La Crosse County Landfill Complex and Disposal Facility, La Crosse, Wisconsin

2023 Annual WDNR Report

LA CROSSE COUNTY
Exceptional services. Extraordinary place.

Solid Waste Department

April 22, 2024

RE: 2023 Annual WDNR Report
La Crosse County Landfill Complex and
Disposal Facility, La Crosse, Wisconsin

Mr. Colin Maus, Waste Management Engineer
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53711-5367

Dear Mr. Maus:

The La Crosse County Solid Waste Department is submitting this 2023 Annual WDNR Report for the La Crosse County Landfill (WDNR License No. 3253) in accordance with Condition #41 of the May 24, 2023 Conditional Plan of Operation (POO) Approval for the North Expansion Plan of Operation, License No. 3253. This report also addresses inspection and reporting requirements outlined in previous approvals, that have not been rescinded, or formally referenced in the May 24, 2023 POO approval.

This annual report generally follows the format outlined in Condition #41 of the May 24, 2023 POO. The additional inspection and reporting requirements outlined in previous approvals are referenced in Section 11. The 2023 Annual Compliance Certification was submitted to the WDNR on February 23 and is attached for your reference.

Please contact the undersigned if you have any questions regarding this report.

Sincerely,

Jadd Stilwell, Director
La Crosse County Solid Waste Department

Enclosures
cc: Brian Kent, SEH

hbh
document6

3200 Berlin Dr.
La Crosse, WI 54601-3200

608-785-9572 Phone
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LA CROSSE COUNTY
Exceptional services. Extraordinary place.

Solid Waste Department

February 23rd, 2024

RE: La Crosse County Solid Waste Department
2023 Compliance Certification

Colin Maus
Wisconsin Department of Natural Resources
FITCHBURG SERVICE CENTER
3911 Fish Hatchery Road
Fitchburg, WI 53711-5367

The purpose of this letter is to document the compliance status of the La Crosse County Landfill (FID 632063630), La Crosse County Intermediate C&D Landfill (FID 632075730), and La Crosse County Small Sized C&D Landfill (FID 632070010) during calendar year 2023. This certification is prepared in accordance with s. NR506.19(1) Wisconsin Administrative Code and relates to the following facilities:

- Monitoring ID #3253; MSW Landfill
- Monitoring ID #4317; Ash Monofill
- Monitoring ID #3846; Intermediate C&D Landfill
- Monitoring ID #3454; Small Sized C&D Landfill
- Monitoring ID #2627; Relocated MSW Landfill

On behalf of La Crosse County, I assert that I am aware of approved plans, WDNR conditions of approval, and applicable solid waste statutory and administrative rules for the above referenced facilities. To the best of my knowledge, information and belief, the above referenced facilities are in substantial compliance with approved plans and requirements.

Should you have any questions or issues, please contact me at 608.785.9769 to discuss.

Sincerely,

Jadd Stilwell
La Crosse County Solid Waste, Director

3200 Berlin Dr.
La Crosse, WI 54601-3200

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La Crosse County Landfill Complex and Disposal Facility, La Crosse, Wisconsin

2023 Annual WDNR Report

Prepared for Wisconsin Department of Natural Resources

1 Introduction and Purpose

La Crosse County owns and operates an integrated waste management system on approximately 320-acres located partially in the City of La Crosse and the City of Onalaska. The current landfill are located in portions of the Northeast, Southeast, Southwest, and Northwest 1/4 of Section 12, T16N, R7W, Cities of La Crosse and Onalaska, La Crosse County, Wisconsin. The integrated waste management system includes, but is not limited to:

- An approximate 52-acre municipal solid waste landfill, with a current approximate design capacity of 8.78 million cubic yards (WDNR License No. 3253)
- An approximate 6-acre Ash Monofill, with an approximate design capacity of 291,000 cubic yards (WDNR License No. 4317)
- A closed intermediate sized (250,000 cubic yard) C&D Landfill (WDNR License No. 3846)
- A closed small sized (50,000 cubic yard) C&D Landfill (WDNR License No. 3454)
- A former exhumed and relocated natural attenuation landfill (WDNR License No. 2637)
- A household hazardous materials (HHM) program and facility
- Materials processing pad for diversion of asphalt shingles, clean wood, used concrete and bituminous
- Public/private partnership with Xcel French Island RDF (French Island RDF) facility for waste processing to produce refuse derived fuel (RDF) for incineration and energy production
- Public/private partnership with Gundersen Lutheran for utilization of landfill gas (LFG) to produce heat and electricity for their Onalaska Campus.

The closed and exhumed landfill (License No. 2637) was the initial landfill operated at the site beginning in the early 1970's until 1991. The current MSW Landfill (License No. 3253) opened in 1991 and included six separate phases/cells with a design capacity of 1.84 million CY. A March 2003 Plan Modification combined the Phases V and VI into a single, Phase V. Phases I and II were constructed with a 5-foot-thick clay liner with full basin lysimeters lined in 60-mil high density polyethylene (HDPE). Subsequent phases III through V were constructed with 4-ft thick composite clay and 60-mil HDPE liners. Ash from the French Island RDF facility was placed in a designated ash disposal area of Phase I. The final phase, Phase V, was constructed and approved for waste placement in 2004.

A horizontal and vertical expansion was approved in 2006, which included five liner construction sequences and added 3,853,000 CY of air space (referred to as the North Expansion). Due to groundwater quality impacts associated with the former unlined landfill, the North Expansion

included additional air space to exhume and relocate the unlined landfill contents into the MSW landfill, which included a compliant liner and leachate collection system. The North Expansion also included the permitting and construction of a separate Ash Monofill (License No. 4317), and ash from Phase I was relocated to the Ash Monofill.

During 2006 and 2007, following approval of the Feasibility Report and Plan of Operation for the North Expansion, La Crosse County constructed the Ash Monofill and Phase VI of the MSW landfill. RDF ash from Phase I of the MSW landfill was exhumed and relocated to the new Ash Monofill during 2006. Excavation of the unlined landfill and placement into Phase VI and portions of Phases I through V occurred between 2006 and 2008. As of 2018, the last landfill cell (Phase VIII Module 2) was constructed.

A second horizontal and vertical expansion was approved in 2023, which included 4 liner construction sequences and added 3,085,865 CY of air space (referred to as the Phase 2 North Expansion). The La Crosse County Landfill is currently operating in accordance with the Plan of Operations Approval issued by the Wisconsin Department of Natural Resources (WDNR) on May 24, 2023. La Crosse County has reviewed this, and other applicable WDNR approval conditions to determine the necessary annual report contents. An annual report shall be submitted to the department no later than April 30th of each year that summarizes the below activities from the previous calendar year.

2 General

Provide one or more plan view drawings.

2.1 NR 506.19(2)(a)

The landfill development and filling status information specified in s. NR 506.19(2)(a), Wis. Adm. Code on a topographic site map depicting all landfill phases.

Response: Refer to Appendix A-1.

2.2 Environmental Monitoring Points

All existing environmental monitoring points and systems on a color-coded site map.

Response: Refer to Appendix A-2.

2.3 NR 506.19(1) Wis. Adm. Code

A copy of the compliance certification required by s. NR 506.19(1), Wis. Adm. Code.

Response: Refer to compliance certification page provided after document cover letter.

2.4 NR 506.16 Wis. Adm. Code

Copies of random load inspections required in s. NR 506.16, Wis. Adm. Code.

Response: Refer to Appendix A-3.

3 Operations

The actions used to minimize windblown debris.

3.1 Wind Speed

Dates when the wind speed was greater than or equal to 30 mph at the working face.

Response: For 2023 wind speed was not greater than or equal to 30 mph at the working face for any day the facility was open. Refer to Appendix B-1 for a copy of the form used to track if/when wind speed exceeds 30 mph.

3.2 Shut down due to wind

Dates when the landfill was shut down due to wind.

Response: No closures were required in 2023 due to windspeed.

3.3 Off-Site Debris Collection

Dates when the landfill collected debris off-site.

Response: In 2023, no off-site collection events were required. On-site debris management techniques and local tarping ordinance were appropriate in preventing windblown debris from leaving the site.

4 Special Waste and Alternate Daily Cover (ADC)

4.1 Daily Mixing Ratios

Daily mixing ratios of each sludge waste to municipal solid waste as required by s. NR 506.14(2)(e), Wis. Adm. Code, unless the small quantity exemption requirements of s. NR 506.14(1), Wis. Adm. Code are met.

Response: The facility accepts very small volumes of sludge from approved generators on an annual basis. Annual sludge acceptance for 2023 totals 1,145.45 tons of material equating out to 0.93 percent of total waste volumes. Sludge average daily mixing ratio equals 490.81 tons of waste with 4.58 tons of sludge or a 107:1 ratio. Refer to Appendix C-1 for exact tonnage by waste category.

4.2 Total Tonnage of Special Wastes

Total tonnage of special wastes, and tabulation by waste category for each of the waste types in the special waste plan which were accepted for disposal the previous calendar year.

Response: Refer to Appendix C-1. All waste types are provided by WDNR Code and waste description.

4.3 Computation of the Total Volume of all Disposed Wastes

Computation of the total volume of all wastes disposed at this facility, and the proportions of special wastes compared to the total volume of landfill filled.

Response: Refer to Appendix C-1 for waste detail. Computation of total waste to special wastes is 6.71:1 or 14.9 percent.

4.4 ADC Tonnage

Tonnage for each waste used as ADC or other approved fee exempt use (specify use), the ratio of waste to ADC by volume or weight, and a discussion of any changes and/or problems encountered with the use of the wastes within the landfill.

Response: Refer to Appendix C-1 for waste detail.

Ratio of Waste to Alternative Daily Cover by Weight

The total tonnage of waste disposed in the site in 2023 was 93,876.09 tons. The total amount of ADC (by weight) used in 2023 was 15,201.09 CY. Therefore, the waste to ADC ratio was approximately 9.75:1 or 10.26 percent.

4.5 Test Results for specific ADC Materials

Test results in table format for specific ADC materials, including shredder fluff and construction and demolition fines.

Response: Laboratory analytical reports for testing of ADC materials during 2023 are included in Appendix C-2.

4.6 Other Additional Conditions

Applications for Alternative Daily Cover: The alternative daily cover materials were used for daily and temporary intermediate cover internal to the landfill, construction of containment berms, dikes to confine working areas, road base for internal access roads, and sub-base for turnaround and unloading areas.

Discussion of any changes and/or problems encountered with the use of the wastes within the landfill: No significant problems occurred during use of approved beneficially reused materials in landfill construction and operations at the La Crosse County Landfill during 2023.

No wastes failing to meet acceptance criteria were disposed of at the site.

Rejected Wastes: No wastes were rejected in 2023.

Deviations from Acceptance Criteria: There were no deviations from acceptance criteria in 2023.

Problems Encountered Implementing Special Waste Management Plan: No problems were encountered when implementing the plan.

5 Gas Extraction System

5.1 Results of surface emission monitoring

Results of surface emission monitoring, to include supporting narrative, a map identifying problems areas, recent calibration data for portable analyzer, as well as meteorological conditions at the time of inspection, including: temperature, barometric pressure trend, average wind speed, wind direction and sky conditions. The report shall describe remedial measures taken to correct areas of landfill gas emissions at or above 500 ppm methane above background or areas with stressed vegetation or other physical signs of landfill gas emergence. The report

shall include construction documentation in accordance with ch. NR 516, Wis. Adm. Code for any repairs conducted on the clay or geosynthetic layers of final covered areas.

Response: Annual surface emission monitoring completed during October 2023 did not indicate an exceedance of surface emission limits. Refer to Appendix D-1 for a copy of the Annual Surface Emissions Monitoring Report completed in 2023.

5.2 Recording Periods of Shutdown

Records of periods of shutdown of the gas extraction system, length of time of shutdown, and corrective action for the system or individual extraction wells.

Response: See Appendix D-2. La Crosse County Solid Waste, in partnership with Gundersen Health System, continues operation of the joint G2E and thermal recovery project which began in January of 2012. Collected landfill gas is either diverted to Gundersen's landfill gas to energy system, or combusted at an onsite candlestick flare if Gundersen is not operating.

5.3 Extraction Wells Maintenance

Any maintenance, cleaning, repair, or replacement of extraction wells, header or lateral lines, gas condensate knock-outs, blower or gas combustion equipment components, or valve assemblies.

Response: Refer to Appendix D-3 for information recorded in the Malfunction Prevention and Abatement Plan with associated reporting sheets and Semi-Annual Monitoring Reports as part of the Air Permit submittal requirements.

5.4 Gas Extraction System Assessment

An assessment of the performance of the gas extraction system, including liquid levels in the gas extraction wells, the condition of each gas well and identification of any wells which need to be replaced or that have been replaced, the quality and quantity of gas and gas condensate produced from the facility, and the removal of volatile organic compounds and other substances in the gas and gas condensate. Also, include a summary of gas wells experiencing high leachate head levels and any corrective actions taken.

Response: The gas extraction system functioned as designed in 2023 with only minimal routine and preventative maintenance required to maintain operation. La Crosse County utilizes a dual system for the collection of landfill gas with a Unison Compressor Skid capturing over 98% of the annual landfill gas processed at the site. Additionally, this site operates and maintains a John Zinc bio-gas flare skid as a back-up unit. Overall gas collection volume was up 5.2 percent compared to 2022 with 114,939,231 scf of landfill gas being collected with an average methane content of 42.26 percent in 2023.

Gas wells performed as designed with only minor preventative maintenance being performed in 2023. Maintenance included inspections, tightening of hose clamps, temperature gauge replacements and the replacement of two Accu-flow well heads controls from ball valve to needle valves. Additional maintenance was performed on the compressor that supports the pneumatic pumping system for gas wells, 14-17. Percent of screen open (liquid levels) for all vertical wells averaged 90 percent open with a range of 76 percent in GW-22 to 100 percent in GW-2. No wells required replacement in 2023.

Gas condensate produced by the system is not metered to discharge. Since the majority of the landfill gas is collected by the Unison skid; the projected manufacturing rate of liquid from gas processed through the conditioning system is approximately 11 gallons/24 hours or 0.458 gallons per hour. Based on the hours of gas collection 7829 and projected capture rate of 0.458 gallons per hour it is estimated that the facility produced 3,585.68 gallons of gas condensate. Analytical results from gas condensate testing results are summarized below.

LFG Condensate (WDNR Point ID. 454)	
May 2023 Detection Summary	**November 2023 Detection Results**
Sodium 1.6 mg/L	Sodium 1.2 mg/L
Total Hardness by 2340B 12.8 mg/L	Total Hardness by 2340B 8.4 mg/L
2-Butanone (MEK) 2210 ug/L	Mercury 2.6 ug/L
Acetone 2810 ug/L	Total Suspended Solids 865 mg/L
Benzene 14.2 ug/L	BOD, 5 day 223 mg/L
Ethylbenzene 79.4 ug/L	Chloride 5.4J mg/L
Naphthalene 225 ug/L	Sulfate 3.7J mg/L
Styrene 10.3 ug/L	Alkalinity, Total as CaCO3 691 mg/L
Tetrahydrofuran 3360 ug/L	Nitrogen, Ammonia 166 mg/L
Toluene 64.9 ug/L	Chemical Oxygen Demand 2290 mg/L
Xylene (Total) 144 ug/L	
cis-1,3-Dichloropropene 3.4J ug/L	
Total Suspended Solids 64.0 mg/L	
BOD, 5 day 179 mg/L	
Chloride 4.5J mg/L	
Sulfate 5.1J mg/L	
Alkalinity, Total as CaCO3 338 mg/L	
Nitrogen, Ammonia 103 mg/L	
Chemical Oxygen Demand 410 mg/L	

Refer to Appendix D-4 for monthly gas balance sheets.

