Street (now East Eleventh and Twelfth Streets); on the Northwest by Nettleton Avenue (now Twenty-first Avenue East); and the Southeast by a line One Hundred Twenty-five feet (125') Southeasterly from, and parallel to the Northwesterly boundary of Block 20.

The Southerly One Hundred feet (Sly 100') of Northwesterly Two Hundred Twenty-five feet (NWly 225') of Southwesterly one-half (SWly 1/2) of Block Twenty (20), on West Eleventh Street, Townsite of Superior, in the City of Superior, Douglas County, Wisconsin.

Lots 450 through 480, Even Numbers inclusive, Subdivision of North 1/2 & SE 1/4 Block 30 on West 15th Street, Lots on West 15th Street, Douglas County, Wisconsin.

Lots 449 through 463, Odd Numbers inclusive, Subdivision of North 1/2 & SE 1/4 Block 30 on West 15th Street, Lots on West 16th Street, Douglas County, Wisconsin.

Lots 386 through 416 Even Numbers inclusive, Chrisfield Johnson's Subdivision of Block 26, West 17th Street, Douglas County, Wisconsin.

Lots 385 through 415 Odd Numbers inclusive, Chrisfield Johnson's Subdivision of Block 26, West 17th Street, Douglas County, Wisconsin.

Lots 226 through 256, Even Numbers inclusive, West 17th Street, Subdivision of Block 16 West 17th Street, Douglas County, Wisconsin.

Lots 225 through 255, Odd Numbers inclusive, Southwest 18th Street, Subdivision of Block 16 West 17th Street, Douglas County, Wisconsin.

The Northeast Quarter (NE 1/4) and the East Half of the East Half of the Northwest Quarter (E 1/2 E 1/2 NW 1/4), Block Seventeen (17), West Fifteenth Street, in Townsite of Superior, City of Superior, Douglas County, Wisconsin.

The West Half of the East Half of the Northwest Quarter (W 1/2 of E 1/2 of NW 1/4) of Block Seventeen (17), West Fifteenth Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin.

The West Half of the Northwest Quarter (W 1/2 NW 1/4) of Block Seventeen (17), West Fifteenth Street, Townsite of Superior, in the City of Superior, Douglas County, Wisconsin.

The East 1/4 of SE 1/4, Block 17, Townsite of Superior West 15th Street, Douglas County, Wisconsin.

The West 3/4 of SE 1/4, Block 17, Townsite of Superior West 15th Street, Douglas County, Wisconsin.

The North Half (N 1/2) of Block Seventeen (17), West Thirteenth Street, Townsite of Superior, (Superior Division), in City of Superior, Douglas County, Wisconsin.

The South Half (S 1/2) of Block Seventeen (17), West Thirteenth Street, Townsite of Superior, (Superior Division), in City of Superior, Douglas County, Wisconsin.

Fractional Lots Two Hundred Fifty-seven (257), Two Hundred Fifty-nine (259), Two Hundred Sixty-one (261), Two Hundred Sixty-three (263) and Two Hundred Sixty-five (265), West Twelfth Street, Subdivision of Block Eighteen (18), West Eleventh Street, in Townsite of Superior, City of Superior, Douglas County, Wisconsin, together with that part of the West Half (W 1/2) of vacated Villard Street abutting said lots.

All of Block Sixteen (16), on West Twenty-First Street, in the City of Superior, Douglas County, Wisconsin.

All of Block Thirteen (13), excluding right of way, West 21st Street, Townsite of Superior, Douglas County, Wisconsin.

The Northwest Quarter (NW 1/4) and the Southwest Quarter (SW 1/4) of Block Twenty (20), Townsite of Superior West 16th Street, Douglas County, Wisconsin.

The West Half of the West Half of the Northwest Quarter (W 1/2 W 1/2 NW 1/4) of Block Nineteen (19), West Thirteenth Street, Townsite of Superior, in the City of Superior, Douglas County, Wisconsin.

The Southeast Quarter (SE 1/4) of Block Nineteen (19), West Thirteenth Street, Townsite of Superior, (Southwestern Division), in the City of Superior, Douglas County, Wisconsin.

The East One Hundred Twenty feet (E 120') of the Northeast Quarter (NE 1/4) of Block Nineteen (19), West Thirteenth Street, Townsite of Superior, (Southwestern Division), in the City of Superior, Douglas County, Wisconsin.

The Southwest Quarter (SW 1/4) of Block Nineteen (19), West 13th Street, Townsite of Superior, City of Superior, County of Douglas, Wisconsin.

The East Three-Fourths of the Northwest Quarter (E 3/4 NW 1/4), except the East Half of the East Half (E 1/2 E 1/2), Block Nineteen (19), West 13th Street, Townsite of Superior, City of Superior, County of Douglas, Wisconsin.

The East Half of the East Half of the Northwest Quarter (E 1/2 E 1/2 NW 1/4) and the West Eighty feet (W 80') of the Northeast Quarter (NE 1/4) of Block Nineteen (19), West Thirteenth Street, Townsite of superior, City of Superior, Douglas County, Wisconsin.

The East One-half (E 1/2) of the Northeast Quarter (NE 1/4) and the East One-half (E 1/2) of the Southeast Quarter (SE 1/4) of Block Nineteen (19), West Fifteenth Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin.

The NW 1/4 & W 1/2 of NE 1/4 and W 1/4 of SE 1/4 & E 3/4 of SW 1/4, Block 19, Townsite of Superior of Superior West 15th Street, Douglas County, Wisconsin.

The W 1/2 of the W 1/4 of the SW 1/4 of Block 19, Townsite of Superior West 15th Street, Douglas County, Wisconsin.

Lots 290 through 320, Even Numbers inclusive, West 17th Street, Subdivision of Block 20 West 17th Street, Douglas County, Wisconsin.

Lots 289 through 319, Odd Numbers inclusive, West 18th Street, Subdivision of Block 20 West 17th Street, Douglas County, Wisconsin.

Lots 258 through 288, Even Numbers inclusive, West 20th Street, AND Lots 257 through 287, Odd Numbers inclusive, West 21st Street, all in the Subdivision of Block 17, on West 21st Street, Townsite of Superior, Douglas County, Wisconsin.

Lots 273 through 287, Odd Numbers inclusive, West Fifteenth Street, in Plat of McBean Blocks, being a Subdivision of the Southwest Quarter (SW 1/4) of Block Seventeen (17), West Fifteenth Street, Townsite of Superior, (Southwestern Division), in the City of Superior, Douglas County, Wisconsin.

Lots 258 and 260, Block 18, 15th Street, McBean Blocks, Douglas County, Wisconsin.

Lots 299, 301 & 303, Block 20, 14th Street & alley vacated, McBean Blocks, West 13th Street, Douglas County, Wisconsin.

Lots 393 through 399, Odd Numbers inclusive, Block 25, McBean Blocks, West Thirteenth Street, City of Superior, Douglas County, Wisconsin.

Lots 281 through 287, Odd Numbers inclusive, on West Twelfth Street, in Subdivision of Block Eighteen, West Eleventh Street, Townsite of Superior (Southwestern Division), City of Superior, Douglas County, Wisconsin.

Lots 267 through 279, Odd Numbers inclusive, on West Twelfth Street, in Subdivision of Block Eighteen (18), West Eleventh Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin.

Block Thirteen (13), West Twenty-third Street, except right-of-way, in Townsite of Superior, City of Superior, Douglas County, Wisconsin, together with that part of the West 23rd Street which accrued thereto by reason of vacation thereof.

E 3/4 of Block 12 on West 37th Street, Townsite of Superior, Douglas County, Wisconsin, except right of way.

E 3/4 of Block 11 on West 39th Street, Townsite of Superior, Douglas County, Wisconsin, except right of way.

E 3/4 of Block 12 on West 39th Street, Townsite of Superior, Douglas County, Wisconsin, except right of way.

NE 1/4 of Block 12 on West 43rd Street, Townsite of Superior, Douglas County, Wisconsin.

That part of Block 10, West 41st Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin, lying north of the following described line: Beginning at the most northerly corner of Fractional Block 8, West 41st Street, Townsite of Superior, thence westerly and parallel with the south line of the Southeast Quarter of Section 35, Township Forty-Nine North, Range 14 West to the northeasterly line of Fractional Block 9, West 43rd Street, Townsite of Superior, and said line there terminating.