Month 2023	SCF to Flare	SCF To Pipeline	Combined SCF
January	5,527	10,461,497	10,467,024
February	0	9,936,743	9,936,743
March	0	11,182,611	11,182,611
April	83,962	10,127,798	10,211,760
May	1,093	11,743,719	11,744,812
June	50,568	10,534,611	10,585,179
July	74,711	10,606,929	10,681,640

Month 2023	SCF to Flare	SCF To Pipeline	Combined SCF
August	384,126	6,675,902	7,060,028
September	39,729	6,325,046	6,364,775
October	152,181	9,734,800	9,886,981
November	321,908	6,970,361	7,292,269
December	95,080	9,430,329	9,525,409
Average/Month	100,740	9,477,529	9,583,075
Total	1,208,885	113,730,346	114,939,231

5.6 Other Additional Conditions

The below table details landfill gas extraction systems extracted gas volumes for 2023.

6 Groundwater

A summary of groundwater sampling results that exceed any approved PAL or ACL or ch NR 140, Wis. Adm. Code, PAL or ES (where ACLs are not approved), and an assessment of the cause and significance of the exceedances.

Response: Refer to Appendix E-1. Appendix E-1 contains a table summarizing the existing NR140 Wis Adm. Code exemptions for the Active MSW, a separate table summarizing the existing, approved PALs and ACLs for the Active MSW, and a separate table summarizing the PAL and ACL exceedances measured from the Active MSW monitoring wells during 2023.

6.1 Assessment of Increased Concentration Trends

An assessment of any increasing concentration trends of monitored parameters in groundwater over the past 4 or more sampling events.

Response: Refer to Appendix E-2. Appendix E-2 includes a spreadsheet summarizing the trend analysis conducted on the monitoring wells that had exceeded a groundwater quality standard during 2023. Trend analysis was conducted on the past four sampling events for the indicator parameters that had exceeded a site specific PAL. For parameters with groundwater quality health standards, the trend analysis included all available data for that specific parameter. The trend analysis involved plotting individual parameter results against a linear trend line. For parameters with increasing trends, further discussion of cause, significance and context is included.

6.2 Groundwater Elevation Contour Map

A groundwater elevation contour map with a summary of any significant change in flow patterns compared to previous flow patterns, unless otherwise approved by the department in writing.

Response: Refer to Appendix E-3.

6.3 Environmental Monitoring Devices Summary

A summary of the status and condition of all environmental monitoring devices including

a. A list of all monitoring devices that did not function properly or were damaged.

b. A description of repairs, replacements, or modifications completed to regain function of the monitoring device.

Response: Refer to Appendix E-4 for a summary of condition assessment for all site monitoring devices.

6.4 Summary of Gas Monitoring Results

A summary of gas monitoring results and any remediation required under s. NR 507.22(1)(c), Wis. Adm. Code.

Response: Refer to Appendix E-5

6.5 Summary of Anticipated Significant Monitoring Devices

A summary of anticipated significant monitoring device activities for the upcoming year, such as installations, abandonments, or monitoring changes that may be proposed.

Response: Anticipating installation of STOCs in Phase VIII Mod A in 2024. Details will be submitted for approval prior to installation or modification.

7 Leachate Collection and Recirculation

7.1 Leachate Collection Line

The leachate collection line video camera inspection required by s. NR 506.07(5)(e), Wis. Adm. Code or the date the next leachate collection line video camera inspection will occur.

Site	Date of Latest Televising of Lines	Due Date of Next Line Televising Event
MSW Site (License No. 3253):	2019	2024
Phase V	2020	2025
Phase VI	2022	2027
Phase VII	2022	2027
Phase VIII	2023	2028
C & D Landfill	Not Applicable	Not Applicable
Ash Monofill (License No. 4317)	2020	2025

When Televising is required, Speedy Clean works with a unit called the Jet-cam. This unit can travel up to 800 feet in lines as small as 2 inches and lines up to 12 inches. The water jet will propel the camera down the line providing safer travel in landfill atmospheres. Flash drive of all televising will be available to WDNR upon request.

7.2 Cleaning and Identification

The leachate collection line cleaning and identification of any blockages or impedances within lines required under s. NR 506.07(5)(f)-(g), Wis. Adm. Code.

Response: Refer to Appendix F-1 for line jetting report which details small areas of blockages and impedances. La Crosse County contracted for additional jetting and cleaning time to rectify impacted areas.

7.3 Documentation of Monitoring or Pressure Testing

Documentation of monitoring or pressure testing leachate transfer lines and manhole secondary containment systems.

Response: In 2023, pressure testing requirement is not applicable. Refer to Appendix F-2 for monthly and annual manhole secondary containment inspections.

7.4 Leachate Recirculation Annual Report

The annual report for leachate recirculation in accordance with s. NR 506.135(5), Wis. Adm. Code including a summary and tabulation of monitoring required within ss. NR 507.215(1) – (4), Wis. Adm. Code.

Response: Since the Leachate Recirculation Plan (LRP), Organic Stability Plan (OSP), and Research, Development and Demonstration (RD&D) Plan utilize the same general methods and share the same goal of increasing the moisture content of the waste to promote organic stability, evaluation of the progress for each are monitored in conjunction with one another. Refer to Appendix G-1 for further data and discussion on leachate recirculation performed during 2023.

7.5 Other Additional Conditions

The quantity of leachate produced and sent to treatment in 2022 was 8,719,249 gallons.

Issues related to the system include additional resources and maintenance with the gravity flow Parshall flume in the FM-2 manhole metering point. Impacts from the flume buildup and associated maintenance events resulted in data points not in line with historical and expected leachate volumes.

8 Organic Stability

8.1 Performance Evaluation

An evaluation of the performance and a report of the implemented landfill organic stability plan as required by s. NR 514.07(9)(d), Wis. Adm. Code.

Response: Since the LRP, OSP, and RD&D Plan utilize the same general methods and share the same goal of increasing the moisture content of the waste to promote organic stability, evaluation of the progress for each are monitored in conjunction with one another. Refer to Appendix G-1 for further data and discussion on organic stability goals and performance measured during 2023.

8.2 5 Year Report

Every 5 years, a report describing the evaluation of the plan and likelihood that the plan will enable the landfill to reach the organic stability goals as required by s. NR 514.07(9)(e), Wis. Adm. Code.

Response: The April 2022 OSP approved as part of the Phase 2 North Expansion Plan of Operation. The 5-year update as required by NR 514.07(9)(e) is anticipated to be completed as part of the 2027 annual report.

9 Research, Development and Demonstration (RD&D)

9.1 Approved RD&D Annual Report

An annual report in accordance with the approved research, development and demonstration plan and s. NR 514.10(1)(f), Wis. Adm. Code.

Response: Since the LRP, OSP, and RD&D Plan utilize the same general methods and share the same goal of increasing the moisture content of the waste to promote organic stability, evaluation of the progress for each are monitored in conjunction with one another. Refer to Appendix G-1 for further data and discussion the progress of RD&D performed during 2023.

10 Other Applicable Approvals

10.1 RDF Fly Ash Management

10.1.1 Ash Overlay Location

A figure showing areas of ash placement and the quantities of ash placed shall be provided in each annual report required as Condition 11 of the 2006 Conditional Plan of Operation Approval.

Response: Refer to Appendix H-1 (Air Space Calcs). Please note this document also provides a summary of air space consumption and effective density calculations for MSW and special waste.

10.1.2 Ash Overlay Construction Documentation

Conditions of Approval from the January 15, 2015 Conditional Plan Modification Approval to place RDF Fly Ash in Phases III, IV, V including drawings that identify areas of ash placement and the thickness of ash.

Response: Refer to Appendix H-1, (Air Space Calcs).

10.2 Treatment of Contaminated Soil

All aspects of the construction, operation, monitoring, and closure of this facility shall be performed in accordance with the plan of operation, the requirements of NR 500 to 520, Wis. Adm. Code, and the conditions of this approval. In the case of any discrepancies between the conditions of this approval and the approved plans, the conditions of this approval shall take precedence (Treatment of Contaminated Soil Approval, dated August 14, 1996.)

Response: Refer to Appendix H-2, Annual Bio-pile Report.

10.3 Asphalt Shingle Management

Condition No. 10 in the January 24, 2008 Low Hazard Exemption and Condition No. 9 in the February 4, 2008 Approval for Exemption from Solid Waste processing rules pertaining to residential asphalt shingles. Note: Both of these conditions are identical.

Conditional Modification to the Exemption from Solid Waste Processing Rules for Recycling Asphalt Shingles dated January 17, 2013.

Response: Refer to Appendix H-3, Annual Shingle Report

10.4 Anticipated Construction Events

This report summarizes the anticipated liner and final cover construction events for the La Crosse County Complex during 2024. This report has been prepared to satisfy Condition No. 11(f) of the February 10, 2006 Plan of Operation Approval from the WDNR.

Ash Monofill Final Closure Construction: Stripping and salvaging of existing intermediate cover soils and grading of ash wastes to permitted final waste grades. Construction of an approximate 5.9-acre composite liner system comprised of two feet of compacted clay and an LLDPE geomembrane overlain with a synthetic geocomposite drainage layer. Placement of a 2.5-foot general soils and rooting zone layer. Placement of a 6-inch topsoil layer and vegetation.
Ash Monofill Final Closure Construction Work will be substantially completed on or before August 23, 2024. Substantial completion will be defined by deliverance to Owner of a completed and vegetated final closure area verified as meeting NR 504 and NR 516 Wis. Admin. Code requirements for approval. Key milestone events will be communicated with the WDNR via our consultant, SEH, along with construction documentation report requirements in the fall of 2024.

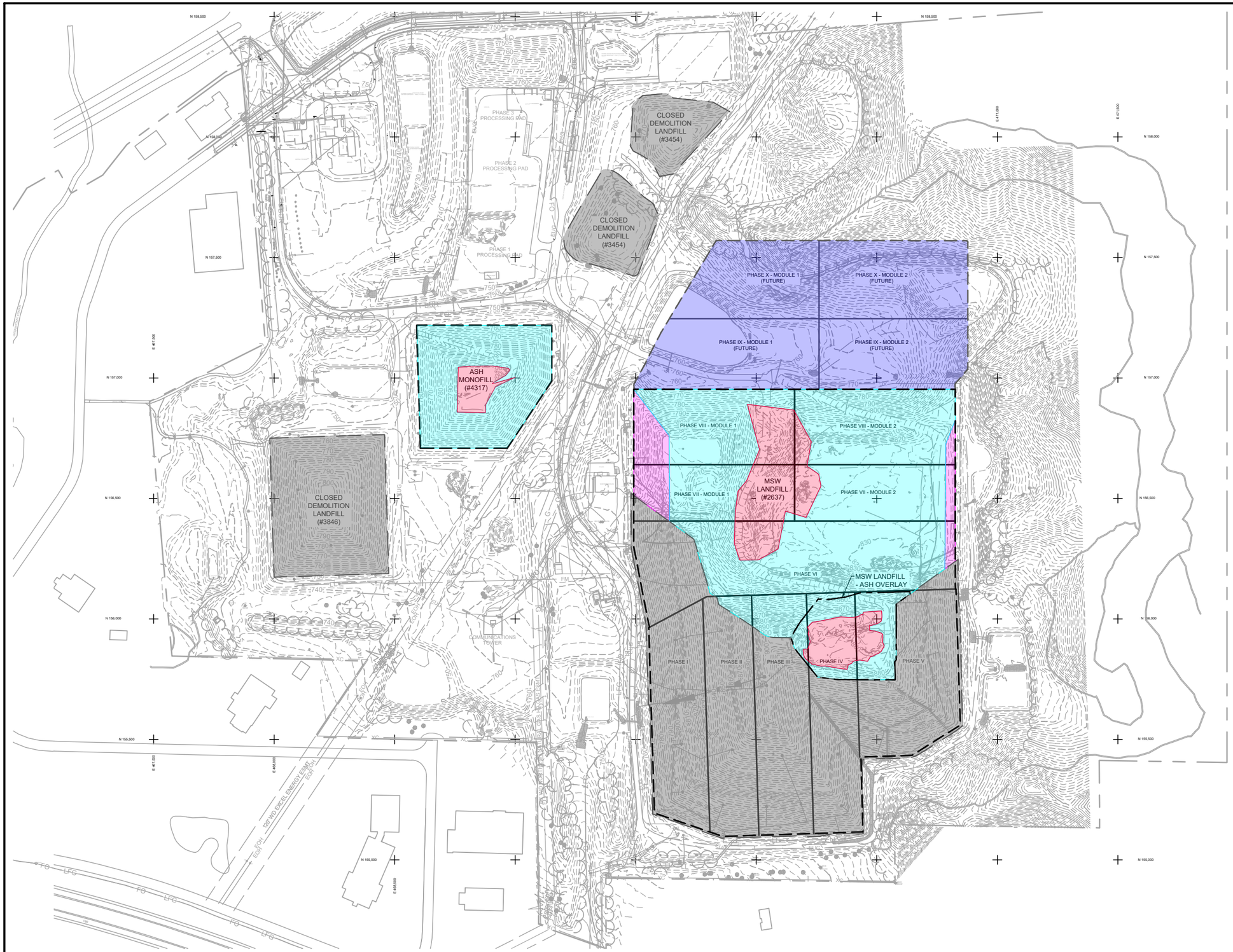
hbh

Appendix A

General

A-1 – Landfill Development Plan
A-2 – Environmental Monitoring Point Maps
A-3 – Random Load Inspections

A-1 – Landfill Development Plan



NOTES:

1. CONTOUR INTERVAL IS 2-FOOT.
2. EXISTING GRADE CONTOURS PRODUCED BY MOST RECENT SURVEY BY PARAGON ASSOCIATES ON DECEMBER 27, 2023.

LEGEND: FILLING STATUS AND WASTE GRADE

- ACTIVE, BELOW FINAL GRADE
- INACTIVE, BELOW FINAL GRADE (NO FINAL COVER)
- INACTIVE, AT FINAL GRADE (NO FINAL COVER)
- ABOVE FINAL GRADE - 5% OVERFILL (NO FINAL COVER)
- CLOSED, WITH FINAL COVER
- FUTURE DEVELOPMENT

LEGEND: GENERAL

- EXISTING GRADE - MAJOR CONTOUR
- EXISTING GRADE - MINOR CONTOUR
- WASTE LIMITS
- PHASE BOUNDARY
- EXISTING FINAL CLOSURE LIMITS
- WASTE LIMITS (FUTURE)
- PHASE BOUNDARY (FUTURE)
- APPROXIMATE PROPERTY LINE
- MSW LANDFILL - ASH OVERLAY LIMITS

N

200 0 200 400
scale 100 feet

SEH Project	LACSW 176666	Rev.#	Revision Issue Description	Date	Rev.#	Revision Issue Description	Date
Drawn By	NRP						
Designed By	TTR						
Checked By	DRH						

SEH
PHONE: 608.782.3161
329 JAY STREET, SUITE 301
LA CROSSE, WI 54601-4034
www.sehinc.com

PLANS PREPARED FOR:

LA CROSSE SOLID WASTE DEPT
3200 BERLIN DRIVE
LA CROSSE, WI 54601

LA CROSSE COUNTY LANDFILL
2023 ANNUAL REPORT

EXISTING CONDITIONS AND FILLING STATUS

1 of 1

Save: 4/10/2024 12:22 PM mpeterson Plot: 4/10/2024 12:27 PM X:\KOLL\LACSW\176666\5-final-dsgn\51-drawings\85-HeavyCiv\2023 ANNUAL REPORT\SHEET\SLA176666_EXISTING CONDITIONS.dwg