That part of Block 11, West 41st Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin lying East of the East right of way line of the former Soo Line Railroad.

Lots 225 through 255, Odd Numbers inclusive, Lots on 16th Street, in the Subdivision of Block 16 on West 15th Street, in the City of Superior, Douglas County, Wisconsin.

Lots 226 through 256, Even Numbers inclusive, Lots on West 15th Street, in the Subdivision of Block 16 on West 15th Street, in the City of Superior, Douglas County, Wisconsin.

(Doc. Nos. 624023, 633082, 725853, 766342, 794160, 795896, 799526, 801654, 802205, 803377, 803498, 803978, 803979, 803733, 803734, 804451, 804524, 804525, 804706,806050, 806592, 806593, 806973, 809578, 808862, 809996, 810193, 813026, 828601, 829415 & 829526).

Parcel Nos. 02-802-00947-00, 01-801-02976-01, 01-801-02976-03, 01-801-02976-05, 02-802-06614-00, 02-802-01293-00, 01-801-03987-00, 01-801-03125-00, 01-801-03131-00, 01-801-03129-00, 01-801-03128-00, 01-801-03123-00, 01-801-03042-00, 01-801-03046-00, 01-801-03805-00, 01-801-03302-00, 01-801-03294-00, 01-801-03055-00, 01-801-03047-00, 01-801-03047-01, 01-801-03047-02, 01-801-03047-03, 01-801-03047-04, 01-801-03048-00, 01-801-03136-00, 01-801-03145-00, 01-801-04051-00, 01-801-04083-00, 01-801-04706-00, 01-801-04713-00, 01-801-04679-00, 02-802-03804-00, 01-801-03807-00, 01-801-03806-00; 01-801-03326-00, 08-808-09780-00, 08-808-09821-00, 08-808-09823-00, 08-808-09892-00, 08-808-09808-09892-00, 08-808-09892-00, 08-808-09892-00, 08-808-09892

TRACT K:

That part of the West Half (W 1/2) of Section Thirty-six (36), Township forty-nine (49) North, Range Fourteen (14) West, Douglas County, Wisconsin, more fully described as follows: Commencing at the North quarter corner of said Section 36, Township 49 North, Range 14 West, thence due south along the north-south quarter line, said quarter line being the center line of Bardon Avenue, a distance of 1,456.64 feet to the south property line of 26th Avenue extended, thence south 48 degrees and 36 minutes west along the south property line of 26th Avenue, a distance of 481 feet to the point of beginning, thence continuing in the same straight line a distance of 1,323.53 feet to a point, thence south 89 degrees and 46 minutes west a distance of 151.91 feet to a point, thence South 48 degrees 36 minutes West a distance of 162.43 feet to a point, thence South 41 degrees 24 minutes east a distance of 751 feet to a point, thence north 48 degrees and 36 minutes East a distance of 1,463.36 feet to a point on the west line of Bardon Avenue a distance of 207.10 feet to a point, thence north 41 degrees and 24 minutes west a distance of 495.66 feet to the point of beginning.

(Doc. No. 459590 V 271 P 358) Parcel No. 01-801-05132-00. DOCUMENT NO.

AFFIDAVIT OF CORRECTION

DOCUMENT# **890824** Recorded or filed on 08-03-2017 at 02:22 PM

TRACY A MIDDLETON DOUGLAS COUNTY RECORDER

This document is exempt from transfer fee pursuant to Wis. Stats. 77.23(3): correction of a document previously recorded.	Fee Amount: \$30.00 FEE EXEMPT: 3 Total Pages: 15 ELECTRONICALLY RECORDED DOCUMENT	
AFFIANT, <u>John A. Moore</u> , on behalf of the undersigned Murphy Oil USA, Inc., a Delaware corporation, hereby swears or affirms that a certain document titled <u>Special Warranty Deed</u> recorded on the <u>4th</u> day of <u>October</u> , <u>2011</u> , as Document Number <u>845763</u> which was recorded in <u>Douglas</u> County, State of Wisconsin, contained the following error (if more space is needed, please attach addendum):		
The legal description set forth in Attachment A of said document is incomplete.		
AFFIANT makes this Affidavit for the purpose of correcting the above document as follows (if more space is needed, please attach addendum):	RETURN TO Danielle M. Bergner, Esq. Michael Best & Friedrich LLP 100 East Wisconsin Ave., Ste. 3300 Milwaukee, WI 53202	
The legal descriptions set forth on Exhibit A attached hereto and made a part hereof are hereby incorporated and made part of Attachment A to the above-referenced Special Warranty Deed. See Attached Exhibit A Parcel Identification Number (PIN)		
AFFIANT is the (check one): ☐ Drafter of the document being corrected. ☐ Owner of the property described in the document being corrected. ☐ Other (explain: Affiant is the authorized representative of the Grantor name	amed in the above-referenced deed).	
The original document (in part or whole) ☑ is ☐ is not attached to this Affidavit please attach legal description and names of grantors and grantees).	(if original document is not attached,	
Signed: MURPHY OIL USA, INC. Name/Title: John A. Moore, Sr. V	Vice President & General Counsel	
) ss. County of		
August UNION COUNTY NOTARY PUBLIC - ARKANSAS My Commission Expires September 07, 2024 Commission No. 12400715 *	hy Oil USA, INC., a Delaware corporation met Superior, LLC, a Delaware corporation	
Notary Public, State of <u>Arkansas</u> My Commission (expires) (is): <u>09/01/2024</u> .		
THIS INSTRUMENT WAS DRAFTED BY: Danielle M. Berger, Esq. Michael Best & Friedrich LLP		

This instrument □ is ☒ is not (check one) a conveyance of real property as per s. 77.21(1) Wisconsin Statutes. (A Wisconsin Real Estate Transfer Return is required for instruments that do convey real property).

EXHIBIT A LEGAL DESCRIPTIONS INCORPORATED AND MADE PART OF ATTACHMENT A TO SPECIAL WARRANTY DEED DOCUMENT NO. 845763

Parcel 1:

Block Thirteen (13) on West 31st Street, Block Fourteen (14) on West 31st Street, Block Thirteen (13) on West 33rd Street, Fractional Block Fourteen (14) on West 33rd Street, Block Fourteen (14) on West 29th Street, Subject to Northern Pacific Railway Company easement for right-of-way on Newton Avenue, Block Sixteen (16) on West 29th Street, Block Eighteen (18) on West 29th Street, Block Twenty (20) on West 29th Street and Block Twenty-two (22) on West 29th Street, all in the Townsite of Superior, now City of Superior, Douglas County, Wisconsin, together with vacated West 30th, 31st, 32nd, 33rd, and 34th streets and vacated 21st, 22nd and 23rd avenues East, lying East of Hill Avenue.

Parcel 2:

Blocks Fifteen (15), Sixteen (16) and Seventeen (17) of West 31st Street, that part lying East of the East line of Hill Avenue of Blocks, Eighteen (18), Nineteen (19) and Twenty (20) on West 31st Street, Block Fifteen (15) on West 33rd Street and that part lying East of the East line of Hill Avenue of Blocks Sixteen (16) and Seventeen (17) on West 33rd Street, all in the Townsite of Superior, Now City of Superior, Douglas County, Wisconsin, together with the vacated West 30th, 31st, 32nd, 33rd, and 34th streets and Vacated 21st, 22nd and 23rd avenues East, lying East of Hill Avenue.

Parcel No. 08-808-09689-00

Property Address: 4210 Hill Avenue, Superior, WI

AND

Block 30 on W 19th Street, EXCEPT the Southeast Quarter (SE1/4), the West One-half of Block 23 on W 19th Street, Northwest Quarter (NW1/4) of Block 25 on W 21st Street, and all of Blocks 25, 26, 27, 28, 29, 31 and 32 on W 19th Street and Blocks 27 and 29 on West 21st Street, all in the Townsite of Superior, City of Superior, Douglas County, Wisconsin.