A-2 – Environmental Monitoring Point Maps

Operation and Maintenance Activities

Location	Inspection Schedule	Maintenance Schedule
G2E Building and Operation	Daily/Weekly	Check operation, oil level, equipment operation, LFG quality
Leachate Extraction Buildings Storage Tank	Monthly	Per Operational and Maintenance (O&M) Manual
Leachate Collection System Line Cleaning	Annually	Annually
Leachate Collection System Line Televising	Every 5 years after initial televising following construction	Every 5 years after initial televising following construction
Leachate Collection System Manholes	Monthly	Cleaned as needed
Secondary Containment Systems	Monthly	As necessary
Gas Extraction Wells	Monthly	Per Operational and Maintenance (O&M) Manual
Leachate Head Wells	Quarterly	Check conditon of protector pipe and surface seal
Leachate Extraction Building	Monthly	Clean as needed, maintain pumps and flow meters per manufacturer's recommendation
Leachate Extraction Wells	Daily	Confirm operation
Erosion/Settlement	Quarterly	Quarterly Inspect for erosion and condition of vegetation
Groundwater Monitoring Wells	Semi-annually	Check condition of protector pipe and surface seal
Chain Link Fence/Windblown Debris	Weekly	Clean-up adjacent properties with 72 hours of notification
Vermin, Rodent and Insect Control	As necessary	Refer to Wildlife Management Plan
Water and Drainage Control	Within 24-hrs of 1-inch rain event	Repair eroded and/or remove sediment within 7 days of the occurrence
Weed and Grass Control	As necessary	Mow at least twice annually
Odor Control	As necessary	As necessary, includes daily cover, no surface ponding, venting and operating flares
Random Waste Inspections	One/5,000 tons of solid waste, min. one inspection per month	
Dust Control	Sweep access road, provide water truck daily	
Settlement Hubs	Survey Annually	Survey Annually

Leachate

Monitoring Points			Parameters		Sample Interval
Leachate Head Wells			Leachate Elevation	Q	February, May, July & November
LHW-8A	LHW-9A	LHW-10A	Leachate Depth	Q	
LHW-1B	LHW-2B	LHW-3B	Leachate Elevation	M	See below
LHW-4B	LHW-5B	LHW-6B	Leachate Depth	M	
LHW-7B	LWH-8B	LHW-9B			
LHW-10B					
M= monthly - measure monthly and document as a condition of organic stability plan approval					
Leachate Tank			Leachate Volume Pumped	M	Monthly
			Field pH	SA	May & November
			Field Conductivity	SA	
			BOD5	SA	
			Total Alkalinity	SA	
			Total Chloride	SA	
			Total Suspended Solids	SA	
			Total Hardness	SA	
			Total Sulfate	SA	
			COD	SA	
			Total Sodium	SA	
			Total Cadmium	SA	
			Total Iron	SA	
			Total Lead	SA	
			Total Manganese	SA	
			Total Mercury	SA	
			Total Ammonia Nitrogen	SA	
			Total Kjeldahl Nitrogen	SA	
			VOCs	SA	
			SVOCs	A	May

Lysimeters

Monitoring Points		Parameters		Sample Interval
MH-7	L-3	Lysimeter Discharge (gallons)	M	See below
MH-7	L-3	Field pH	SA	May & November
		Field Conductivity	SA	
		Total Alkalinity	SA	
		Total Chloride	SA	
		Total Hardness	SA	
		COD	SA	
		Total Sodium	SA	
		Total Sulfate	SA	
		Total Kjeldahl Nitrogen	SA	
		VOCs	SA	

MH-7 and MH-8 are full basin lysimeters with discharge flows combined to one conveyance line at JMH-3, which discharges to one flow meter at FM-1. Combine discharge volume from MH-7 and MH-8 are reported under MH-7.

Sample ports or access have not constructed within MH-8; therefore, sample collection from MH-8 is not possible.

The lysimeter beneath Phase 3 not connected to the leachate/exfiltrate conveyance system at MH-9. L-3 is pumped manually as needed.

NOTES:

1. CONTOUR INTERVAL IS 2-FOOT.
2. EXISTING GRADE CONTOURS PRODUCED BY MOST RECENT SURVEY BY PARAGON ASSOCIATES ON DECEMBER 27, 2023.

LEGEND:

- WASTE LIMITS
- PHASE BOUNDARY
- EXISTING FINAL CLOSURE LIMITS
- WASTE LIMITS (FUTURE)
- PHASE BOUNDARY (FUTURE)
- APPROXIMATE PROPERTY LINE
- DESIGN MANAGEMENT ZONE (DMZ)
- VERTICAL EXPANSION LIMITS

EXISTING:

- MW-5B — GROUNDWATER MONITORING WELL / PRIVATE WELL
- MW-11, MW-11A, MW-11B, ABANDONED — ABANDONED GROUNDWATER MONITORING WELL
- SW-2 — SURFACE WATER SAMPLING LOCATION POINT
- LHW-9A — LEACHATE HEAD WELL RISER
- PB — PUMP BUILDING
- JMH-1 — LEAK DETECTION MANHOLE
- GV — GAS VENT
- GW-7 — GAS EXTRACTION WELL
- GMW-3 — GAS MONITORING WELL

FUTURE:

- LHW-9A — LEACHATE HEAD WELL RISER
- PB — PUMP BUILDING
- JMH-1 — LEAK DETECTION MANHOLE
- GW-18 — GAS EXTRACTION WELL
- GMW-6 — GAS MONITORING WELL

LFG Monitoring

Monitoring Points			Parameters		Sample Interval
Existing Gas Probes			% Methane	Q	February, May, July & November
GP-4S	GP-4D	GP-7	% Oxygen	Q	
GP-8R			Ambient Temperature	Q	
GMW-1	GMW-2	GMW-3	Barometric Pressure	Q	
GMW-4	GMW-5		Barometric Trend	Q	
			Ground Conditions	Q	
Proposed To Be Abandoned Gas Probes					
GP-3					
Proposed Gas Monitoring Wells			% Methane	Q	February, May, July & November
GMW-6	GMW-7	GMW-8	% Oxygen	Q	
GMW-9			Ambient Temperature	Q	
			Barometric Pressure	Q	
			Barometric Trend	Q	
			Ground Conditions	Q	
Existing LFG Extraction Wells			% Methane	M	Monthly
GW-1	GW-2	GW-3	% Oxygen	M	
GW-4	GW-5	GW-6	% Carbon Dioxide	M	
GW-7	GW-8	GW-9	Gas Flow Rate (CFM)	M	
GW-10	GW-11	GW-12	Well Head Pressure (in H2O)	M	
GW-13	GW-14	GW-15	Valve Opening (%)	M	
GW-16	GW-17	GW-19	Gas Temperature	M	
GW-20	GW-21	GW-22	Ambient Temperature	M	
GW-26	GW-27	GW-33	Barometric Pressure	M	
STOC-1	STOC-2	STOC-3	Barometric Trend	M	
STOC-4	STOC-5	STOC-6	Ground Conditions	M	
STOC-7	STOC-8	STOC-9	Liquid Level	A	
STOC-10	STOC-11	STOC-12			
STOC-13	STOC-14	STOC-15			
Phase IV CD					
Phase V CD					
Phase VI CD East					
Phase VII CD					
Proposed LFG Extraction Wells					
GW-18	GW-23	GW-24			
GW-25	GW-28	GW-29			
GW-30	GW-31	GW-32			
GW-34	GW-35	GW-36			
GW-37	GW-38	GW-39			
GW-40	GW-41	GW-42			
GW-43	GW-44	GW-45			
GW-46	GW-47	GW-48			
GW-49	GW-50	GW-51			
GW-52	GW-53	GW-54			
GW-55	GW-56	GW-57			
GW-58	GW-59				
(any others installed)					
LFG System Blower			% Methane	M	Monthly
			% Oxygen	M	
			% Carbon Dioxide	M	
			Gas Flow Rate (CFM)	M	
			Header Pressure (in H2O)	M	
Condensate Drip Leg			Field pH	SA	May & November
			Field Conductivity	SA	
			Field Temperature	SA	
			Total Alkalinity	SA	
			Total Chloride	SA	
			Total Suspended Solids	SA	
			BOD5	SA	
			Chloride	SA	
			Total Sulfate	SA	
			COD	SA	
			Total Sodium	SA	
			Total Ammonia Nitrogen	SA	
			VOCs	SA	

Groundwater Monitoring Wells/Piezometers

Well ID			Parameters		Sample Interval
MW-3	MW-3A	MW-5R	Groundwater Elevation	SA	May & November
MW-20	MW-20A	MW-24	Field pH	SA	
MW-24P	MW-30	MW-32	Field Conductivity	SA	
MW-32P	MW-33	MW-33P	Field Temperature	SA	
MW-38	MW-42P	MW-42R	Diss. Alkalinity	SA	
MW-54	MW-54A	MW-55	Diss. Chloride	SA	
MW-55B	MW-56	MW-56B	Diss. Hardness	SA	
MW-57	MW-57A	MW-58	Color, Odor, Turbidity	SA	
MW-58A	MW-64	MW-65	VOC	A	May
MW-65R	MW-75	MW-75A			
MW-76	MW-76A	MW-77			
MW-77A	MW-78	MW-78A			
MW-82	MW-82A	MW-83			
MW-83A	MW-117	MW-118			
MW-119	MW-120	MW-120A			
MW-121					
MW-8	MW-9		Groundwater Elevation	SA	May & November
			Field pH	SA	
			Field Conductivity	SA	
			Field Temperature	SA	
			Diss. Alkalinity	SA	
			Color, Odor, Turbidity	SA	
Subtitle D Wells			Groundwater Elevation	SA	May & November
MW-32	MW-33	MW-42R	Field pH	SA	
MW-118			Field Conductivity	SA	
			Field Temperature	SA	
			Diss. Alkalinity	SA	
			Diss. Chloride	SA	
			Diss. Hardness	SA	
			Color, Odor, Turbidity	SA	
			VOC	SA	
Proposed To Be Abandoned Wells					
MW-83	MW-83A	MW-65			

Private Wells

Well ID	Parameters		Sample Interval
Walz Well (Old)	Field pH	A	May
Walz Well (New)	Field Conductivity	A	
Splander Well	Field Temperature	A	
	VOC	A	

Surface Water Monitoring

Monitoring Points			Parameters		Sample Interval
SW-3			Surface Water Elevation	Q	February, May, July & November
			Field pH	Q	
			Field Conductivity	Q	
			Field Temperature	Q	
			Total Alkalinity	Q	
			Total Chloride	Q	
			Total Hardness	Q	
			Total Iron	Q	
			Color, Odor, Turbidity	Q	
SW-1	SW-2	SW-4	Field pH	DE	See below
			Field Conductivity	DE	
			BOD5	DE	

DE = discharge event - after each major precipitation event resulting in surface water discharge each location shall be inspected, sampled, and documented.

SEH Project	LACSW 176666
Drawn By	NRP
Designed By	TTR
Checked By	BLK

Rev.#	Revision Issue Description	Date

Rev.#	Revision Issue Description	Date

SEH
PHONE: 608.782.3161
329 JAY STREET, SUITE 301
LA CROSSE, WI 54601-4034
www.sehinc.com

PLANS PREPARED FOR:

LA CROSSE SOLID WASTE DEPT
3200 BERLIN DRIVE
LA CROSSE, WI 54601

LA CROSSE COUNTY LANDFILL
2023 ANNUAL REPORT

ENVIRONMENTAL MONITORING PLAN

Save: 4/8/2024 1:30 PM mpeterson Plot: 4/8/2024 1:31 PM X:\KOI\LLACSW\176666\5-final-dsgn\51-drawings\85-HeavyCiv\2023 ANNUAL REPORT\SHEETS\LA176666_ENVIRO MON PLAN.dwg

NOTES:

1. CONTOUR INTERVAL IS 2-FOOT.
2. EXISTING CONTOURS PRODUCED FROM MOST RECENT SITE SURVEY PERFORMED BY PARAGON ASSOCIATES ON DECEMBER 27, 2023.

LEGEND:

- 820 — MAJOR GROUND CONTOUR
- MINOR GROUND CONTOUR
- PHASE BOUNDARY
- APPROVED LIMITS OF WASTE
- EXISTING STOC PIPE

PHASE VIII - MODULE 1

PHASE VIII - MODULE 2

PHASE VII - MODULE 1

PHASE VII - MODULE 2

PHASE VI

STOC-15

STOC-14

STOC-13

STOC-12

STOC-11

STOC-10

STOC-9

STOC-8

STOC-7

STOC-6

STOC-5

STOC-4

STOC-3

STOC-2

STOC-1

STOC-15 ABANDONED

N

50 0 50 100

scale 25 feet

SEH	PROJECT NO. LACSW 176666 DATE: 02/13/2024	**EXISTING STOC LOCATION** GENERAL ASSISTANCE LA CROSSE COUNTY LANDFILL	FIG 1

Save: 4/11/2024 10:15 AM tromanko Plot: 4/11/2024 10:24 AM X:\KOL\LACSW\176666\5-final-dsgn\51-drawings\85-HeavyCiv\2023 ANNUAL REPORT\DESIGN_STOC LOCATIONS.dwg

A-3 – Random Load Inspections

La Crosse County Waste Inspection Reporting Form

Date: 1/18/2023 Time: 11:31 AM Inspected by: Jackie Davis

Hauler: Waste Management

Truck Number: ADV375023

WDNR License Number: 887804

Vehicle License Number: 531117

Origin of Load: Municipal Solid Waste

Type of Waste: Residential ☒ Industrial ☐ Commercial ☐

Type of Container: Roll- Off ☒ Packer ☐

Were any hazardous wastes found? Yes ☐ No ☒

Were any PCB wastes found? Yes ☐ No ☒

Were any recyclables found? Yes ☐ No ☒

Were any banned materials found? Yes ☐ No ☒ (Examples: white goods, oil filters, absorbents)

If so, what was the final disposition of the load? Click or tap here to enter text.

Comments: Click or tap here to enter text.

The DNR La Crosse office shall be notified in writing within 15 days of discovery of Hazardous or Toxic Wastes. The notice shall identify the unacceptable waste, the source, and the destination

Attachments to be included: Scale ticket (1) and photos (5)

Load Inspection Photo #1

Load Inspection #2

Load Inspection #3

Load Inspection #4

Load Inspection #5

La Crosse County,WI
LA CROSSE COUNTY
3240 Berlin Drive
La Crosse, WI 54601

** DUPLICATE TICKET reprinted by bharvey at 15:43:33 on 01/19/2023 **

010019
Waste Management
trusk@wm.com
415 Island Street
La Crosse WI 54603

Site 01
Ticket 00213402
Date In 01/18/23
Time In 11:26:30
Date Out 01/18/23
Time Out 11:45:25

Scale 12
Origin JACKSONCOUNTY,WI

Ref.
Grid

DESCRIPTION			
Scale 3 Gross Wt.	49460LB	Vehicle ADV375023	
Scale 2 Tare Wt.	39060LB	Roll-Off	
Net Wt.	10400LB	TON	5.20

Municipal Solid Wast @ $ 64.000 per TON	332.80
Fee	0.00
Net Charge Amount	332.80

Comment
Job/PO

Operating hours November 1st - March 31st
Monday - Friday 7:00am-4:00pm

Signature _____

La Crosse County Waste Inspection Reporting Form

Date: 2/23/2023 Time: 01:08PM Inspected by: Jackie Davis

Hauler: Hilltopper

Truck Number:7

WDNR License Number: 1152766

Vehicle License Number: MC12101

Origin of Load: Municipal Solid Waste

Type of Waste: Residential ☒ Industrial ☐ Commercial ☐

Type of Container: Roll- Off ☒ Packer ☐

Were any hazardous wastes found? Yes ☐ No ☒

Were any PCB wastes found? Yes ☐ No ☒

Were any recyclables found? Yes ☐ No ☒

Were any banned materials found? Yes ☐ No ☒ (Examples: white goods, oil filters, absorbents)

If so, what was the final disposition of the load? Click or tap here to enter text.

Comments: Click or tap here to enter text.