Part of Parcel No. 02-802-00815-00

Property Address: Vacant Land on Hill Avenue

SPECIAL WARRANTY DEED

Document Name

Document Number

THIS DEED, made between MURPHY OIL USA, INC., a Delaware corporation, as to Tracts A, D, E, F, G, H and J; MURPHY OIL USA, INC., a Delaware corporation, f/k/a New Murphy Oil USA, Inc., f/k/a Murphy Oil Corporation, as to Tracts B and I; and MURPHY OIL USA, INC., a Delaware corporation, f/k/a Murphy Corporation, a Louisiana corporation, as to Tract C and Tract K ("Grantor," whether one or more), and

CALUMET SUPERIOR, LLC, a Delaware limited liability company ("Grantee"),

for and in consideration of good and valuable consideration paid by Grantee, Grantor hereby grants, sells and conveys to Grantee the following described real estate, together with the rents, profits, fixtures, improvements, structures and other appurtenant interests constituting real property, located in Douglas County, State of Wisconsin ("Property"); subject, however, to (i) all easements, rights-of-way, covenants, restrictions, agreements, claims or other matters, rights or encumbrances of record (or referred to or described or discoverable in recorded documents or otherwise known to Grantee), (ii) liens for governmental taxes, assessments or charges, (iii) public or private rights used, laid out or dedicated for road or highway purposes, (iv) rights of owners and governmental regulation of pipelines through public rights of way or privately owned land, respectively, (v) rights of easement, or any encroachments, in and to all railroad switches, sidetracks, spur tracks or similar rights of way, and (vi) any or all reservations of minerals and mineral rights (collectively, "Permitted Encumbrances").

See Attachment A - Legal Description.

Together with all of Grantor's rights and interests in and to all pipelines serving the Property described in Attachment A and all easements and rights appurtenant thereto, and all interest of Grantor, being no less than a 12% interest, in a 7.5 mile 10" gas main extending from the Great Lakes Gas Transmission mainline to a delivery point near the Superior Refinery as more fully described in the Construction, Ownership & Operating Agreement for a Natural Gas Main in Superior, WI, dated as of November 1, 2000, between Superior Water Light & Power Company and Murphy Oil USA, Inc.

DOCUMENT# 845763

Recorded or Filed on October 04, 2011 9:15 AM GAYLE I. WAHNER DOUGLAS COUNTY RECORDER SUPERIOR, WI 54880-2769 Fee Amount: \$30.00 Transfer Fee: \$47.052.00 Total Pages 13

Recording Area

Name and Return Address
Tamarah R. Feigl, Esq.
Fulbright & Jaworski L.L.P.
Fulbright Tower
1301 McKinney, Suite 5100 Furst am
Houston, TX 77010-3095 30ck

See Attachment "A"

Parcel Identification Number (PIN)

This is not homestead property

(is) (is not)

Grantor does hereby bind Grantor and Grantor's successors and assigns to forever warrant and defend that the title to the Property is good, indefeasible, in fee simple and free and clear of all encumbrances arising by, through, or under Grantor, except for Permitted Encumbrances.

Dated September 30, 2011	MURPHY OIL USA, INC. —— :
	By: [(SEAL)]
	Name: Thomas McKinlay
	Title: President
	ACKNOWLEDGMENT
	STATE OF ARKANSAS SUBLIC
	Union COUNTY CO, ARKAN
	Personally came before me on September 30, 2011
	the above-named Thomas McKinlay
	to me known to be the person(s) who executed the foregoing instrument and acknowledged the same.
THIS INSTRUMENT DRAFTED BY:	* Lim Gutiener
Bryan C. Esch, Esq.	Notary Public, State of ARKANSAS
DeWitt Ross & Stevens S.C.	My Commission (is permanent) (expires: <u>2-1-2013</u>)

LOUDDING OUT LICE INCO

Attachment A to Special Warranty Deed from Murphy Oil USA, Inc. to Calumet Superior, LLC dated September 30, 2011

Legal Description

TRACT A:

Lots 354 through 368, even numbers inclusive, West 18th Street, Bay Front Division. (Doc. No. 805831).

Parcel No. 02-802-01033-00.

Lots 322 through 352, even numbers inclusive, West 19th Street, Bay Front Division. (Doc. No. 766342).

Parcel No. 01-801-04149-00.

Fractional Lots 345 through 351, odd numbers inclusive, West 19th Street, Bay Front Division. (Doc. No. 806050).

Parcel No. 01-801-04161-00.

Lots 353 through 367, odd numbers inclusive, on West 19th Street, Bay Front Division. (Doc. No. 805831).

Parcel No. 02-202-01041-00.

Lots 354 through 384, even numbers inclusive, on West 19th Street, Bay Front Division. (Doc. Nos. 766342 & 805831).

Parcel No. 02-202-01054-00.

Lots 290 through 320, even numbers inclusive, West 20th Street, Bay Front Division. (Doc. No. 766342).

Parcel No. 01-801-04169-00.

Lots 321 through 352, inclusive, West 20th Street, Bay Front Division. (Doc. Nos. 766342 & 806050).

Parcel No. 01-801-04185-00.

Lots 386 through 400, even numbers inclusive, West 20th Street, Bay Front Division. (Doc. Nos. 805831, 806050 & 807145).

Parcel No. 02-802-01099-00.

Lots 353 through 384, inclusive, West 20th Street, Bay Front Division. (Doc. Nos. 766342 & 806050).

Parcel No. 02-802-01066-00.

Lots 289 through 319, odd numbers inclusive, West 21st Street, Bay Front Division. (Doc. Nos. 766342 & 805069).

Parcel No. 01-801-04218-00.

Lots 321 through 351, odd numbers inclusive, West 21st Street, Bay Front Division. (Doc. Nos. 766342 & 800813).

Parcel No. 01-801-04250-00.

Lots 353 through 415, odd numbers inclusive, West 21st Street, Bay Front Division. (Doc. No. 766342).

Parcel No. 02-802-01105-00.

Lots 385 through 416, inclusive, Herrick's Subdivision of Block 25, West 15th Street. (Doc. No. 794160).

Parcel No. 02-802-02810-00.

Lots 321 to 351, odd numbers inclusive, Linler Place, West 15th Street. (Doc. No. 794160).

Parcel No. 01-801-04630-00.

Lots 289 through 293, Block 20, McBean Blocks, West Thirteenth Street, Lots on West Fourteenth Street; together with that part of the alley which accrued thereto by reason of the vacation thereof. (Doc. Nos. 766592 & 802863).

Parcel No. 01-801-04674-00.

Lots 338 through 352, even numbers inclusive, Block 21, 16th Street, McBean Blocks West 17th Street. (Doc. No. 794160).

Parcel No. 01-801-04738-00.

Lots 1 through 18, inclusive, and Lots 20 through 26, inclusive, Block 5; Lots 1, 2 and 3 and Lots 21 through 26, inclusive, Block 6, Lots 15, 16, 17, 18, and 19, Block 4, all in Dudley Park Addition to South Superior; together with that part of the alleys, Caitlin Avenue, Fisher Avenue & Fifty-Third Street which accrued thereto by reason of the vacation thereof. (Doc. Nos. 835187 & 837523).

Parcel Nos. 08-808-03384-00, 08-808-03409-00, 08-808-03372-00 & 08-808-03412-00.

Lots 23, 24, 25 and 26, Block 5, Lots 2 through 9, inclusive, Block 6, all in Harriet Place Addition to South Superior; together with that part of Caitlin Avenue and Fifty-Third Street which accrued thereto by reason of the vacation thereof. (Doc. Nos. 835187 & 837523).

Parcel Nos. 08-808-04104-00 & 08-808-04109-00.

Lots 329 through 351, odd numbers inclusive, West 13th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Lots 322 through 352, even numbers inclusive, West 13th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Lots 321 through 351, odd numbers inclusive, West 14th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Lots 322 through 330, even numbers inclusive, West 12th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Lots 321 through 327, odd numbers inclusive, West 13th Street, Burhan's Subdivision of Blocks 21 & 22, West 13th Street.

Together with that part of 12th Street which accrued thereto by reason of the vacation thereof.

(Doc. Nos. 806050, 806973 and 723202).

Parcel Nos. 01-801-04426-00, 01-801-04442-00, 01-801-04410-00, 01-801-04397-00 & 01-801-04412-00.

Lots 225 through 271, odd numbers inclusive, Frey's Subdivision of Block 16 and of the Southeasterly One Half of Block 18, on West 19th Street. (Doc. No. 766342).

Parcel No. 01-801-04551-00.

Lots 226 through 272, even numbers inclusive, Frey's Subdivision of Block 16 and of the Southeasterly One Half of Block 18, on West 19th Street. (Doc. No. 766342).

Parcel No. 01-801-04528-00.

Lots 273 through 287, odd numbers inclusive, Hanson and Streatfield's Subdivision of Block 18 West Thirteenth Street, Lots on West Fourteenth Street. (Doc. No. 803730).

Parcel No. 01-801-04593-00.

Lots 257 through 265, inclusive, and Lots 267 through 271, odd numbers inclusive, Hanson and Streatfield's Subdivision of Block 18 West Thirteenth Street, Lots on West Fourteenth Street. (Doc. No. 804858).

Parcel Nos. 01-801-04583-00 and 01-801-04566-00.

Blocks 17, 19 and 22 and the Northeast Quarter and the South Half of Block 21, Townsite of Superior West 17th Street. (Doc. No. 794160).

Parcel No. 01-801-03209-00.

The Northeast Quarter of Section 12, Township 48 North, Range 14 West, except that part thereof lying North of County Highway A, and except Railroad Rights of Way, and except the following described property: That part of the Southeast Quarter of the Northeast Quarter of Section 12, Township 48 North, Range 14 West, described as follows: Beginning at the Southeast corner of the Northeast Quarter of Section 12; thence North 0 degrees 35 minutes 7 seconds East, along the East line of said Northeast Quarter, a distance of 362.02 feet; thence South 39 degrees 47 minutes 53 seconds West, a distance of 466.60 feet to the South line of said Northeast Quarter; thence South 89 degrees 19 minutes 05 seconds East, along said South line, a distance of 294.98 feet to the point of beginning; and except the following described property: That part of the Southeast Quarter of the Northeast Quarter of Section 12, Township 48 North, Range 14 West, described as follows: Commencing at the Southeast corner of the Northeast Quarter of Section 12, thence North 0 degrees 35 minutes 07 seconds East, along the East line of said Northeast Ouarter, a distance of 362.02 feet to the point of beginning; thence continuing North 0 degrees 35 minutes 07 seconds East, along said East line, a distance of 656.36 feet; thence South 34 degrees 03 minutes 51 seconds West a distance of 1219.58 feet to the South line of said Northeast Quarter; thence South 89 degrees 19 minutes 05 seconds East, along said South line, a distance of 377.78 feet; thence North 39 degrees 47 minutes 53 seconds East a distance of 466.60 feet to the point of beginning. (Doc. No. 832177)

Parcel Nos. TS-030-01326-00, TS-030-01329-00, TS-030-01327-00 & TS-030-01328-00.

Lots 14 through 26, inclusive, Block 5, Lots 1 through 17, inclusive, Block 6, Lots 5 through 8, inclusive, Block 7, Lots 1 through 8, inclusive, Block 8, all of Block 9, all in Short Line Addition to South Superior;

together with that part of the alleys, Fifty-Fourth Street, Fifty-Fifth Street, Clough Avenue and Weeks Avenue which accrued thereto by reason of the vacation thereof. (Doc. Nos. 835187 and 837523).

Parcel Nos. 08-808-07179-00, 08-808-07197-00, 08-808-07214-00, 08-808-07218-00 & 08-808-07226-00.

Lots 481 through 512, inclusive, Lots on West 20th and West 21st Streets, in W.H. Webb's Subdivision of Block Thirty-one (31) on West 21st Street. (Doc. No. 805831).

Parcel No. 02-802-06749-00.

The Southeast Quarter of the Northeast Quarter of the Northwest Quarter of Section 2, Township 48 North, Range 14 West. (Doc. No. 835187).

Parcel No. 08-808-09932-00.

Block 13, Townsite of Superior West 13th Street, City of Superior. (Doc. No. 794162). Parcel No. 01-801-03032-00.

Lots 258 through 288, even numbers inclusive, and Lots 257 through 287, odd numbers inclusive, SW 17th Street, Subdivision of Block 18 West 17th Street, City of Superior. (Doc. No. 794160).

Parcel No. 01-801-04019-00.

Block 23, West 13th Street, Townsite of Superior. (Doc. Nos. 803374, 804371 & 806050).

Parcel Nos. 02-802-00698-01, 02-802-00698-00, 02-802-00699-00, 02-802-00734-00, 02-802-00736-00 and 02-802-00700-00.

Lots 300, 302, 304, 1301, 1303 and 1305, Subdivision of Part of the Northeast Quarter of Block 20, West Thirteenth Street, Lots on Becker Avenue, City of Superior; together with the alley which accrued thereto by reason of the vacation thereof. (Doc. Nos. 802863 and 806050)

Parcel Nos. 01-801-03856-00 & 01-801-03852-00.

All of Block 31 on West 14th Street, except right of way for Bardon Avenue, Townsite of Superior. (Doc. No. 801654).

Parcel No. 02-802-00735-00.

Lots 225 through 255, odd numbers inclusive, in the Subdivision of Blocks 16 and 17, West 12th Street, Townsite of Superior. (Doc. Nos. 808863, 812595 & 819919).

Parcel Nos. 01-801-03808-00, 01-801-03814-00 & 01-801-03815-00.

The Southeast Quarter and the Southwest Quarter and the East Half of the Northwest Quarter and the West 150 feet of the Northeast Quarter, Block 18, Townsite of Superior, West 15th Street.

The West Half of the Northwest Quarter, Block 18, West Fifteenth Street, Townsite of Superior. The Westerly Quarter of the Northeast Quarter of Block 20, Townsite of Superior, West Fifteenth Street.

The East 3/8ths of the Northeast Quarter and the East 2/5ths of the West 5/8ths of the Northeast Quarter, Block 20, West Fifteenth Street, Townsite of Superior.

The East 25 feet of the West 3/8ths of the Northeast Quarter of Block 20, West Fifteenth Street, Townsite of Superior.

The Northwest Quarter, Block 20, Townsite of Superior, West Fifteenth Street. The Southwest Quarter, Block 20, Townsite of Superior, West Fifteenth Street. The Southeast Quarter, Block 20, Townsite of Superior, West Fifteenth Street. The North Half of Block 21, Townsite of Superior, West Fifteenth Street. Block 22, Townsite of Superior, West Fifteenth Street.

(Doc. Nos. 794160 and 801793)
Parcel Nos. 01-801-03133-00, 01-801-03147-00 & 01-801-03148-00.

A certain piece of land located in the Northeast Quarter of Block Twenty, on West Thirteenth Street, in Townsite of Superior, City of Superior, Douglas County, Wisconsin, described as follows: Beginning at a point on the Westerly side of Becker Avenue Seventy-eight feet Southerly from the Northeasterly corner of the Northeasterly Quarter of Block 20 on West Thirteenth Street; thence running Southerly along Becker Avenue Fifty feet to the Southeasterly corner of said Quarter Block; thence Westerly along the Southerly line of said Block and at right angles to Becker Avenue One Hundred Seventeen feet; thence Northerly and parallel to Becker Avenue Fifty feet; thence Easterly and parallel to West Thirteenth Street One Hundred Seventeen feet to the place of beginning; together with that portion of vacated alley abutting Block.

(Doc. Nos. 766592 and 802863) Parcel No. 01-801-03855-00.

Block 23 & East 14th Street Vacated, Townsite of Superior, West 15th Street.

Block 24, Townsite of Superior, West 15th Street.

Block 26, Townsite of Superior, West 15th Street.

Block 27 & Bardon Avenue Vacated, Townsite of Superior, West 15th Street.

Block 28 & Bardon Avenue Vacated, Townsite of Superior, West 15th Street.

Block 29, Townsite of Superior, West 15th Street.

SW 1/4, Block 30, Townsite of Superior, West 15th Street.

Fractional Block 31, Except R/W, Townsite of Superior, West 15th Street.

Block 32, Except R/W, Townsite of Superior, West 15th Street.

Block 34, Except R/W, Townsite of Superior, West 15th Street.

(Doc. Nos. 794160, 801654 & Volume 508, Page 705).

Parcel No. 02-802-00736-00.

The Southwest Quarter of Block 23 on West 17th Street, Townsite of Superior.

The Northwest Quarter of Block 24 on West 17th Street, Townsite of Superior.

Block 29 on West 17th Street, Townsite of Superior.

The South Half of Block 30 on West 17th Street, Townsite of Superior.

The Northwest Quarter of Block 32 on West 17th Street, Townsite of Superior.

Block 36, except Railroad right of way and North 28th Street, on West 17th Street, Townsite of Superior.

(Doc. No. 801654)

The East Half of Block 23 on West 17th Street, Townsite of Superior.