The DNR La Crosse office shall be notified in writing within 15 days of discovery of Hazardous or Toxic Wastes. The notice shall identify the unacceptable waste, the source, and the destination

Attachments to be included: Scale ticket (1) and photos (5)

Load Inspection Photo #1

Load Inspection #2

Load Inspection #3

Load Inspection #4

Load Inspection #5

La Crosse County,WI
LA CROSSE COUNTY
3240 Berlin Drive
La Crosse, WI 54601

** DUPLICATE TICKET reprinted by bharvey at 15:37:02 on 02/23/2023 **

010007
Hilltopper Refuse & Recycling

W6833 Industrial Blvd
Onalaska WI 54650

Site 01
Ticket 00216694
Date In 02/23/23
Time In 13:08:27
Date Out 02/23/23
Time Out 13:27:51

Scale 9
Origin LACROSSECOUNTY,WI

Ref.
Grid

DESCRIPTION			
Scale 3 Gross Wt.	33660LB	Vehicle HIL7	
Scale 2 Tare Wt.	30720LB	Roll-Off	
Net Wt.	2940LB	TON	1.47

Municipal Solid Wast @ $ 64.000 per TON	94.08
Fee	0.00
Net Charge Amount	94.08

Comment
Job/PO

Operating hours November 1st - March 31st
Monday - Friday 7:00am-4:00pm

Signature _____

La Crosse County Waste Inspection Reporting Form

Date3/15/2023 Time: 02:25 PM Inspected by: Jackie Davis

Hauler: Harter's Trash & Recycling

Truck Number: 08

WDNR License Number: 13521

Vehicle License Number: T56764Z

Origin of Load: Municipal Solid Waste

Type of Waste: Residential ☒ Industrial ☐ Commercial ☐

Type of Container: Roll- Off ☒ Packer ☐

Were any hazardous wastes found? Yes ☐ No ☒

Were any PCB wastes found? Yes ☐ No ☒

Were any recyclables found? Yes ☐ No ☒

Were any banned materials found? Yes ☐ No ☒ (Examples: white goods, oil filters, absorbents)

If so, what was the final disposition of the load? Click or tap here to enter text.

Comments: Click or tap here to enter text.

The DNR La Crosse office shall be notified in writing within 15 days of discovery of Hazardous or Toxic Wastes. The notice shall identify the unacceptable waste, the source, and the destination

Attachments to be included: Scale ticket (1) and photos (5)

Load Inspection Photo #1

Load Inspection #3

Load Inspection #2

Load Inspection #4

Load Inspection #5

Scale Ticket

La Crosse County Waste Inspection Reporting Form

Date: 4/10/2023 Time: 02:25 PM Inspected by: Jackie Davis

Hauler: Always Affordable

Truck Number: 2

WDNR License Number: 15094

Vehicle License Number: LB11800

Origin of Load: Municipal Solid Waste

Type of Waste: Residential ☒ Industrial ☐ Commercial ☐

Type of Container: Roll- Off ☒ Packer ☐

Were any hazardous wastes found? Yes ☐ No ☒

Were any PCB wastes found? Yes ☐ No ☒

Were any recyclables found? Yes ☐ No ☒

Were any banned materials found? Yes ☐ No ☒ (Examples: white goods, oil filters, absorbents)

If so, what was the final disposition of the load? Click or tap here to enter text.

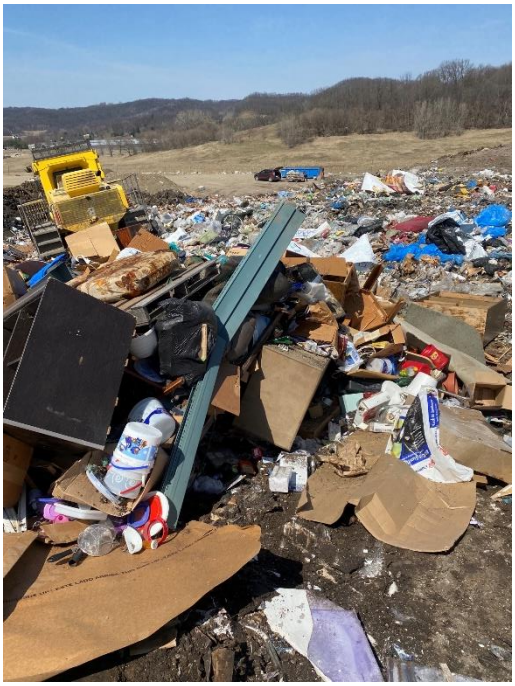
Comments: Click or tap here to enter text.

The DNR La Crosse office shall be notified in writing within 15 days of discovery of Hazardous or Toxic Wastes. The notice shall identify the unacceptable waste, the source, and the destination

Attachments to be included: Scale ticket (1) and photos (5)

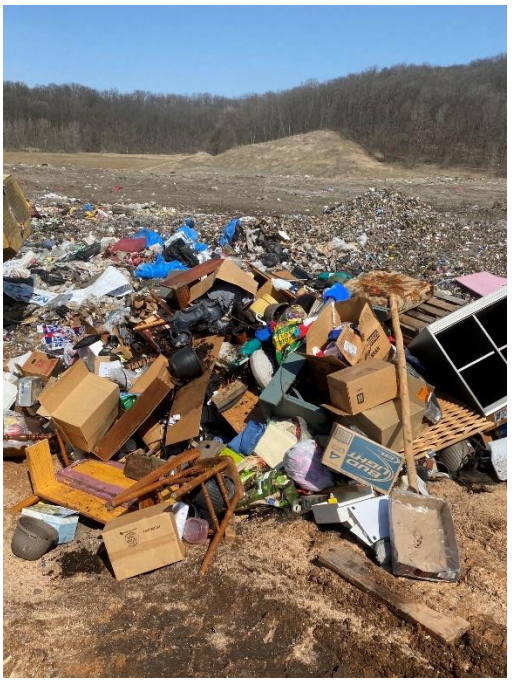
Load Inspection Photo #1

Load Inspection #3



Load Inspection #2

Load Inspection #4



Load Inspection #5

La Crosse County,WI
LA CROSSE COUNTY
3240 Berlin Drive
La Crosse, WI 54601

** DUPLICATE TICKET reprinted by bharvey at 10:30:34 on 04/17/2023 **

010002
Always Affordable LLC
Dan Erickson
N22233 Rogness Coulee Road
Ettrick WI 54627

Site 01
Ticket 00222106
Date In 04/10/23
Time In 13:28:14
Date Out 04/10/23
Time Out 13:37:26

Scale 12
Origin VILLAGEOFETTRICK

Ref.
Grid

DESCRIPTION			
Scale 3 Gross Wt.	37160LB	Vehicle ALW2	
Scale 2 Tare Wt.	33180LB	Roll-Off	
Net Wt.	3980LB	TON	1.99

Municipal Solid Wast @ $ 64.000 per TON	127.36
Fee	0.00
Net Charge Amount	127.36

Comment
Job/PO

Operating hours November 1st - March 31st
Monday - Friday 7:00am-4:00pm

Signature _____

Scale Ticket

La Crosse County Waste Inspection Reporting Form

Date: 5/10/2023 Time: 1:45 PM Inspected by: Jackie Davis

Hauler: Midwest Roll-Off

Truck Number: 4

WDNR License Number: 1514786

Vehicle License Number: PB9063

Origin of Load: Municipal Solid Waste

Type of Waste: Residential ☒ Industrial ☐ Commercial ☐

Type of Container: Roll- Off ☒ Packer ☐

Were any hazardous wastes found? Yes ☐ No ☒

Were any PCB wastes found? Yes ☐ No ☒

Were any recyclables found? Yes ☐ No ☒

Were any banned materials found? Yes ☐ No ☒ (Examples: white goods, oil filters, absorbents)

If so, what was the final disposition of the load? Click or tap here to enter text.

Comments: Click or tap here to enter text.

The DNR La Crosse office shall be notified in writing within 15 days of discovery of Hazardous or Toxic Wastes. The notice shall identify the unacceptable waste, the source, and the destination

Attachments to be included: Scale ticket (1) and photos (5)

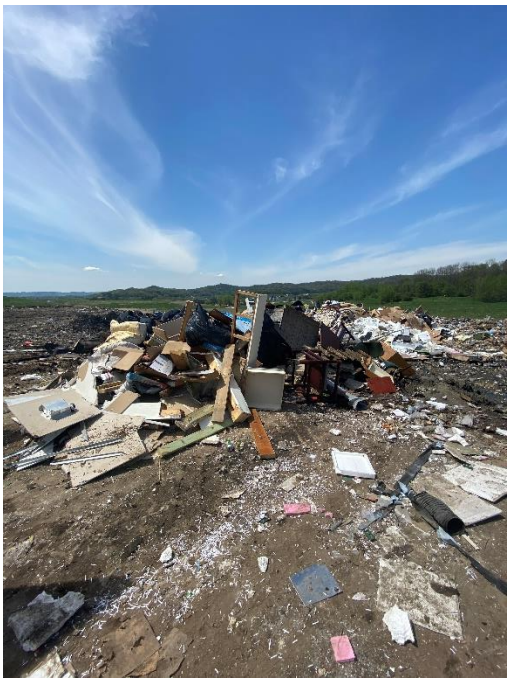
Load Inspection Photo #1

Load Inspection #3

Load Inspection #2

Load Inspection #4

Load Inspection #5



Scale Ticket

La Crosse County,WI
LA CROSSE COUNTY
3240 Berlin Drive
La Crosse, WI 54601

** DUPLICATE TICKET reprinted by bharvey at 15:43:33 on 05/10/2023 **

010012	Site 01
Midwest Roll-Off	Ticket 00228425
Theresa Weibel	Date In 05/10/23
N5059 Greens Coulee Road	Time In 13:44:37
Onalaska WI 54650	Date Out 05/10/23
	Time Out 13:59:08

Scale 12 Ref.
Origin LACROSSECOUNTY,WI Grid

DESCRIPTION			
Scale 3 Gross Wt.	43100LB	Vehicle MID4	
Scale 2 Tare Wt.	33920LB	Roll-Off	
Net Wt.	9180LB	TON	4.59

Municipal Solid Wast @ $ 64.000 per TON	293.76
Fee	0.00
Net Charge Amount	293.76

Comment
Job/PO

Operating hours April 1st - October 31st
Monday - Friday 6:30 AM - 4:30 PM

Signature _____

La Crosse County Waste Inspection Reporting Form

Date: 6/27/2023 Time: 1:45 PM Inspected by: Jackie Davis

Hauler: Two Guys and a Dumpster

Truck Number: 40

WDNR License Number: 15602

Vehicle License Number: HD34371

Origin of Load: Municipal Solid Waste

Type of Waste: Residential ☒ Industrial ☐ Commercial ☐

Type of Container: Roll- Off ☒ Packer ☐

Were any hazardous wastes found? Yes ☐ No ☒

Were any PCB wastes found? Yes ☐ No ☒

Were any recyclables found? Yes ☐ No ☒

Were any banned materials found? Yes ☐ No ☒ (Examples: white goods, oil filters, absorbents)

If so, what was the final disposition of the load? Click or tap here to enter text.

Comments: Click or tap here to enter text.

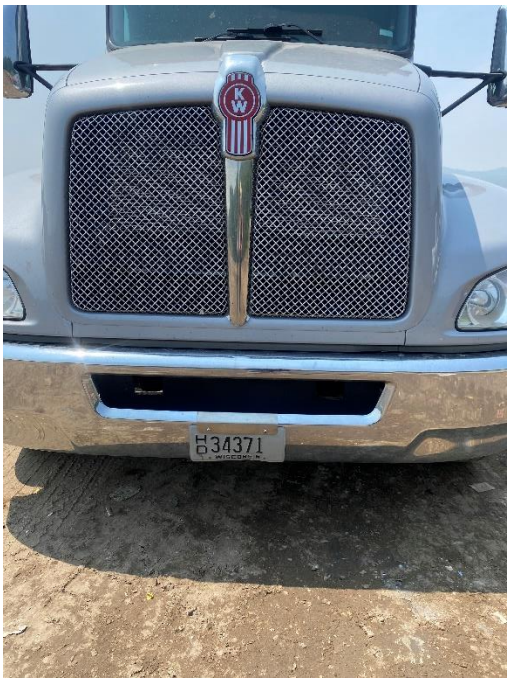
The DNR La Crosse office shall be notified in writing within 15 days of discovery of Hazardous or Toxic Wastes. The notice shall identify the unacceptable waste, the source, and the destination

Attachments to be included: Scale ticket (1) and photos (5)

Load Inspection Photo #1

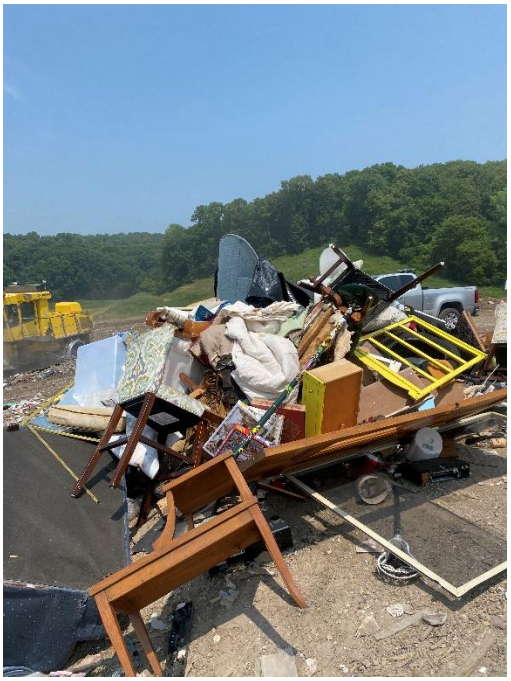
Load Inspection #3

Load Inspection #2



Load Inspection #4

Load Inspection #5



Scale Ticket

La Crosse County,WI
LA CROSSE COUNTY
3240 Berlin Drive
La Crosse, WI 54601

** DUPLICATE TICKET reprinted by bharvey at 14:06:02 on 06/27/2023 **

010018		Site	01
Two Guys & A Dumpster		Ticket	00238071
Justin Birdd		Date In	06/27/23
PO Box 890		Time In	13:44:52
West Salem WI 54669		Date Out	06/27/23
		Time Out	14:04:18
Scale 12		Ref.	
Origin CITYOFLACROSSE		Grid	

DESCRIPTION			
Scale 3 Gross Wt.	22120LB	Vehicle TWO40	
Scale 2 Tare Wt.	20460LB	Roll-Off	
Net Wt.	1660LB	TON	0.83

Municipal Solid Wast @ $ 64.000 per TON	53.12
Fee	0.00
Net Charge Amount	53.12

Comment
Job/PO

Operating hours April 1st - October 31st
Monday - Friday 6:30 AM - 4:30 PM

Signature _____

La Crosse County Waste Inspection Reporting Form

Date: 7/20/2023 Time: 9:50 AM Inspected by: Jackie Davis

Hauler: Richards Sanitation

Truck Number: 47

WDNR License Number: 13629

Vehicle License Number: YBR7374

Origin of Load: Municipal Solid Waste

Type of Waste: Residential ☒ Industrial ☐ Commercial ☐

Type of Container: Roll- Off ☒ Packer ☐

Were any hazardous wastes found? Yes ☐ No ☒

Were any PCB wastes found? Yes ☐ No ☒

Were any recyclables found? Yes ☐ No ☒

Were any banned materials found? Yes ☐ No ☒ (Examples: white goods, oil filters, absorbents)

If so, what was the final disposition of the load? Click or tap here to enter text.

Comments: Click or tap here to enter text.

The DNR La Crosse office shall be notified in writing within 15 days of discovery of Hazardous or Toxic Wastes. The notice shall identify the unacceptable waste, the source, and the destination

Attachments to be included: Scale ticket (1) and photos (5)

Load Inspection Photo #1

Load Inspection #3

Load Inspection #2

Load Inspection #4

Load Inspection #5

Scale Ticket

La Crosse County,WI
LA CROSSE COUNTY
3240 Berlin Drive
La Crosse, WI 54601

** DUPLICATE TICKET reprinted by bharvey at 14:13:24 on 07/25/2023 **

010014
Richard's Sanitation
Greg Skauge
PO Box 226
Caledonia MN 55921

Site 01
Ticket 00242182
Date In 07/20/23
Time In 09:37:49
Date Out 07/20/23
Time Out 09:50:06

Scale 10
Origin HOUSTONCOUNTY,MN

Ref.
Grid

DESCRIPTION			
Scale 3 Gross Wt.	35540LB	Vehicle RIC47	
Scale 2 Tare Wt.	30840LB	Roll-Off	
Net Wt.	4700LB	TON	2.35

Municipal Solid Wast @ $ 64.000 per TON	150.40
Fee	0.00
Net Charge Amount	150.40

Comment
Job/PO

Operating hours April 1st - October 31st
Monday - Friday 6:30 AM - 4:30 PM

Signature _____

La Crosse County Waste Inspection Reporting Form

Date: 8/16/2023 Time: 1:45 PM Inspected by: Jackie Davis

Hauler: Hilltopper Refuse & Recycling

Truck Number: 52

WDNR License Number: 13066

Vehicle License Number: NB5202

Origin of Load: Municipal Solid Waste

Type of Waste: Residential ☒ Industrial ☐ Commercial ☐

Type of Container: Roll- Off ☒ Packer ☐

Were any hazardous wastes found? Yes ☐ No ☒

Were any PCB wastes found? Yes ☐ No ☒

Were any recyclables found? Yes ☐ No ☒

Were any banned materials found? Yes ☐ No ☒ (Examples: white goods, oil filters, absorbents)

If so, what was the final disposition of the load? Click or tap here to enter text.