The Northwest Quarter of Block 23 on West 17th Street, Townsite of Superior.

The West Half of the Northeast Quarter of Block 24 on West 17th Street, Townsite of Superior.

The East Half of the Northeast Quarter of Block 24 on West 17th Street, Townsite of Superior.

The South Half of Block 24 and Bardon Avenue Vacated on West 17th Street, Townsite of Superior.

Block 25 and Bardon Avenue Vacated on West 17th Street, Townsite of Superior.

Block 27 on West 17th Street, Townsite of Superior.

The North Half, the Southeast Quarter and the East Half of the Southwest Quarter of Block 28 on West 17th Street, Townsite of Superior.

The West Half of the Southwest Quarter of Block 28 on West 17th Street, Townsite of Superior.

The Northwest Quarter of Block 30 on West 17th Street, Townsite of Superior.

The West Half of the Northeast Quarter of Block 30 on West 17th Street, Townsite of Superior.

The East Half of the Northeast Quarter of Block 30 on West 17th Street, Townsite of Superior.

Block 31 on West 17th Street, Townsite of Superior.

The Northeast Quarter of Block 32 on West 17th Street, Townsite of Superior.

The South Half of Block 32 on West 17th Street, Townsite of Superior.

The Fractional Block 33, except Right of Way, on West 17th Street, Townsite of Superior.

The Southwest Quarter and the Southeast Quarter of Block 34 on West 17th Street, Townsite of Superior.

The East Quarter of the Northwest Quarter of Block 34 on West 17th Street, Townsite of Superior.

The East 3/4 of the Northeast Quarter of Block 34 on West 17th Street, Townsite of Superior.

(Doc. No. 794160)

Parcel No. 02-802-00763-00.

Blocks 15, 17 and 19, Townsite of Superior on West 19th Street. The West Half of Block 18, Townsite of Superior on West 19th Street. The Fractional Blocks of 20 and 21, Townsite of Superior on West 19th Street. Blocks 13 and 14, Townsite of Superior on West 19th Street.

(Doc. No. 766342) Parcel No. 01-801-03246-00.

Lots 353, 355 and 371, Bay Front Division, West 23rd Street. Lots 401 and 403, Bay Front Division, West 22nd Street.

Lots 380, 382 and 384, Bay Front Division, West 22nd Street.

(Doc. Nos. 624956, 603131, 630951 and 807780). Parcel No. 02-802-00872-00.

TRACT B:

Lots 354 through 416, even numbers inclusive, West 21st Street, Bay Front Division. (Doc. No. 528677).

Parcel No. 02-802-01104-00.

Blocks 28, 30 and 32, Townsite of Superior, West 21st Street.

Blocks 25, 27, 29, 31 and 32, Townsite of Superior, West 23rd Street.

Lots 354 through 400, even numbers inclusive, Bay Front Division, West 21st Street.

Lots 353 through 383, odd numbers inclusive, Bay Front Division, West 22nd Avenue.

Lots 385 through 399, odd numbers inclusive, Bay Front Division, West 22nd Street.

Lots 405 through 415, odd numbers inclusive, Bay Front Division, West 22nd Street.

Lots 354 through 378, even numbers inclusive, Bay Front Division, West 22nd Street.

Lots 357 through 369, odd numbers inclusive and Lots 373 through 383, odd numbers inclusive, Bay Front Division, West 23rd Street.

(Doc. Nos. 505366, 518749 and 528677).

Parcel No. 02-802-00872-00.

Lots 290 through 320, even numbers inclusive, Bay Front Division, West 21st Street.

Lots 322 through 352, even numbers inclusive, Bay Front Division, West 21st Street.

Lots 305 through 351, odd numbers inclusive, Bay Front Division, West 22nd Street.

Lots 314 through 352, even numbers inclusive, Bay Front Division, West 22nd Street.

Lots 321 through 341, odd numbers inclusive, Bay Front Division, West 23rd Street.

Lots 344 through 352, even numbers inclusive, Bay Front Division, West 23rd Street.

Lots 347, 349 and 351, Bay Front Division, West 23rd Street.

Lots 289 through 303, odd numbers inclusive, Nobles Subdivision of Block 20, West 21st Street.

Block 18, Townsite of Superior, West 21st Street.

Southwest Quarter of Block Seventeen, Townsite of Superior, West 23rd Street.

Lots 343 through 351, odd numbers inclusive, Bay Front Division, West 24th Street.

(Doc. Nos. 505366, 513195, 514949, 520340 and 528677). Parcel No. 01-801-03339-00.

TRACT C:

Blocks 24, 26, 28 and 30, Townsite of Superior, West 23rd Street;

Blocks 22, 23, 24, 25, 26, 27, 28, 29 and 30, Townsite of Superior, West 25th Street;

Block 32, Townsite of Superior, West 26th Street;

Blocks 23, 24, 25, 26, 27, 28, 29, 30, 31 and 32, Townsite of Superior, West 27th Street, together with that part of West 27th Street which accrued thereto by reason of the vacation thereof.

Blocks 23, 24, 25, 26, 27, 28, 29, 30 and 31, Townsite of Superior, West 29th Street, together with that part of West 29th Street which accrued thereto by reason of the vacation thereof, except those parts of Blocks 30 and 31 lying East of the East line of the Wisconsin Central Railway Company Right-of-Way.

(Doc. Nos. 453215, 405966 and 458930).

Parcel No. 02-802-00872-00.

Blocks 15, 16, 18, and 20, Townsite of Superior, West 23rd Street.

The North Half and the Southeast Quarter of Block 17, Townsite of Superior, West 23rd Street.

Blocks 19 and 22, Townsite of Superior, West 23rd Street, except Lots 314, 316, 318 and 320, Bay Front Division, West 22nd Street, and Lots 343 through 352, inclusive, Bay Front Division.

Blocks 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22, Townsite of Superior, West 25th Street.

Blocks 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22, Townsite of Superior, West 27th Street.

Blocks 13, 15, 17, 19 and 21, Townsite of Superior, West 29th Street.

Together with that part of the streets and avenues which accrued thereto by reason of the vacation thereof.

(Doc. Nos. 405966 and 453215).

Parcel No. 01-801-03339-00.

TRACT D:

Lots 354 through 384, even numbers inclusive, Bay Front Division, West 23rd Street. (Doc. No. 453215).

Parcel No. 02-802-00872-00.

Lots 330 through 342, even numbers inclusive, Bay Front Division, West 23rd Street.

Lots 337, 339 and 341, Bay Front Division, West 24th Street.

(Doc. No. 453215). Parcel No. 01-801-03339-00.

TRACT E:

Lot 386, Bay Front Division, West 22nd Street. (Doc. No. 315814).

Parcel No. 02-802-00872-00.

TRACT F:

Block 23, Townsite of Superior, West 23rd Street (V 143 P 609).

Parcel No. 02-802-00872-00.

TRACT G:

That certain triangular shaped tract of land described last in deed dated August 30, 1957, from Northwestern Improvement Company to Northern Pacific Railway Company recorded January 2, 1958, in Book 254, Page 427, records of Douglas County, Wisconsin, said tract being described in said deed for reference as follows:

"A triangle of land comprising all of the Northwest Quarter Southwest Quarter (NW 1/4SW 1/4) of Section 36, Township 49 North, Range 14 West, Fourth Principal Meridian, which is situated Northwesterly of the right of way of the Northern Pacific Railway Company, being the same premises described as Parcel No. 1 in deeds recorded in Book 109 of Deeds on Pages 526 and 528, as Document Nos. 186157 and 186158 respectively, records of said county." (Document No. 840739)

Parcel No. 08-808-10047-00.

TRACT H:

The Southeast Quarter of Block 30 on West Nineteenth Street, Townsite of Superior, Douglas County, Wisconsin. (Document No. 840739)

Parcel No. 02-802-00830-00.

TRACT I:

North Half (N 1/2) of Fractional Block Thirteen (13), West Thirty-fifth (35th) Street, Townsite of Superior, according to the recorded plat or plats thereof on file and of record in the Office of the Register of Deeds in and for Douglas County, Wisconsin; together with that part of West 34th Street which accrued thereto by reason of the vacation thereof.

Block 18, West 21st Street, Townsite of Superior, Douglas County, Wisconsin.

(Doc. Nos. 522304, 528677 & 777319).

Parcel Nos. 08-808-09743-00 & 01-801-03304-00.

TRACT J:

The Southwest Quarter (SW 1/4) of Block Twenty-five (25), Townsite of Superior West 31st Street, according to the recorded plat or plats thereof on file and of record in the Office of the Register of Deeds in and for Douglas County, Wisconsin.

The Southeast Quarter (SE 1/4) of Block Fifteen (15), Townsite of Superior West 37th Street, according to the recorded plat or plats thereof on file and of record in the Office of the Register of Deeds in and for Douglas County, Wisconsin.

The Southeasterly One Hundred Seventy-five feet (SEly 175') of the Southwesterly Half (SWly 1/2) of Block Twenty (20), West Eleventh Street, Township of Superior (Southwestern Division), in the City of Superior, Douglas County, Wisconsin.

The Northwesterly One Hundred Twenty-five feet (NWly 125') of the Southwesterly One-Half (SWly 1/2) of Block Twenty (20), West Eleventh Street, Townsite of Superior, in the City of Superior, Douglas County, Wisconsin, being that part of said Block 20 which is bound on the Southwest by West Twelfth Street (now East Twelfth Street); on the Northeast by a line running midway between and parallel with West Eleventh Street and West Twelfth Street (now East Eleventh and Twelfth Streets); on the Northwest by Nettleton Avenue (now Twenty-first Avenue East); and the Southeast by a line One Hundred Twenty-five feet (125') Southeasterly from, and parallel to the Northwesterly boundary of Block 20.

The Southerly One Hundred feet (Sly 100') of Northwesterly Two Hundred Twenty-five feet (NWly 225') of Southwesterly one-half (SWly 1/2) of Block Twenty (20), on West Eleventh Street, Townsite of Superior, in the City of Superior, Douglas County, Wisconsin.

Lots 450 through 480, Even Numbers inclusive, Subdivision of North 1/2 & SE 1/4 Block 30 on West 15th Street, Lots on West 15th Street, Douglas County, Wisconsin.

Lots 449 through 463, Odd Numbers inclusive, Subdivision of North 1/2 & SE 1/4 Block 30 on West 15th Street, Lots on West 16th Street, Douglas County, Wisconsin.

Lots 386 through 416 Even Numbers inclusive, Chrisfield Johnson's Subdivision of Block 26, West 17th Street, Douglas County, Wisconsin.

Lots 385 through 415 Odd Numbers inclusive, Chrisfield Johnson's Subdivision of Block 26, West 17th Street, Douglas County, Wisconsin.

Lots 226 through 256, Even Numbers inclusive, West 17th Street, Subdivision of Block 16 West 17th Street, Douglas County, Wisconsin.

Lots 225 through 255, Odd Numbers inclusive, Southwest 18th Street, Subdivision of Block 16 West 17th Street, Douglas County, Wisconsin.

The Northeast Quarter (NE 1/4) and the East Half of the East Half of the Northwest Quarter (E 1/2 E 1/2 NW 1/4), Block Seventeen (17), West Fifteenth Street, in Townsite of Superior, City of Superior, Douglas County, Wisconsin.

The West Half of the East Half of the Northwest Quarter (W 1/2 of E 1/2 of NW 1/4) of Block Seventeen (17), West Fifteenth Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin.

The West Half of the Northwest Quarter (W 1/2 NW 1/4) of Block Seventeen (17), West Fifteenth Street, Townsite of Superior, in the City of Superior, Douglas County, Wisconsin.

The East 1/4 of SE 1/4, Block 17, Townsite of Superior West 15th Street, Douglas County, Wisconsin.

The West 3/4 of SE 1/4, Block 17, Townsite of Superior West 15th Street, Douglas County, Wisconsin.

The North Half (N 1/2) of Block Seventeen (17), West Thirteenth Street, Townsite of Superior, (Superior Division), in City of Superior, Douglas County, Wisconsin.

The South Half (S 1/2) of Block Seventeen (17), West Thirteenth Street, Townsite of Superior, (Superior Division), in City of Superior, Douglas County, Wisconsin.

Fractional Lots Two Hundred Fifty-seven (257), Two Hundred Fifty-nine (259), Two Hundred Sixty-one (261), Two Hundred Sixty-three (263) and Two Hundred Sixty-five (265), West Twelfth Street, Subdivision of Block Eighteen (18), West Eleventh Street, in Townsite of Superior, City of Superior, Douglas County, Wisconsin, together with that part of the West Half (W 1/2) of vacated Villard Street abutting said lots.

All of Block Sixteen (16), on West Twenty-First Street, in the City of Superior, Douglas County, Wisconsin.

All of Block Thirteen (13), excluding right of way, West 21st Street, Townsite of Superior, Douglas County, Wisconsin.

The Northwest Quarter (NW 1/4) and the Southwest Quarter (SW 1/4) of Block Twenty (20), Townsite of Superior West 16th Street, Douglas County, Wisconsin.

The West Half of the West Half of the Northwest Quarter (W 1/2 W 1/2 NW 1/4) of Block Nineteen (19), West Thirteenth Street, Townsite of Superior, in the City of Superior, Douglas County, Wisconsin,

The Southeast Quarter (SE 1/4) of Block Nineteen (19), West Thirteenth Street, Townsite of Superior, (Southwestern Division), in the City of Superior, Douglas County, Wisconsin.

The East One Hundred Twenty feet (E 120') of the Northeast Quarter (NE 1/4) of Block Nineteen (19), West Thirteenth Street, Townsite of Superior, (Southwestern Division), in the City of Superior, Douglas County, Wisconsin.

The Southwest Quarter (SW 1/4) of Block Nineteen (19), West 13th Street, Townsite of Superior, City of Superior, County of Douglas, Wisconsin.

The East Three-Fourths of the Northwest Quarter (E 3/4 NW 1/4), except the East Half of the East Half (E 1/2 E 1/2), Block Nineteen (19), West 13th Street, Townsite of Superior, City of Superior, County of Douglas, Wisconsin.

The East Half of the East Half of the Northwest Quarter (E 1/2 E 1/2 NW 1/4) and the West Eighty feet (W 80') of the Northeast Quarter (NE 1/4) of Block Nineteen (19), West Thirteenth Street, Townsite of superior, City of Superior, Douglas County, Wisconsin.

The East One-half (E 1/2) of the Northeast Quarter (NE 1/4) and the East One-half (E 1/2) of the Southeast Quarter (SE 1/4) of Block Nineteen (19), West Fifteenth Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin.

The NW 1/4 & W 1/2 of NE 1/4 and W 1/4 of SE 1/4 & E 3/4 of SW 1/4, Block 19, Townsite of Superior of Superior West 15th Street, Douglas County, Wisconsin.

The W 1/2 of the W 1/4 of the SW 1/4 of Block 19, Townsite of Superior West 15th Street, Douglas County, Wisconsin.

Lots 290 through 320, Even Numbers inclusive, West 17th Street, Subdivision of Block 20 West 17th Street, Douglas County, Wisconsin.

 Lots 289 through 319, Odd Numbers inclusive, West 18th Street, Subdivision of Block 20 West 17th Street, Douglas County, Wisconsin.

Lots 258 through 288, Even Numbers inclusive, West 20th Street, AND Lots 257 through 287, Odd Numbers inclusive, West 21st Street, all in the Subdivision of Block 17, on West 21st Street, Townsite of Superior, Douglas County, Wisconsin.

Lots 273 through 287, Odd Numbers inclusive, West Fifteenth Street, in Plat of McBean Blocks, being a Subdivision of the Southwest Quarter (SW 1/4) of Block Seventeen (17), West Fifteenth Street, Townsite of Superior, (Southwestern Division), in the City of Superior, Douglas County, Wisconsin.

Lots 258 and 260, Block 18, 15th Street, McBean Blocks, Douglas County, Wisconsin.

Lots 299, 301 & 303, Block 20, 14th Street & alley vacated, McBean Blocks, West 13th Street, Douglas County, Wisconsin.

Lots 393 through 399, Odd Numbers inclusive, Block 25, McBean Blocks, West Thirteenth Street, City of Superior, Douglas County, Wisconsin.

Lots 281 through 287, Odd Numbers inclusive, on West Twelfth Street, in Subdivision of Block Eighteen, West Eleventh Street, Townsite of Superior (Southwestern Division), City of Superior, Douglas County, Wisconsin.

Lots 267 through 279, Odd Numbers inclusive, on West Twelfth Street, in Subdivision of Block Eighteen (18), West Eleventh Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin.