Comments: Click or tap here to enter text.

The DNR La Crosse office shall be notified in writing within 15 days of discovery of Hazardous or Toxic Wastes. The notice shall identify the unacceptable waste, the source, and the destination

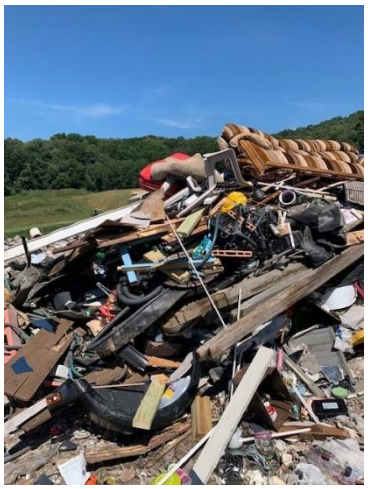
Attachments to be included: Scale ticket (1) and photos (5)

Load Inspection Photo #1

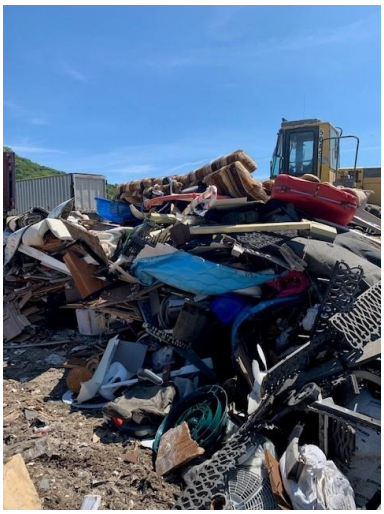
Load Inspection #2

Load Inspection #3

Load Inspection #4



Load Inspection #5



Scale Ticket

La Crosse County,WI
LA CROSSE COUNTY
3240 Berlin Drive
La Crosse, WI 54601

** DUPLICATE TICKET reprinted by bharvey at 11:33:25 on 09/20/2023 **

010007
Hilltopper Refuse & Recycling

W6833 Industrial Blvd
Onalaska WI 54650

Site 01
Ticket 00247250
Date In 08/16/23
Time In 12:45:42
Date Out 08/16/23
Time Out 12:55:07

Scale 10
Origin LACROSSECOUNTY,WI

Ref.
Grid

DESCRIPTION			
Scale 3 Gross Wt.	34980LB	Vehicle HIL52	
Scale 2 Tare Wt.	31940LB	Roll-Off	
Net Wt.	3040LB	TON	1.52

Municipal Solid Wast @ $ 64.000 per TON	97.28
Fee	0.00
Net Charge Amount	97.28

Comment
Job/PO

Operating hours April 1st - October 31st
Monday - Friday 6:30 AM - 4:30 PM

Signature _____

La Crosse County Waste Inspection Reporting Form

Date: 9/27/2023 Time: 2:50 PM Inspected by: Jackie Davis

Hauler: Harters Trash & Recycling

Truck Number: 15

WDNR License Number: 13521

Vehicle License Number: KB4738

Origin of Load: Municipal Solid Waste

Type of Waste: Residential ☒ Industrial ☐ Commercial ☐

Type of Container: Roll- Off ☐ Packer ☒

Were any hazardous wastes found? Yes ☐ No ☒

Were any PCB wastes found? Yes ☐ No ☒

Were any recyclables found? Yes ☐ No ☒

Were any banned materials found? Yes ☒ No ☐ (Examples: white goods, oil filters, absorbents)

If so, what was the final disposition of the load? 7 Mattresses

Comments: Mattresses were removed by the landfill operators

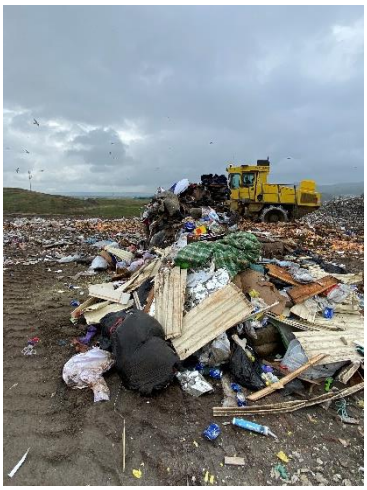
The DNR La Crosse office shall be notified in writing within 15 days of discovery of Hazardous or Toxic Wastes. The notice shall identify the unacceptable waste, the source, and the destination.

Attachments to be included: Scale ticket (1) and photos (5)

Load Inspection Photo #1

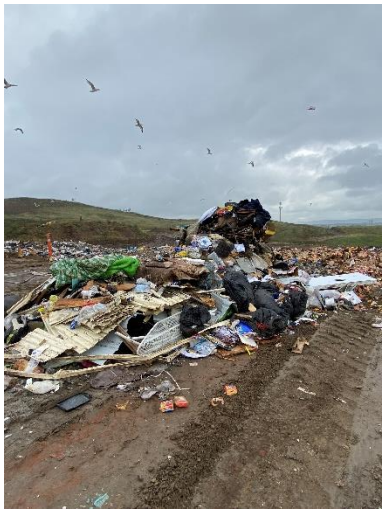
Load Inspection #2

Load Inspection #3



Load Inspection #4

Load Inspection #5



Scale Ticket

La Crosse County,WI
LA CROSSE COUNTY
3240 Berlin Drive
La Crosse, WI 54601

** DUPLICATE TICKET reprinted by bharvey at 12:08:32 on 10/04/2023 **

010005
Harter's Trash & Recycling

2850 Larson Street
La Crosse WI 54603

Site 01
Ticket 00254791
Date In 09/27/23
Time In 14:44:31
Date Out 09/27/23
Time Out 14:59:19

Scale 10

Ref.

DESCRIPTION			
Scale 3 Gross Wt.	38700LB	Vehicle HAR15	
Scale 2 Tare Wt.	30640LB	Roll-Off	
Net Wt.	8060LB	TON	4.03

Municipal Solid Wast @ $ 64.000 per TON	257.92
LF Unacceptable Matt @ $ 18.000 per EACH	126.00
Fee	0.00
Net Charge Amount	383.92

Comment
Job/PO

Operating hours April 1st - October 31st
Monday - Friday 6:30 AM - 4:30 PM

Signature _____

La Crosse County Waste Inspection Reporting Form

Date: 10/26/2023 Time: 1:27 PM Inspected by: Jackie Davis

Hauler: Harters Trash & Recycling

Truck Number: 11

WDNR License Number: 13521

Vehicle License Number: SB14616

Origin of Load: Municipal Solid Waste

Type of Waste: Residential ☒ Industrial ☐ Commercial ☐

Type of Container: Roll- Off ☐ Packer ☒

Were any hazardous wastes found? Yes ☐ No ☒

Were any PCB wastes found? Yes ☐ No ☒

Were any recyclables found? Yes ☐ No ☒

Were any banned materials found? Yes ☒ No ☒ (Examples: white goods, oil filters, absorbents)

If so, what was the final disposition of the load?

Comments: Click or tap here to enter text.

The DNR La Crosse office shall be notified in writing within 15 days of discovery of Hazardous or Toxic Wastes. The notice shall identify the unacceptable waste, the source, and the destination.

Attachments to be included: Scale ticket (1) and photos (5)

Load Inspection Photo #1

Load Inspection #2

Load Inspection #3

Load Inspection #4

Load Inspection #5

Scale Ticket

La Crosse County,WI
LA CROSSE COUNTY
3240 Berlin Drive
La Crosse, WI 54601

** DUPLICATE TICKET reprinted by bharvey at 08:40:33 on 12/01/2023 **

010005
Harter's Trash & Recycling

2850 Larson Street
La Crosse WI 54603

Site 01
Ticket 00260305
Date In 10/26/23
Time In 13:24:10
Date Out 10/26/23
Time Out 13:39:26

Scale 12
Origin LACROSSECOUNTY,WI

Ref.
Grid

DESCRIPTION			
Scale 3 Gross Wt.	53080LB	Vehicle HAR11	
Scale 2 Tare Wt.	37820LB	Roll-Off	
Net Wt.	15260LB	TON	7.63

Municipal Solid Wast @ $ 64.000 per TON	488.32
Fee	0.00
Net Charge Amount	488.32

Comment
Job/PO

Operating hours November 1st-March 31st
Monday - Friday 7:00 AM - 4:00 PM

Signature _____

La Crosse County Waste Inspection Reporting Form

Date: 11/21/2023 Time: 2:22 PM Inspected by: Jackie Davis

Hauler: Waste Management

Truck Number: 417958

WDNR License Number: 887804

Vehicle License Number: SB14957

Origin of Load: Municipal Solid Waste

Type of Waste: Residential ☒ Industrial ☐ Commercial ☐

Type of Container: Roll- Off ☒ Packer ☐

Were any hazardous wastes found? Yes ☐ No ☒

Were any PCB wastes found? Yes ☐ No ☒

Were any recyclables found? Yes ☐ No ☒

Were any banned materials found? Yes ☒ No ☐ (Examples: white goods, oil filters, absorbents)

If so, what was the final disposition of the load?

Comments: 1 Microwave was removed by landfill operator

The DNR La Crosse office shall be notified in writing within 15 days of discovery of Hazardous or Toxic Wastes. The notice shall identify the unacceptable waste, the source, and the destination.

Attachments to be included: Scale ticket (1) and photos (5)

Load Inspection Photo #1

Load Inspection #2

Load Inspection #3

Load Inspection #4

Load Inspection #5

Scale Ticket

La Crosse County,WI
LA CROSSE COUNTY
3240 Berlin Drive
La Crosse, WI 54601

** DUPLICATE TICKET reprinted by bharvey at 09:19:24 on 12/01/2023 **

010019		Site	01
Waste Management		Ticket	00264957
tgerke@wm.com		Date In	11/21/23
415 Island Street		Time In	14:05:11
La Crosse WI 54603		Date Out	11/21/23
		Time Out	14:14:48

Scale 12 Ref.

DESCRIPTION			
Scale 3 Gross Wt.	45140LB	Vehicle WAS417958	
Scale 2 Tare Wt.	35880LB	Roll-Off	
Net Wt.	9260LB	TON	4.63

Municipal Solid Wast @ $ 64.000 per TON	296.32
LF Unacceptable WG @ $ 25.000 per EACH	25.00
Fee	0.00
Net Charge Amount	321.32

Comment 1 MICROWAVE
Job/PO

Operating hours November 1st-March 31st
Monday - Friday 7:00 AM - 4:00 PM

Signature _____

La Crosse County Waste Inspection Reporting Form

Date: 12/28/2023 Time: 3:38 PM Inspected by: Jackie Davis

Hauler: Midwest Roll-Off

Truck Number: 5

WDNR License Number:

Vehicle License Number: QB17302

Origin of Load: Municipal Solid Waste

Type of Waste: Residential ☒ Industrial ☐ Commercial ☐

Type of Container: Roll- Off ☒ Packer ☐

Were any hazardous wastes found? Yes ☐ No ☒

Were any PCB wastes found? Yes ☐ No ☒

Were any recyclables found? Yes ☐ No ☒

Were any banned materials found? Yes ☒ No ☐ (Examples: white goods, oil filters, absorbents)

If so, what was the final disposition of the load?

Comments: 1 Mattress and 1 A/C unit was removed by landfill operator

The DNR La Crosse office shall be notified in writing within 15 days of discovery of Hazardous or Toxic Wastes. The notice shall identify the unacceptable waste, the source, and the destination.

Attachments to be included: Scale ticket (1) and photos (5)

Load Inspection Photo #1

Load Inspection #2

Load Inspection #3

Load Inspection #4

Load Inspection #5

Scale Ticket

La Crosse County,WI
LA CROSSE COUNTY
3240 Berlin Drive
La Crosse, WI 54601

** DUPLICATE TICKET reprinted by bharvey at 15:41:50 on 12/29/2023 **

010012
Midwest Roll-Off of LaX, LLC

PO Box 890
West Salem WI 54669

Site 01
Ticket 00270060
Date In 12/28/23
Time In 15:38:15
Date Out 12/28/23
Time Out 15:51:24

Scale 10

Ref.

DESCRIPTION			
Scale 3 Gross Wt.	37120LB	Vehicle MID5	
Scale 2 Tare Wt.	34400LB	Roll-Off	
Net Wt.	2720LB	TON	1.36

Municipal Solid Wast @ $ 64.000 per TON	87.04
LF Unacceptable Matt @ $ 18.000 per EACH	18.00
LF Unacceptable WG @ $ 25.000 per EACH	25.00
Fee	0.00
OutofArea	0.00
Net Charge Amount	130.04

Comment 1 AC
Job/PO

Operating hours November 1st-March 31st
Monday - Friday 7:00 AM - 4:00 PM

Signature _____

Appendix B

Operations

B-1 – Wind Speed Report

B-1 – Wind Speed Report

Fugitive Dust & Wind-Blown Litter Corrective Action Record

Date: _____

Name of Person Performing Inspection: _____

Reason for corrective action: _____

_____

Location: _____

_____

Description of Corrective Action: _____

_____

_____

_____

Identification of Party Responsible for Implementing Corrective Action: _____

_____

Appendix C

Special Waste & ADC

C-1 – Tonnage Reports
C-2 – ADC Testing Data

C-1 – Tonnage Reports

La Crosse County Landfill
2023 Tonnages
All Sites

						OTHER WASTE		MSW LANDFILL	ASH MONOFILL	COMBINED LANDFILLS	RECYCLING & OTHER
CATEGORY *	1	25	27	30	31	19	Varies		20		R
MONTH	DIRECT LANDFILL	CONST & DEMO	MSW-NON-PROFIT	LANDFILL-MRF	XCEL (LANDFILL)	XCEL BOTTOM ASH	SPECIAL WASTE	SUBTOTAL	XCEL WTE ASH **	TOTAL	TOTAL
JANUARY	2,975.74	1,679.11	41.15	0.00	1,764.90	180.81	1,208.08	7,849.79	826.62	8,676.41	172.49
FEBRUARY	2,110.74	1,213.06	32.85	0.00	1,647.34	157.75	1,228.48	6,390.22	625.97	7,016.19	159.05
MARCH	3,072.02	1,933.64	37.66	1.19	2,292.33	175.88	1,950.26	9,462.98	785.92	10,248.90	364.56
APRIL	3,056.50	2,371.76	28.79	0.00	1,803.90	142.79	3,731.20	11,134.94	921.79	12,056.73	1,016.36
MAY	3,698.77	2,519.15	64.94	0.00	1,850.70	228.94	2,094.16	10,456.66	905.19	11,361.85	1,560.37
JUNE	3,463.52	2,346.92	57.81	0.00	2,097.50	204.36	2,706.16	10,876.27	1,000.22	11,876.49	1,524.05
JULY	2,715.79	2,274.21	57.49	0.00	1,575.40	223.96	1,155.85	8,002.70	855.89	8,858.59	979.52
AUGUST	3,464.73	2,962.09	57.15	0.00	2,418.60	223.68	1,282.33	10,408.58	834.19	11,242.77	1,909.42
SEPTEMBER	2,914.23	2,610.55	87.41	0.98	1,888.50	241.44	1,443.81	9,186.92	712.13	9,899.05	1,823.48
OCTOBER	3,532.73	3,011.45	54.68	5.21	2,146.10	227.26	1,920.68	10,898.11	909.75	11,807.86	1,685.00
NOVEMBER	3,735.98	2,306.72	53.77	11.19	2,120.50	230.43	1,339.25	9,797.84	721.30	10,519.14	919.84
DECEMBER	2,558.57	1,493.42	40.27	0.00	1,486.90	191.93	2,519.55	8,290.64	847.14	9,137.78	363.06
Actual YTD Tonnage	37,299.32	26,722.08	613.97	18.57	23,092.67	2,429.23	22,579.81	**112,755.65**	**9,946.11**	**122,701.76**	**12,477.20**
% MSW Landfill	33.08%	23.70%	0.54%	0.19%	20.48%	2.15%	20.03%	**100%**			
% Combined Landfills	30.40%	21.78%	0.50%	0.15%	18.82%	1.98%	18.40%	91.89%	8.11%	**100%**	
YTD Cubic Yards	55948.98	40083.12	920.96	27.86	34639.01	1797.63			7,360.12	**Cover Ratio 9.75:1 or 10.26%**	

This includes WDNR Code 28 May 102.48, June 1.50

Numbers in Red

This number includes 5.5 tons for each clean mobile home disposed in landfill.