Block Thirteen (13), West Twenty-third Street, except right-of-way, in Townsite of Superior, City of Superior, Douglas County, Wisconsin, together with that part of the West 23rd Street which accrued thereto by reason of vacation thereof.

E 3/4 of Block 12 on West 37th Street, Townsite of Superior, Douglas County, Wisconsin, except right of way.

E 3/4 of Block 11 on West 39th Street, Townsite of Superior, Douglas County, Wisconsin, except right of way.

E 3/4 of Block 12 on West 39th Street, Townsite of Superior, Douglas County, Wisconsin, except right of way.

NE 1/4 of Block 12 on West 43rd Street, Townsite of Superior, Douglas County, Wisconsin.

That part of Block 10, West 41st Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin, lying north of the following described line: Beginning at the most northerly corner of Fractional Block 8, West 41st Street, Townsite of Superior, thence westerly and parallel with the south line of the Southeast Quarter of Section 35, Township Forty-Nine North, Range 14 West to the northeasterly line of Fractional Block 9, West 43rd Street, Townsite of Superior, and said line there terminating.

That part of Block 11, West 41st Street, Townsite of Superior, City of Superior, Douglas County, Wisconsin lying East of the East right of way line of the former Soo Line Railroad.

Lots 225 through 255, Odd Numbers inclusive, Lots on 16th Street, in the Subdivision of Block 16 on West 15th Street, in the City of Superior, Douglas County, Wisconsin.

Lots 226 through 256, Even Numbers inclusive, Lots on West 15th Street, in the Subdivision of Block 16 on West 15th Street, in the City of Superior, Douglas County, Wisconsin.

(Doc. Nos. 624023, 633082, 725853, 766342, 794160, 795896, 799526, 801654, 802205, 803377, 803498, 803978, 803979, 803733, 803734, 804451, 804524, 804525, 804706,806050, 806592, 806593, 809578, 808862, 809996, 810193, 813026, 828601, 829415 & 829526).

Parcel Nos. 02-802-00947-00, 01-801-02976-01, 01-801-02976-03, 01-801-02976-05, 02-802-06614-00, 02-802-01293-00, 01-801-03987-00,01-801-03125-00, 01-801-03131-00, 01-801-03129-00, 01-801-03128-00,01-801-03123-00, 01-801-03042-00, 01-801-03046-00, 01-801-03805-00, 01-801-03302-00, 01-801-03294-00, 01-801-03055-00,01-801-03047-00, 01-801-03047-01, 01-801-03047-02, 01-801-03047-03, 01-801-03047-04, 01-801-03048-00, 01-801-03136-00, 01-801-03145-00, 01-801-04051-00, 01-801-04083-00, 01-801-04706-00, 01-801-04713-00, 01-801-04679-00, 02-802-03804-00, 01-801-03807-00, 01-801-03806-00; 01-801-03326-00, 08-808-09780-00,08-808-09821-00, 08-808-09823-00, 08-808-09892-00, 08-808-09856-00, 01-801-03971-00 & 01-801-03955-00.

TRACT K:

That part of the West Half (W 1/2) of Section Thirty-six (36), Township forty-nine (49) North, Range Fourteen (14) West, Douglas County, Wisconsin, more fully described as follows: Commencing at the North quarter corner of said Section 36, Township 49 North, Range 14 West, thence due south along the north-south quarter line, said quarter line being the center line of Bardon Avenue, a distance of 1,456.64 feet to the south property line of 26th Avenue extended, thence south 48 degrees and 36 minutes west along the south property line of 26th Avenue, a distance of 481 feet to the point of beginning, thence continuing in the same straight line a distance of 1,323.53 feet to a point, thence south 89 degrees and 46 minutes west a distance of 151.91 feet to a point, thence South 48 degrees 36 minutes West a distance of 162.43 feet to a point, thence South 41 degrees 24 minutes east a distance of 751 feet to a point, thence north 48 degrees and 36 minutes East a distance of 1,463.36 feet to a point on the west line of Bardon Avenue a distance of 207.10 feet to a point, thence north 41 degrees and 24 minutes west a distance of 495.66 feet to the point of beginning.

(Doc. No. 459590 V 271 P 358) Parcel No. 01-801-05132-00.

Lots 290 through 320, even numbers inclusive, Bay Front Division, West 21st Street.

Lots 322 through 352, even numbers inclusive, Bay Front Division, West 21st Street.

Lots 305 through 351, odd numbers inclusive, Bay Front Division, West 22nd Street.

Lots 314 through 352, even numbers inclusive, Bay Front Division, West 22nd Street.

Lots 321 through 341, odd numbers inclusive, Bay Front Division, West 23rd Street.

Lots 344 through 352, even numbers inclusive, Bay Front Division, West 23rd Street.

Lots 347, 349 and 351, Bay Front Division, West 23rd Street.

Lots 289 through 303, odd numbers inclusive, Nobles Subdivision of Block 20, West 21st Street.

Block 18, Townsite of Superior, West 21st Street.

Southwest Quarter of Block Seventeen, Townsite of Superior, West 23rd Street.

Lots 343 through 351, odd numbers inclusive, Bay Front Division, West 24th Street.

(Doc. Nos. 505366, 513195, 514949, 520340 and 528677). Parcel No. 01-801-03339-00.

TRACT C:

Blocks 24, 26, 28 and 30, Townsite of Superior, West 23rd Street;

Blocks 22, 23, 24, 25, 26, 27, 28, 29 and 30, Townsite of Superior, West 25th Street;

Block 32, Townsite of Superior, West 26th Street;

Blocks 23, 24, 25, 26, 27, 28, 29, 30, 31 and 32, Townsite of Superior, West 27th Street, together with that part of West 27th Street which accrued thereto by reason of the vacation thereof.

Blocks 23, 24, 25, 26, 27, 28, 29, 30 and 31, Townsite of Superior, West 29th Street, together with that part of West 29th Street which accrued thereto by reason of the vacation thereof, except those parts of Blocks 30 and 31 lying East of the East line of the Wisconsin Central Railway Company Right-of-Way.

(Doc. Nos. 453215, 405966 and 458930).

Parcel No. 02-802-00872-00.

Blocks 15, 16, 18, and 20, Townsite of Superior, West 23rd Street.

The North Half and the Southeast Quarter of Block 17, Townsite of Superior, West 23rd Street.

Blocks 19 and 22, Townsite of Superior, West 23rd Street, except Lots 314, 316, 318 and 320, Bay Front Division, West 22nd Street, and Lots 343 through 352, inclusive, Bay Front Division.

Blocks 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22, Townsite of Superior, West 25th Street.

Blocks 13, 14, 15, 16, 17, 18, 19, 20, 21 and 22, Townsite of Superior, West 27th Street.

Blocks 13, 15, 17, 19 and 21, Townsite of Superior, West 29th Street.

Together with that part of the streets and avenues which accrued thereto by reason of the vacation thereof.

(Doc. Nos. 405966 and 453215).

Parcel No. 01-801-03339-00.

TRACT D:

Lots 354 through 384, even numbers inclusive, Bay Front Division, West 23rd Street. (Doc. No. 453215).

Parcel No. 02-802-00872-00.

Lots 330 through 342, even numbers inclusive, Bay Front Division, West 23rd Street. Lots 337, 339 and 341, Bay Front Division, West 24th Street.