La Crosse County Landfill
2023 Special Waste Tonnages

CATEGORY	2	5	6	6	6	6	6	19	19	19	21	23	
MONTH	COAL/ WOOD ASH	POTW SLUDGES	ASBESTOS (FRIABLE)	ASBESTOS (NON-FRIABLE)	ASBESTOS TOTAL	SLUDGE	MISC. SPECIAL WASTE	CATCH BASIN-DC	OTHER APPROVED DC	STREET SWEEPINGS-DC	HV IND WASTE-DC	PETROLEUM IMPACTED SOIL-BIO	SPECIAL WASTE TOTAL
JANUARY	9.01	0.00	0.82	0.07	0.89	61.36	342.53	72.29	25.65	0.00	686.63	9.72	1,208.08
FEBRUARY	10.58	0.00	12.56	8.56	21.12	55.79	99.77	33.95	39.33	65.01	901.49	1.44	1,228.48
MARCH	6.14	0.00	5.19	11.43	16.62	75.35	114.39	83.52	12.88	855.36	784.77	1.23	1,950.26
APRIL	6.92	0.00	0.76	7.86	8.62	41.16	1,119.43	44.62	829.95	776.68	890.08	13.74	3,731.20
MAY	7.07	0.00	2.22	6.51	8.73	68.45	975.52	35.21	43.51	151.15	803.70	0.82	2,094.16
JUNE	5.40	228.28	3.86	35.69	39.55	49.09	1,062.65	114.60	29.76	320.61	833.83	22.39	2,706.16
JULY	13.70	0.00	0.39	27.53	27.92	45.45	228.70	34.90	66.73	143.82	594.63	0.00	1,155.85
AUGUST	3.13	0.00	0.26	2.67	2.93	63.04	117.61	3.38	0.00	36.41	898.81	157.02	1,282.33
SEPTEMBER	4.44	0.00	2.28	0.07	2.35	57.31	315.42	134.92	38.42	148.81	708.93	33.21	1,443.81
OCTOBER	4.43	210.18	0.53	6.10	6.63	75.89	154.07	2.22	25.53	355.34	1,054.93	31.46	1,920.68
NOVEMBER	12.27	5.96	9.88	6.04	15.92	50.95	175.82	11.06	53.82	14.64	854.32	144.49	1,339.25
DECEMBER	8.46	0.00	2.42	5.76	8.18	57.19	118.66	141.41	33.52	123.29	908.11	1,120.73	2,519.55
Actual YTD Tonnage	91.55	444.42	41.17	118.29	159.46	701.03	4,824.57	712.08	1,199.10	2,991.12	9,920.23	1,536.25	**22,579.81**
% Special Waste	0.41%	1.97%	0.18%	0.52%		3.10%	21.37%	3.15%	5.31%	13.25%	43.93%	6.80%	**100%**
		% Asbestos	26%	74%	100%								
YTD Cubic Yards	67.75	666.63	61.76	177.44		1,051.55	7,236.86	526.94	887.33	2,213.43	7,340.97	1,136.83	

DC=Daily Cover

C-2 – ADC Testing Data

DAVY LABORATORIES
A Division of Davy Engineering Co., Inc.
115 6th Street South
La Crosse, WI 54601
(608) 782-3130
www.davyinc.com

LABORATORY ANALYSIS REPORT

A-1 Advanced Pumping Service
Attn: Jim Shurson
N4314 County Rd. M
West Salem, WI 54669

Date: February 16, 2024
Client No: 09582

Sample No: 24B0173-01
Sample Site: Carwash

Sample Collected: 06-Feb-24 11:00

Sample Received: 07-Feb-24 11:27

Parameter	Result	Units	LOD	LOQ/RL	Dilution	Prepared	Analyzed	Method	Qualifier
Subcontracted									
Free Liquid	**0.0**	**%**			1	15-Feb-24 00:00	15-Feb-24 00:00	EPA 9095B	A-01
Particle Size Distribution (Sieve)	**19**	**% by Volume**			1	09-Feb-24 00:00	09-Feb-24 00:00	ASTM D421-85	Sub-5

Submitted by:
Davy Laboratories

Jennifer M. Buchholz
Jennifer M. Buchholz, Laboratory Director

The laboratory analyses reported were determined in accordance with methods from approved authoritative sources. Approved authoritative sources are defined and listed within the respective state certification codes. The results are representative of the samples only; conditions can be expected to vary at different times and under different sampling conditions. This report may not be reproduced, except in full, without the written approval of the laboratory.
WI Certification 632021390 and WI DATCP 105-216, MN NELAC Certification 055-999-151, IA Certification 304. Revision #3 - 7/29/2019

DAVY LABORATORIES
A Division of Davy Engineering Co., Inc.
115 6th Street South
La Crosse, WI 54601
(608) 782-3130
www.davyinc.com

LABORATORY ANALYSIS REPORT

A-1 Advanced Pumping Service
Attn: Jim Shurson
N4314 County Rd. M
West Salem, WI 54669

Date: February 16, 2024
Client No: 09582

Notes and Definitions

Z-01	0.0
Sub-5	Wisconsin Laboratory Certification No. 157066030
A-01	Subcontract Lab #445023150
LOD	Limit of Detection, adjusted for the dilution factor
LOQ/RL	Limit of Quantitation/Reporting Limit, adjusted for the dilution factor

Total metals are equivalent to total recoverable metals.

Cooler Information

Temperature °C	
Received on Ice	No
Required COC Information completed	No
Sample labels match COC	No
All samples received in the appropriate Containers	Yes
All samples received with sufficient volume	Yes
All samples received with sufficient holding time	Yes
All sample bottles received with H2SO4 were pH <2	No
All sample bottles received with HNO3 were pH <2	No
All sample bottles received with HCl were pH <2	No
All sample bottles received with NaOH were pH >12	No
All sample bottles for cyanide confirmed Sulfide absent	No
All sample bottles for cyanide confirmed Residual Cl absent	No

Preservation of VOC samples checked by the analyst.
Preservation of FOG samples checked by the analyst.
Residual Chlorine absent checked by the analyst unless noted above.

Case Narrative

DAVY LABORATORIES
A Division of Davy Engineering Co., Inc.
115 6th Street South
La Crosse, WI 54601
(608) 782-3130
www.davyinc.com

Division of Davy Engineering Co.

LABORATORY ANALYSIS REPORT

A-1 Advanced Pumping Service
Attn: Jim Shurson
N4314 County Rd. M
West Salem, WI 54669

Date: February 16, 2024
Client No: 09582

La Crosse County Landfill
Application for Special Waste Disposal

PART A: WASTE GENERATOR INFORMATION

1. Generator Name A1 Advanced Pumping Service, Inc
2. Generator Mailing Address N4314 County Road M West Salem, WI 54669
3. Facility Address (site of waste generation) Multiple
4. Generator City See attached
5. Generator State/Zip
6. General Contact Person Jordan Jones
   Phone # and email 608-784-1888 info@a1advacnedpumping.com
7. Technical Contact Person Jim Shurson
   Phone # and email 608-769-2182 info@a1advacnedpumping.com

---

1. Name of Waste Car Wash Grit
2. Process Generating Waste Car Washes
3. Waste Color
4. Waste Odor _____None _____Mild _____ Strong
5. Physical State _____None _____Liquid _____ Semi-Solid Other_____
6. Free Liquids _____Yes _____% _____No
7. pH____ <2____ 2-4.0____ 4.1-7.0____ 7.1-10.0____ 10.1-12.5____ >12.5____ N/A____
8. Flash Point (cc) _____ None _____<140F _____140-199F _____>200
9. a. Waste Composition:

	Range
_____	_____ to _____%
_____	_____ to _____%
_____	_____ to _____%
_____	_____ to _____%
_____	_____ to _____%

b. Does Waste Contain	Yes	No	Do Not Know
PCBS	____	____	_____
Cyanide	____	____	_____
Sulfide	____	____	_____
Phenol	____	____	_____
Chlorinated Solvents	____	____	_____
Aromatic Solvents	____	____	_____

10. Analytical Laboratory Davy Labs, La Crosse, WI
11. Date of Analysis _____

PART B: CAR WASH CATCH BASIS SLUDGE INFORMATION

Industrial discharge _____Yes _____No
Tank interiors x Yes _____No
Vehicle types 2001, 2016, 2018, 2019, 2023 Kenworth T800 Straight Pumping Trucks (5 Total)

PART C: TRANSPORTATION INFORMATION

1. Method of delivery _____Drum _____Paper Truck _____Dump Truck
   _____Roll-off x Other Vacuum Truck

2. Waste Quantity/Units _____

   ☐ One-time Disposal
   ☑ On-going Disposal

   Frequency _____

3. Hauler Name and Address A1 Advanced Pumping Service, Inc
   N4314 County Road M
   West Salem, WI 54669

4. Bill to Name and Address Same as above

To be Completed by La Crosse County Solid Waste

Waste Acceptance/Rejection		
1) Does waste meet requirements of the current Plan of Operations?	☒ Yes	☐ No
2) Is waste acceptable upon approval by WDNR?	☐ Yes	☐ No
3) Plan of Operations Approval Required? (Attach copy if yes)	☐ Yes	☐ No
4) Waste accepted for disposal?	☒ Yes	☐ No
5) Signature/Title Bryce Gerke / Department Technician		

PART D: GENERATOR CERTIFICATION

By signing this application, the generator certifies:

1. This waste is not "Hazardous Waste" as defined by USEPA and/or state regulations. BCG 2-5-24
2. This waste ☐ does ☑ does not contain regulated radioactive materials and ☐ does ☑ does not contain regulated concentrations of PCBs (polychlorinated biphenyls). If "does" is checked, specify level here _____.
3. This waste does not contain regulated infectious waste as defined by NR526.05 Wisconsin Administrative Code.
4. The waste does not contain regulated concentrations of the following pesticides and herbicides: Chlordane, Endrin, Heptachlor (and its epoxide), Lindane, Methoxychlor, Toxaphene, 2, 4, 5-TP (Silvex).
5. The waste does not contain halogenated compounds such as: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, ortho-dichlorobenzene, dichlorodifluoromethane, 1,1,2-trichloro-1, 2,2-trifluoroethane, trichlorofluoromethane, 1,1-dichloroethylene, and 1,2-dichlorethylene at greater than 1% (10,000 ppm) total solvent concentration. This listing includes any combination of the above named halogenated compounds where the total concentration or the sum of the concentration of the individual compounds exceed 1% or 10,000 ppm on a weights to weight basis.
6. This sheet and the attachments contain true and accurate description of the waste material. All relevant information regarding known or suspected hazards in the possession of the Generator has been disclosed.
7. The analytical data presented herein or attached hereto were derived from testing a representative sample taken in accordance with 40 CFR 261.20 © or equivalent rules.
8. If any changes occur in the character of the waste, the Generator shall notify the County prior to providing the waste to the County.
9. Signature James P K
10. Title President | CEO
11. Name (Type or print) James Shurson
12. Date 12/20/23

DAVY LABORATORIES
A Division of Davy Engineering Co., Inc.
115 6th Street South
La Crosse, WI 54601
(608) 782-3130
www.davyinc.com

Division of Davy Engineering Co.

LABORATORY ANALYSIS REPORT

A-1 Advanced Pumping Service
Attn: Jim Shurson
N4314 County Rd. M
West Salem, WI 54669

Date: January 11, 2024
Client No: 09582

Sample No: 23L0644-01
Sample Site: Carwash

Date Collected: 26-Dec-23 11:00

Date Received: 26-Dec-23 12:58

Parameter	Result Wet Wt.	Result Dry Wt.	Units	LOD Wet Wt.	LOQ/RL Wet Wt.	Dilution	Prepared	Analyzed	Method	Qualifier
Laboratory Results										
Particle Size Distribution (Sieve)	**21**	**21**	**% by Volume**			1	02-Jan-24 00:00	02-Jan-24 00:00	ASTM D421-85	Sub-5
Subcontracted										
Free Liquid	**<0.0100**	**0.00**	**%**	0.0100		1	28-Dec-23 00:00	28-Dec-23 00:00	EPA 9095B	A-01

Submitted by:

Davy Laboratories

The laboratory analyses reported were determined in accordance with methods from approved authoritative sources. Approved authoritative sources are defined and listed within the respective state certification codes. The results are representative of the samples only; conditions can be expected to vary at different times and under different sampling conditions. This report may not be reproduced, except in full, without the written approval of the laboratory. WI Certification 632021390, WI DATCP 105-216, MN NELAC Certification 055-999-151, IA Certification 304. Revision #3 8/28/2019

Jennifer M. Buchholz
Jennifer M. Buchholz, Laboratory Director

DAVY LABORATORIES
A Division of Davy Engineering Co., Inc.
115 6th Street South
La Crosse, WI 54601
(608) 782-3130
www.davyinc.com

Division of Davy Engineering Co.

LABORATORY ANALYSIS REPORT

A-1 Advanced Pumping Service
Attn: Jim Shurson
N4314 County Rd. M
West Salem, WI 54669

Date: January 11, 2024
Client No: 09582

Notes and Definitions

Z-01	0.00
Sub-5	Wisconsin Laboratory Certification No. 157066030
A-01	Subcontract Lab #445023150
LOD	Limit of Detection, adjusted for the dilution factor
LOQ/RL	Limit of Quantitation/Reporting Limit, adjusted for the dilution factor

Total metals are equivalent to total recoverable metals.

Cooler Information

Temperature °C	
Received on Ice	No
Required COC information completed	No
Sample labels match COC	No
All samples received in the appropriate containers	Yes
All samples received with sufficient volume	Yes
All samples received with sufficient holding time	Yes
All sample bottles received with H_2SO_4 were pH <2	No
All sample bottles received with HNO_3 were pH <2	No
All sample bottles received with HCl were pH <2	No
All sample bottles received with NaOH were pH >12	No
All sample bottles for cyanide confirmed Sulfide absent	No
All sample bottles for cyanide confirmed Residual Cl absent	No
Preservation of VOC samples checked by the analyst.	

Case Narrative

DAVY LABORATORIES
A Division of Davy Engineering Co., Inc.
115 6th Street South
La Crosse, WI 54601
(608) 782-3130
www.davyinc.com

Division of Davy Engineering Co.

LABORATORY ANALYSIS REPORT

A-1 Advanced Pumping Service
Attn: Jim Shurson
N4314 County Rd. M
West Salem, WI 54669

Date: January 11, 2024
Client No: 09582

Preservation of FOG samples checked by the analyst. Residual Chlorine absent checked by the analyst unless noted above.	

La Crosse County Landfill
Application for Special Waste Disposal

PART A: WASTE GENERATOR INFORMATION

1. Generator Name Alliant Castings
2. Generator Mailing Address 1200 W 3rd St., Winona, MN 55987
3. Facility Address (site of waste generation) Same as Above
4. Generator City Winona
5. Generator State/Zip 55987
6. General Contact Person Casey Iossi
   Phone # and email 507-452-2932 Casey.iossi@alliantcastings.com
7. Technical Contact Person Casey Iossi
   Phone # and email 507-452-2932 Casey.iossi@alliantcastings.com

---

1. Name of Waste Foundry Dust
2. Process Generating Waste Air Recovery
3. Waste Color Gray
4. Waste Odor x None ____ Mild ____ Strong
5. Physical State ____ None ____ Liquid x Semi-Solid Other____
6. Free Liquids ____ Yes ____ % x No
7. pH____ <2____ 2-4.0____ 4.1-7.0____ 7.1-10.0____ 10.1-12.5____ >12.5____ N/A____
8. Flash Point (cc) _____ None _____<140F _____140-199F _____>200
9. a. Waste Composition:

	Range
See Attached	_____ to _____%
	_____ to _____%
	_____ to _____%
	_____ to _____%
	_____ to _____%

b. Does Waste Contain

	Yes	No	Do Not Know
PCBS	____	X	_____
Cyanide	____	X	_____
Sulfide	____	X	_____
Phenol	____	X	_____
Chlorinated Solvents	____	X	_____
Aromatic Solvents	____	X	_____

10. Analytical Laboratory Pace Analytical
11. Date of Analysis 10-15-21

PART B: CAR WASH CATCH BASIS SLUDGE INFORMATION

Industrial discharge _____Yes X No
Tank interiors _____Yes X No
Vehicle types _____

PART C: TRANSPORTATION INFORMATION

1. Method of delivery _____Drum _____Paper Truck x Dump Truck
   _____Roll-off _____Other _____

2. Waste Quantity/Units _____

   ☐ One-time Disposal
   ☑ On-going Disposal

   Frequency 2X per Month

3. Hauler Name and Address Pozanc Trucking
   157 Mankato Ave
   Winona, MN 55987

4. Bill to Name and Address _____

To be Completed by La Crosse County Solid Waste

Waste Acceptance/Rejection
1) Does waste meet requirements of the current Plan of Operations? ☐ Yes ☐ No
2) Is waste acceptable upon approval by WDNR? ☐ Yes ☐ No
3) Plan of Operations Approval Required? (Attach copy if yes) ☐ Yes ☐ No
4) Waste accepted for disposal? ☐ Yes ☐ No
5) Signature/Title _____/_____

PART D: GENERATOR CERTIFICATION

By signing this application, the generator certifies:

1. This waste is not "Hazardous Waste" as defined by USEPA and/or state regulations.
2. This waste ☐ does ☑ does not contain regulated radioactive materials and ☐ does ☑ does not contain regulated concentrations of PCBs (polychlorinated biphenyls). If "does" is checked, specify level here _____.
3. This waste does not contain regulated infectious waste as defined by NR526.05 Wisconsin Administrative Code.
4. The waste does not contain regulated concentrations of the following pesticides and herbicides: Chlordane, Endrin, Heptachlor (and its epoxide), Lindane, Methoxychlor, Toxaphene, 2, 4, 5-TP (Silvex).
5. The waste does not contain halogenated compounds such as: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, ortho-dichlorobenzene, dichlorodifluoromethane, 1,1,2-trichloro-1, 2,2-trifluoroethane, trichlorofluoromethane, 1,1-dichloroethylene, and 1,2-dichlorethylene at greater than 1% (10,000 ppm) total solvent concentration. This listing includes any combination of the above named halogenated compounds where the total concentration or the sum of the concentration of the individual compounds exceed 1% or 10,000 ppm on a weights to weight basis.
6. This sheet and the attachments contain true and accurate description of the waste material. All relevant information regarding known or suspected hazards in the possession of the Generator has been disclosed.
7. The analytical data presented herein or attached hereto were derived from testing a representative sample taken in accordance with 40 CFR 261.20 © or equivalent rules.
8. If any changes occur in the character of the waste, the Generator shall notify the County prior to providing the waste to the County.
9. Signature _____
10. Title Plant Manager
11. Name (Type or print) Casey Iossi
12. Date 10-28-21

La Crosse County Landfill
Application for Special Waste Disposal

PART A: WASTE GENERATOR INFORMATION

1. Generator Name Alliant Castings
2. Generator Mailing Address 1200 W 3rd St., Winona, MN 55987
3. Facility Address (site of waste generation) Same as Above
4. Generator City Winona
5. Generator State/Zip 55987
6. General Contact Person Casey Iossi
   Phone # and email 507-452-2932 Casey.iossi@alliantcastings.com
7. Technical Contact Person Casey Iossi
   Phone # and email 507-452-2932 Casey.iossi@alliantcastings.com

---

1. Name of Waste Slag
2. Process Generating Waste Skimming unusable materials off the top of liquid iron bath
3. Waste Color Gray / White
4. Waste Odor x None ____ Mild ____ Strong
5. Physical State ____ None ____ Liquid ____ Semi-Solid Other Solid
6. Free Liquids ____ Yes ____ % x No
7. pH____ <2____ 2-4.0____ 4.1-7.0____ 7.1-10.0____ 10.1-12.5____ >12.5____ N/A____
8. Flash Point (cc) ____ None ____ <140F ____ 140-199F ____ >200
9. a. Waste Composition:

	Range
See Attached	____ to ____ %
	____ to ____ %
	____ to ____ %
	____ to ____ %
	____ to ____ %

b. Does Waste Contain	Yes	No	Do Not Know
PCBS	____	X	____
Cyanide	____	X	____
Sulfide	____	X	____
Phenol	____	X	____
Chlorinated Solvents	____	X	____
Aromatic Solvents	____	X	____

10. Analytical Laboratory Pace Analytical
11. Date of Analysis 10-15-21

PART B: CAR WASH CATCH BASIS SLUDGE INFORMATION

Industrial discharge _____Yes X No
Tank interiors _____Yes X No
Vehicle types _____

PART C: TRANSPORTATION INFORMATION

1. Method of delivery _____Drum _____Paper Truck x Dump Truck
   _____Roll-off _____Other _____

2. Waste Quantity/Units _____

   ☐ One-time Disposal
   ☑ On-going Disposal

   Frequency 2X per Month

3. Hauler Name and Address Miller Scrap
   1 Recycling Ln
   Winona, MN 55987

4. Bill to Name and Address _____

To be Completed by La Crosse County Solid Waste

Waste Acceptance/Rejection
1) Does waste meet requirements of the current Plan of Operations? ☐ Yes ☐ No
2) Is waste acceptable upon approval by WDNR? ☐ Yes ☐ No
3) Plan of Operations Approval Required? (Attach copy if yes) ☐ Yes ☐ No
4) Waste accepted for disposal? ☐ Yes ☐ No
5) Signature/Title _____/_____

PART D: GENERATOR CERTIFICATION

By signing this application, the generator certifies:

1. This waste is not "Hazardous Waste" as defined by USEPA and/or state regulations.
2. This waste ☐ does ☑ does not contain regulated radioactive materials and ☐ does ☑ does not contain regulated concentrations of PCBs (polychlorinated biphenyls). If "does" is checked, specify level here _____.
3. This waste does not contain regulated infectious waste as defined by NR526.05 Wisconsin Administrative Code.
4. The waste does not contain regulated concentrations of the following pesticides and herbicides: Chlordane, Endrin, Heptachlor (and its epoxide), Lindane, Methoxychlor, Toxaphene, 2, 4, 5-TP (Silvex).
5. The waste does not contain halogenated compounds such as: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, ortho-dichlorobenzene, dichlorodifluoromethane, 1,1,2-trichloro-1, 2,2-trifluoroethane, trichlorofluoromethane, 1,1-dichloroethylene, and 1,2-dichlorethylene at greater than 1% (10,000 ppm) total solvent concentration. This listing includes any combination of the above named halogenated compounds where the total concentration or the sum of the concentration of the individual compounds exceed 1% or 10,000 ppm on a weights to weight basis.
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8. If any changes occur in the character of the waste, the Generator shall notify the County prior to providing the waste to the County.
9. Signature _____
10. Title Plant Manager
11. Name (Type or print) Casey Iossi
12. Date 10-28-21

La Crosse County Landfill
Application for Special Waste Disposal

PART A: WASTE GENERATOR INFORMATION

1. Generator Name Alliant Castings
2. Generator Mailing Address 1200 W 3rd St., Winona, MN 55987
3. Facility Address (site of waste generation) Same as Above
4. Generator City Winona
5. Generator State/Zip 55987
6. General Contact Person Casey Iossi
   Phone # and email 507-452-2932 Casey.iossi@alliantcastings.com
7. Technical Contact Person Casey Iossi
   Phone # and email 507-452-2932 Casey.iossi@alliantcastings.com

---

1. Name of Waste Green Sand
2. Process Generating Waste Water/ Clay Bonding for Sand Molds
3. Waste Color Black
4. Waste Odor x None ____ Mild ____ Strong
5. Physical State ____ None ____ Liquid ____ Semi-Solid Other Sand
6. Free Liquids ____ Yes ____ % x No
7. pH____ <2____ 2-4.0____ 4.1-7.0____ 7.1-10.0____ 10.1-12.5____ >12.5____ N/A____
8. Flash Point (cc) _____ None _____<140F _____140-199F _____>200
9. a. Waste Composition:

	Range
See Attached	_____ to _____%
	_____ to _____%
	_____ to _____%
	_____ to _____%
	_____ to _____%

b. Does Waste Contain

	Yes	No	Do Not Know
PCBS	____	X	_____
Cyanide	____	X	_____
Sulfide	____	X	_____
Phenol	____	X	_____
Chlorinated Solvents	____	X	_____
Aromatic Solvents	____	X	_____

10. Analytical Laboratory Pace Analytical
11. Date of Analysis 10-15-21

PART B: CAR WASH CATCH BASIS SLUDGE INFORMATION

Industrial discharge _____Yes X No
Tank interiors _____Yes X No
Vehicle types _____

PART C: TRANSPORTATION INFORMATION

1. Method of delivery _____Drum _____Paper Truck x Dump Truck
   _____Roll-off _____Other _____

2. Waste Quantity/Units _____

   ☐ One-time Disposal
   ☑ On-going Disposal

   Frequency 2X per Month

3. Hauler Name and Address Miller Scrap
   1 Recycling Ln
   Winona, MN 55987

4. Bill to Name and Address _____

To be Completed by La Crosse County Solid Waste

Waste Acceptance/Rejection
1) Does waste meet requirements of the current Plan of Operations? ☐ Yes ☐ No
2) Is waste acceptable upon approval by WDNR? ☐ Yes ☐ No
3) Plan of Operations Approval Required? (Attach copy if yes) ☐ Yes ☐ No
4) Waste accepted for disposal? ☐ Yes ☐ No
5) Signature/Title _____/_____

PART D: GENERATOR CERTIFICATION

By signing this application, the generator certifies:

1. This waste is not "Hazardous Waste" as defined by USEPA and/or state regulations.

2. This waste ☐ does ☑ does not contain regulated radioactive materials and ☐ does ☑ does not contain regulated concentrations of PCBs (polychlorinated biphenyls). If "does" is checked, specify level here _____.

3. This waste does not contain regulated infectious waste as defined by NR526.05 Wisconsin Administrative Code.

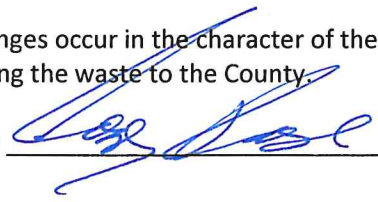
4. The waste does not contain regulated concentrations of the following pesticides and herbicides: Chlordane, Endrin, Heptachlor (and its epoxide), Lindane, Methoxychlor, Toxaphene, 2, 4, 5-TP (Silvex).

5. The waste does not contain halogenated compounds such as: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, ortho-dichlorobenzene, dichlorodifluoromethane, 1,1,2-trichloro-1, 2,2-trifluoroethane, trichlorofluoromethane, 1,1-dichloroethylene, and 1,2-dichlorethylene at greater than 1% (10,000 ppm) total solvent concentration. This listing includes any combination of the above named halogenated compounds where the total concentration or the sum of the concentration of the individual compounds exceed 1% or 10,000 ppm on a weights to weight basis.

6. This sheet and the attachments contain true and accurate description of the waste material. All relevant information regarding known or suspected hazards in the possession of the Generator has been disclosed.

7. The analytical data presented herein or attached hereto were derived from testing a representative sample taken in accordance with 40 CFR 261.20 © or equivalent rules.

8. If any changes occur in the character of the waste, the Generator shall notify the County prior to providing the waste to the County.

9. Signature 

10. Title Plant Manager

11. Name (Type or print) Casey Iossi

12. Date 10-28-21

La Crosse County Landfill
Application for Special Waste Disposal

PART A: WASTE GENERATOR INFORMATION

1. Generator Name Alliant Castings
2. Generator Mailing Address 1200 W 3rd St., Winona, MN 55987
3. Facility Address (site of waste generation) Same as Above
4. Generator City Winona
5. Generator State/Zip 55987
6. General Contact Person Casey Iossi
   Phone # and email 507-452-2932 Casey.iossi@alliantcastings.com
7. Technical Contact Person Casey Iossi
   Phone # and email 507-452-2932 Casey.iossi@alliantcastings.com

---

1. Name of Waste No- Bake Sand
2. Process Generating Waste Chemically Bonded Sand for molds
3. Waste Color Black/Gray/ Brown
4. Waste Odor x None ____ Mild ____ Strong
5. Physical State ____ None ____ Liquid ____ Semi-Solid Other Sand
6. Free Liquids ____ Yes ____ % x No
7. pH____ <2____ 2-4.0____ 4.1-7.0____ 7.1-10.0____ 10.1-12.5____ >12.5____ N/A____
8. Flash Point (cc) ____ None ____ <140F ____ 140-199F ____ >200
9. a. Waste Composition:

	Range
See Attached	____ to ____ %
	____ to ____ %
	____ to ____ %
	____ to ____ %
	____ to ____ %

b. Does Waste Contain

	Yes	No	Do Not Know
PCBS		X	
Cyanide		X	
Sulfide		X	
Phenol		X	
Chlorinated Solvents		X	
Aromatic Solvents		X	

10. Analytical Laboratory Pace Analytical
11. Date of Analysis 10-15-21

PART B: CAR WASH CATCH BASIS SLUDGE INFORMATION

Industrial discharge _____Yes X No
Tank interiors _____Yes X No
Vehicle types _____

PART C: TRANSPORTATION INFORMATION

1. Method of delivery _____Drum _____Paper Truck x Dump Truck
   _____Roll-off _____Other _____

2. Waste Quantity/Units _____

   ☐ One-time Disposal
   ☑ On-going Disposal

   Frequency 2X per week

3. Hauler Name and Address Pozanc Trucking
   157 Mankato Ave
   Winona, MN 55987

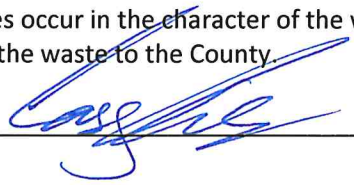
4. Bill to Name and Address _____

To be Completed by La Crosse County Solid Waste

Waste Acceptance/Rejection
1) Does waste meet requirements of the current Plan of Operations? ☐ Yes ☐ No
2) Is waste acceptable upon approval by WDNR? ☐ Yes ☐ No
3) Plan of Operations Approval Required? (Attach copy if yes) ☐ Yes ☐ No
4) Waste accepted for disposal? ☐ Yes ☐ No
5) Signature/Title _____/_____

PART D: GENERATOR CERTIFICATION

By signing this application, the generator certifies:

1. This waste is not "Hazardous Waste" as defined by USEPA and/or state regulations.
2. This waste ☐ does ☑ does not contain regulated radioactive materials and ☐ does ☑ does not contain regulated concentrations of PCBs (polychlorinated biphenyls). If "does" is checked, specify level here _____.
3. This waste does not contain regulated infectious waste as defined by NR526.05 Wisconsin Administrative Code.
4. The waste does not contain regulated concentrations of the following pesticides and herbicides: Chlordane, Endrin, Heptachlor (and its epoxide), Lindane, Methoxychlor, Toxaphene, 2, 4, 5-TP (Silvex).
5. The waste does not contain halogenated compounds such as: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, ortho-dichlorobenzene, dichlorodifluoromethane, 1,1,2-trichloro-1, 2,2-trifluoroethane, trichlorofluoromethane, 1,1-dichloroethylene, and 1,2-dichlorethylene at greater than 1% (10,000 ppm) total solvent concentration. This listing includes any combination of the above named halogenated compounds where the total concentration or the sum of the concentration of the individual compounds exceed 1% or 10,000 ppm on a weights to weight basis.
6. This sheet and the attachments contain true and accurate description of the waste material. All relevant information regarding known or suspected hazards in the possession of the Generator has been disclosed.
7. The analytical data presented herein or attached hereto were derived from testing a representative sample taken in accordance with 40 CFR 261.20 © or equivalent rules.
8. If any changes occur in the character of the waste, the Generator shall notify the County prior to providing the waste to the County.
9. Signature 
10. Title Plant Manager
11. Name (Type or print) Casey Iossi
12. Date 10-28-21

US COMPLIANCE

October 20, 2021

Casey Lossi
Alliant Castings
1200 West 3rd Street
Winona, MN, 55987

RE: Interpretation of Laboratory Analysis Results

Dear Casey,

Enclosed are the laboratory results for the Toxicity Characteristic Leaching Procedure (TCLP) analysis recently performed on the No Bake Sand, Green Sand, Dust, and Slag at Alliant Castings.