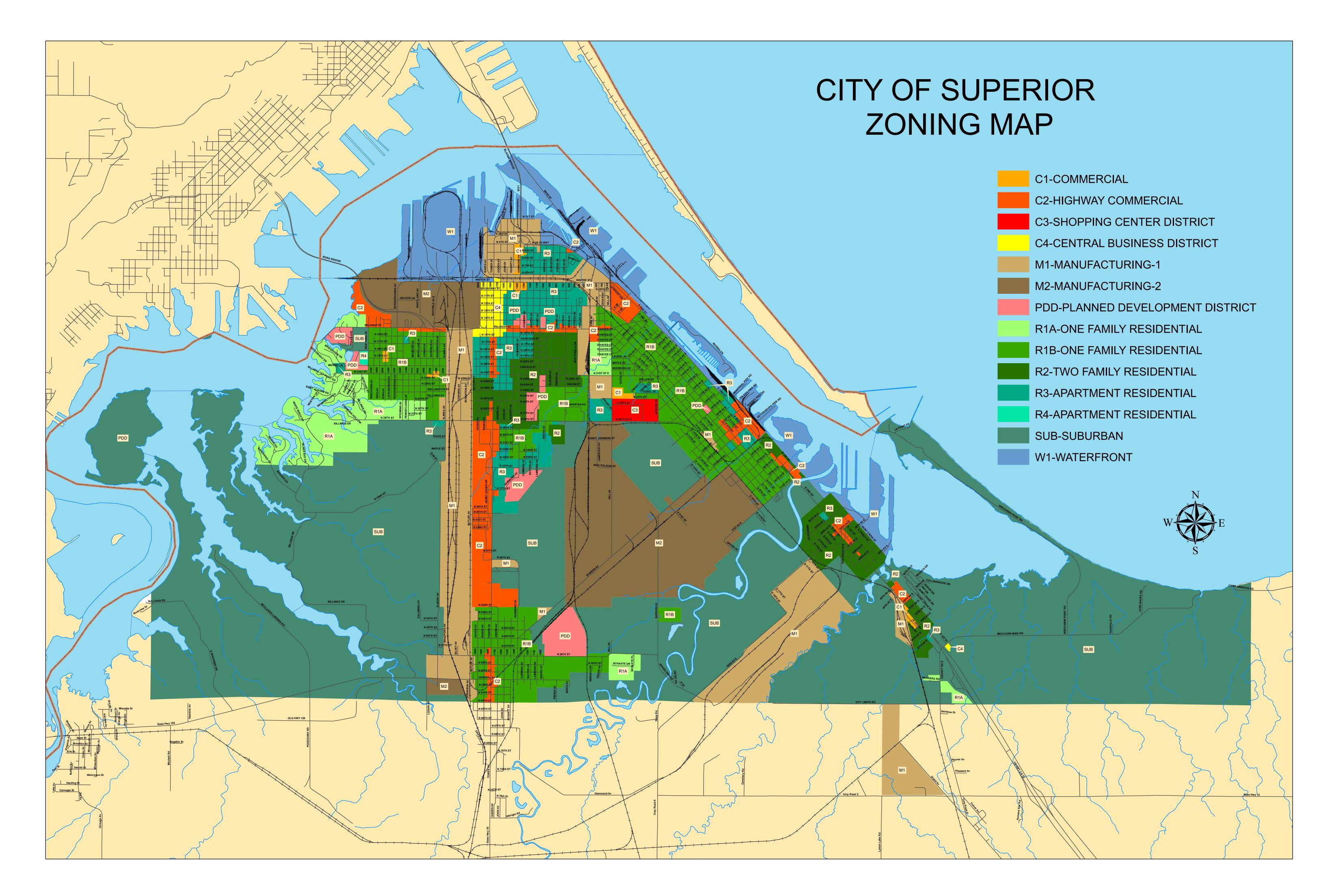


NO



Attachment F.2 – Certified Survey Map

Not Applicable - A certified survey map is not referenced in the deed.



Superior Refinery

March 26, 2020

Mr. John Sager Wisconsin Department of Natural Resources 1701 N. 4th St. Superior, WI 54880

RE:

Signed Statement for Property Legal Description Case Closure Request – BRRTS No. 02-16-585474

Dear Mr. Sager,

Pertaining to the above referenced Superior Refining Company release site located at 2407 Stinson Avenue, Superior, WI 54880 (WTM Coordinates X361726, Y692621), the following legal description and attached surveyor's figure accurately describe the property:

That part of Block 13, Townsite of Superior, West 27th Street, together with that part of the streets and avenues which accrued thereto by reason of the vacation thereof; that part of Block 14, Townsite of Superior, West 27th Street, together with that part of the streets and avenues which accrued thereto by reason of the vacation thereof; and that part of Block 13, Townsite of Superior, West 29th Street, together with that part of the streets and avenues which accrued thereto by reason of the vacation thereof; as described and shown in detail on the attached surveyor's map titled "PARCEL A – SUPERIOR WI EXHIBIT 1" generated by TKDA Engineering of Duluth, MN.

Sincerely,

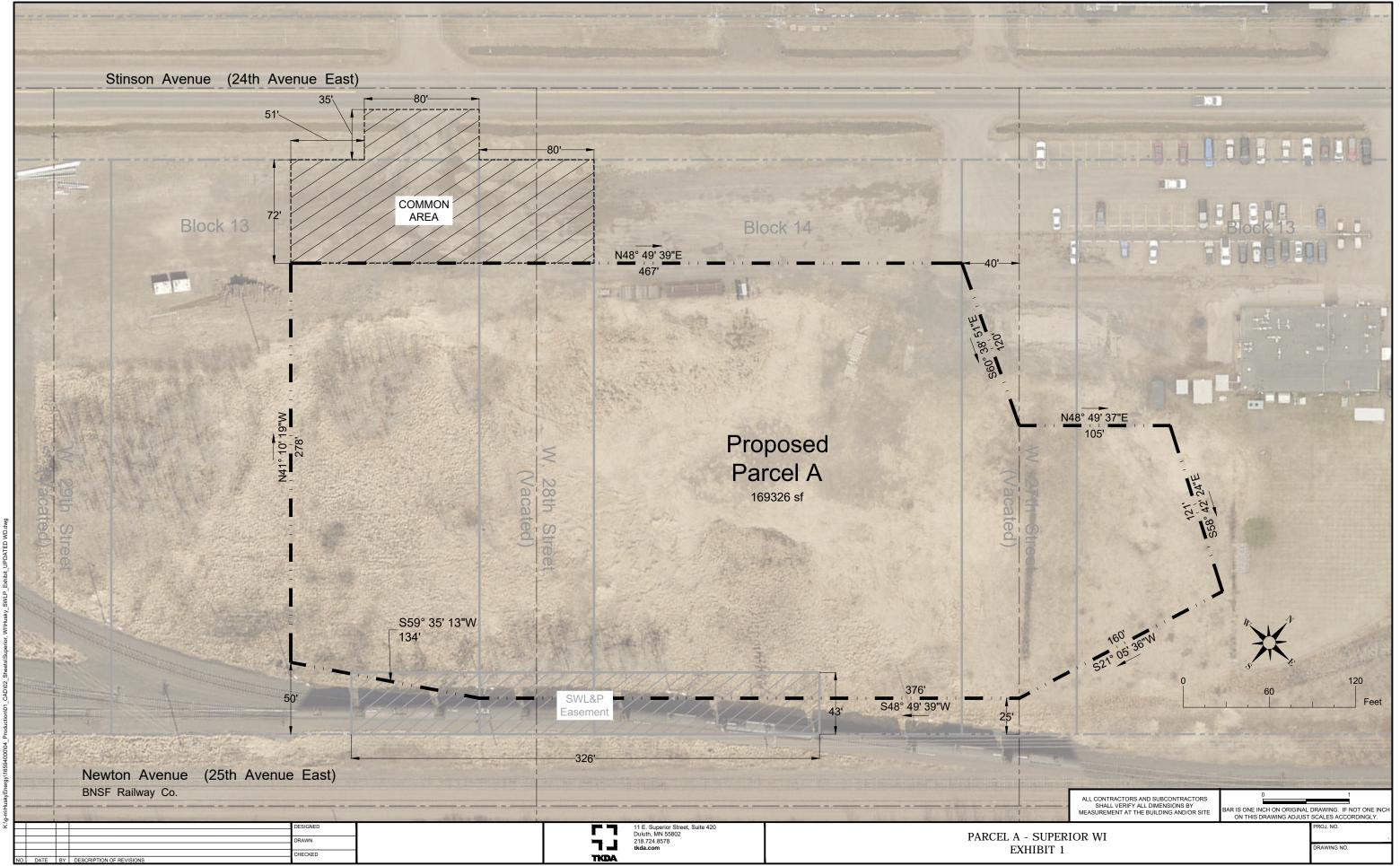
Mark Darby

Environmental Manager

Husky Energy

Superior, Wisconsin Refinery

2407 Stinson Avenue Superior, WI 54880 Bus: 715,398,3533 huskyenergy.com



pr 17, 2018 - 12:06pm

Attachment G – Source Legal Documents

- G.1 Deeds Source Property (Not Applicable)*
- G.2 Certified Survey Map (Not Applicable)*
- G.3 Verification of Zoning (Not Applicable)*
- G.4 Signed Statement (Not Applicable)*
- * There are no affected property owners to notify