Pace Analytical Services, Inc. analyzed the extract from the representative samples of your waste streams for the following parameters: RCRA Metals.

RCRA Metal	EPA Regulatory Threshold (mg/L)
Arsenic	5.0
Barium	100.0
Cadmium	1.0
Chromium	5.0
Lead	5.0
Mercury	0.2
Selenium	1.0
Silver	5.0

According to the lab results, all samples are non-hazardous and can be sent with your current industrial waste hauler as non-hazardous waste/hazardous and must be disposed of properly by a permitted disposal facility. If this waste stream changes in any way, the new waste stream would need to be reanalyzed.

Sincerely,

Logan Wikstrom
Environmental Specialist

Enclosures

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

October 19, 2021

Logan Wikstrom
US Compliance
520 3rd St Suite 100
Excelsior, MN 55331

RE: Project: Alliant Castings-Wikstrom
Pace Project No.: 10581961

Dear Logan Wikstrom:

Enclosed are the analytical results for sample(s) received by the laboratory on October 06, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:
- Pace Analytical Services - Minneapolis

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

Sincerely,

Bryan Nguyen

Bryan Nguyen
bryan.nguyen@pacelabs.com
612-656-2286
Project Manager

Enclosures

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

Pace Analytical Services, LLC
1700 Elm Street
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: Alliant Castings-Wikstrom
Pace Project No.: 10581961

Pace Analytical Services, LLC - Minneapolis MN
1700 Elm Street SE, Minneapolis, MN 55414
1800 Elm Street SE, Minneapolis, MN 55414--Satellite Air Lab
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
Colorado Certification #: MN00064
Connecticut Certification #: PH-0256
EPA Region 8 Tribal Water Systems+Wyoming DW Certification #: via MN 027-053-137
Florida Certification #: E87605*
Georgia Certification #: 959
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 #: AI-03086*
Louisiana DW Certification #: MN00064
Maine Certification #: MN00064*
Maryland Certification #: 322
Michigan Certification #: 9909
Minnesota Certification #: 027-053-137*
Minnesota Dept of Ag Approval: via MN 027-053-137
Minnesota Petrofund Registration #: 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 (1700) #: CL101
Ohio VAP Certification (1800) #: CL110*
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
Wisconsin Certification #: 999407970
Wyoming UST Certification #: via A2LA 2926.01
USDA Permit #: P330-19-00208
*Please Note: Applicable air certifications are denoted with an asterisk (*).

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(612)607-1700

SAMPLE SUMMARY

Project: Alliant Castings-Wikstrom
Pace Project No.: 10581961

Lab ID	Sample ID	Matrix	Date Collected	Date Received
10581961001	Slag Container #716734	Solid	09/14/21 11:00	10/06/21 10:00
10581961002	Foundry Desk Container #716716	Solid	09/14/21 11:00	10/06/21 10:00
10581961003	Green Sand Container #716735	Solid	09/14/21 11:00	10/06/21 10:00
10581961004	No Bake Radaim Container #7167	Solid	09/14/21 11:00	10/06/21 10:00

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SAMPLE ANALYTE COUNT

Project: Alliant Castings-Wikstrom
Pace Project No.: 10581961

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
10581961001	**Slag Container #716734**	EPA 6010D	DM	7	PASI-M
		EPA 7470A	LMW	1	PASI-M
10581961002	**Foundry Desk Container #716716**	EPA 6010D	DM	7	PASI-M
		EPA 7470A	LMW	1	PASI-M
10581961003	**Green Sand Container #716735**	EPA 6010D	DM	7	PASI-M
		EPA 7470A	LMW	1	PASI-M
10581961004	**No Bake Radaim Container #7167**	EPA 6010D	DM	7	PASI-M
		EPA 7470A	LMW	1	PASI-M

PASI-M = Pace Analytical Services - Minneapolis

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ANALYTICAL RESULTS

Project: Alliant Castings-Wikstrom
Pace Project No.: 10581961

Sample: Slag Container #716734 **Lab ID: 10581961001** Collected: 09/14/21 11:00 Received: 10/06/21 10:00 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
6010D MET ICP, TCLP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Leachate Method/Date: EPA 1311; 10/14/21 13:47 Initial pH: 6.3; Final pH: 1.55 Pace Analytical Services - Minneapolis							
Arsenic	ND	mg/L	0.50	1	10/15/21 11:28	10/18/21 15:20	7440-38-2	
Barium	ND	mg/L	1.0	1	10/15/21 11:28	10/18/21 15:20	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/15/21 11:28	10/18/21 15:20	7440-43-9	
Chromium	**1.3**	mg/L	0.50	1	10/15/21 11:28	10/18/21 15:20	7440-47-3	
Lead	ND	mg/L	0.50	1	10/15/21 11:28	10/18/21 15:20	7439-92-1	
Selenium	ND	mg/L	0.10	1	10/15/21 11:28	10/18/21 15:20	7782-49-2	
Silver	ND	mg/L	0.10	1	10/15/21 11:28	10/18/21 15:20	7440-22-4	
7470A Mercury, TCLP	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Leachate Method/Date: EPA 1311; 10/14/21 13:47 Initial pH: 6.3; Final pH: 1.55 Pace Analytical Services - Minneapolis							
Mercury	ND	ug/L	0.60	1	10/15/21 11:56	10/15/21 14:56	7439-97-6	H2

Sample: Foundry Desk Container #716716 **Lab ID: 10581961002** Collected: 09/14/21 11:00 Received: 10/06/21 10:00 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
6010D MET ICP, TCLP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Leachate Method/Date: EPA 1311; 10/14/21 13:47 Initial pH: 9.47; Final pH: 1.86 Pace Analytical Services - Minneapolis							
Arsenic	ND	mg/L	0.50	1	10/15/21 11:28	10/18/21 15:21	7440-38-2	
Barium	ND	mg/L	1.0	1	10/15/21 11:28	10/18/21 15:21	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/15/21 11:28	10/18/21 15:21	7440-43-9	
Chromium	ND	mg/L	0.50	1	10/15/21 11:28	10/18/21 15:21	7440-47-3	
Lead	ND	mg/L	0.50	1	10/15/21 11:28	10/18/21 15:21	7439-92-1	
Selenium	ND	mg/L	0.10	1	10/15/21 11:28	10/18/21 15:21	7782-49-2	
Silver	ND	mg/L	0.10	1	10/15/21 11:28	10/18/21 15:21	7440-22-4	
7470A Mercury, TCLP	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Leachate Method/Date: EPA 1311; 10/14/21 13:47 Initial pH: 9.47; Final pH: 1.86 Pace Analytical Services - Minneapolis							
Mercury	ND	ug/L	0.60	1	10/15/21 11:56	10/15/21 14:58	7439-97-6	H2

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Alliant Castings-Wikstrom
Pace Project No.: 10581961

Sample: Green Sand Container #716735 **Lab ID: 10581961003** Collected: 09/14/21 11:00 Received: 10/06/21 10:00 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
6010D MET ICP, TCLP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Leachate Method/Date: EPA 1311; 10/14/21 13:47 Initial pH: 9.58; Final pH: 1.67 Pace Analytical Services - Minneapolis							
Arsenic	ND	mg/L	0.50	1	10/15/21 11:28	10/18/21 15:23	7440-38-2	
Barium	ND	mg/L	1.0	1	10/15/21 11:28	10/18/21 15:23	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/15/21 11:28	10/18/21 15:23	7440-43-9	
Chromium	ND	mg/L	0.50	1	10/15/21 11:28	10/18/21 15:23	7440-47-3	
Lead	ND	mg/L	0.50	1	10/15/21 11:28	10/18/21 15:23	7439-92-1	
Selenium	ND	mg/L	0.10	1	10/15/21 11:28	10/18/21 15:23	7782-49-2	
Silver	ND	mg/L	0.10	1	10/15/21 11:28	10/18/21 15:23	7440-22-4	
7470A Mercury, TCLP	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Leachate Method/Date: EPA 1311; 10/14/21 13:47 Initial pH: 9.58; Final pH: 1.67 Pace Analytical Services - Minneapolis							
Mercury	ND	ug/L	0.60	1	10/15/21 11:56	10/15/21 15:02	7439-97-6	H2

Sample: No Bake Radaim Container #7167 **Lab ID: 10581961004** Collected: 09/14/21 11:00 Received: 10/06/21 10:00 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
6010D MET ICP, TCLP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Leachate Method/Date: EPA 1311; 10/14/21 13:47 Initial pH: 7.49; Final pH: 1.54 Pace Analytical Services - Minneapolis							
Arsenic	ND	mg/L	0.50	1	10/15/21 11:28	10/18/21 15:25	7440-38-2	
Barium	ND	mg/L	1.0	1	10/15/21 11:28	10/18/21 15:25	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/15/21 11:28	10/18/21 15:25	7440-43-9	
Chromium	ND	mg/L	0.50	1	10/15/21 11:28	10/18/21 15:25	7440-47-3	
Lead	ND	mg/L	0.50	1	10/15/21 11:28	10/18/21 15:25	7439-92-1	
Selenium	ND	mg/L	0.10	1	10/15/21 11:28	10/18/21 15:25	7782-49-2	
Silver	ND	mg/L	0.10	1	10/15/21 11:28	10/18/21 15:25	7440-22-4	
7470A Mercury, TCLP	Analytical Method: EPA 7470A Preparation Method: EPA 7470A Leachate Method/Date: EPA 1311; 10/14/21 13:47 Initial pH: 7.49; Final pH: 1.54 Pace Analytical Services - Minneapolis							
Mercury	ND	ug/L	0.60	1	10/15/21 11:56	10/15/21 15:04	7439-97-6	H2

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QUALITY CONTROL DATA

Project: Alliant Castings-Wikstrom
Pace Project No.: 10581961

QC Batch: 777182
QC Batch Method: EPA 7470A
Analysis Method: EPA 7470A
Analysis Description: 7470A Mercury TCLP
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10581961001, 10581961002, 10581961003, 10581961004

METHOD BLANK: 4139876 Matrix: Water
Associated Lab Samples: 10581961001, 10581961002, 10581961003, 10581961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.60	10/15/21 14:46	

METHOD BLANK: 4138030 Matrix: Water
Associated Lab Samples: 10581961001, 10581961002, 10581961003, 10581961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.60	10/15/21 15:11	

METHOD BLANK: 4138872 Matrix: Water
Associated Lab Samples: 10581961001, 10581961002, 10581961003, 10581961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	ND	0.60	10/15/21 15:12	

LABORATORY CONTROL SAMPLE: 4139877

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	15	16.4	110	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4139878 4139879

Parameter	Units	10581973001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	ND	15	15	16.0	15.6	107	104	80-120	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Alliant Castings-Wikstrom
Pace Project No.: 10581961

QC Batch: 777179
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D TCLP
Laboratory: Pace Analytical Services - Minneapolis
Associated Lab Samples: 10581961001, 10581961002, 10581961003, 10581961004

METHOD BLANK: 4139864 Matrix: Water
Associated Lab Samples: 10581961001, 10581961002, 10581961003, 10581961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.50	10/18/21 14:49	
Barium	mg/L	ND	1.0	10/18/21 14:49	
Cadmium	mg/L	ND	0.050	10/18/21 14:49	
Chromium	mg/L	ND	0.50	10/18/21 14:49	
Lead	mg/L	ND	0.50	10/18/21 14:49	
Selenium	mg/L	ND	0.10	10/18/21 14:49	
Silver	mg/L	ND	0.10	10/18/21 14:49	

METHOD BLANK: 4138030 Matrix: Water
Associated Lab Samples: 10581961001, 10581961002, 10581961003, 10581961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.50	10/18/21 14:51	
Barium	mg/L	ND	1.0	10/18/21 14:51	
Cadmium	mg/L	ND	0.050	10/18/21 14:51	
Chromium	mg/L	ND	0.50	10/18/21 14:51	
Lead	mg/L	ND	0.50	10/18/21 14:51	
Selenium	mg/L	ND	0.10	10/18/21 14:51	
Silver	mg/L	ND	0.10	10/18/21 14:51	

METHOD BLANK: 4138872 Matrix: Water
Associated Lab Samples: 10581961001, 10581961002, 10581961003, 10581961004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.50	10/18/21 14:52	
Barium	mg/L	ND	1.0	10/18/21 14:52	
Cadmium	mg/L	ND	0.050	10/18/21 14:52	
Chromium	mg/L	ND	0.50	10/18/21 14:52	
Lead	mg/L	ND	0.50	10/18/21 14:52	
Selenium	mg/L	ND	0.10	10/18/21 14:52	
Silver	mg/L	ND	0.10	10/18/21 14:52	

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QUALITY CONTROL DATA

Project: Alliant Castings-Wikstrom
Pace Project No.: 10581961

LABORATORY CONTROL SAMPLE: 4139865

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	5	5.2	103	80-120	
Barium	mg/L	5	5.1	102	80-120	
Cadmium	mg/L	5	5.0	101	80-120	
Chromium	mg/L	5	4.9	97	80-120	
Lead	mg/L	5	4.8	97	80-120	
Selenium	mg/L	5	5.5	109	80-120	
Silver	mg/L	2.5	2.6	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 4139866 4139867

Parameter	Units	10580361007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	5	5	5.3	5.0	105	100	75-125	5	20	
Barium	mg/L	2150 ug/L	5	5	7.4	7.0	105	98	75-125	5	20	
Cadmium	mg/L	ND	5	5	5.3	5.0	104	99	75-125	5	20	
Chromium	mg/L	ND	5	5	5.0	4.8	101	96	75-125	5	20	
Lead	mg/L	ND	5	5	5.1	4.9	100	95	75-125	5	20	
Selenium	mg/L	ND	5	5	5.5	5.3	111	105	75-125	5	20	
Silver	mg/L	ND	2.5	2.5	2.6	2.4	103	97	75-125	5	20	

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QUALIFIERS

Project: Alliant Castings-Wikstrom
Pace Project No.: 10581961

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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

TNI - The NELAC Institute.

WORKORDER QUALIFIERS

WO: 10581961

[1] The samples were received outside of required temperature range. Analysis was completed upon client approval.

ANALYTE QUALIFIERS

H2 Extraction or preparation was conducted outside of the recognized method holding time.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Alliant Castings-Wikstrom
Pace Project No.: 10581961

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
10581961001	**Slag Container #716734**	EPA 3010A	777179	EPA 6010D	777622
10581961002	**Foundry Desk Container #716716**	EPA 3010A	777179	EPA 6010D	777622
10581961003	**Green Sand Container #716735**	EPA 3010A	777179	EPA 6010D	777622
10581961004	**No Bake Radaim Container #7167**	EPA 3010A	777179	EPA 6010D	777622
10581961001	**Slag Container #716734**	EPA 7470A	777182	EPA 7470A	777295
10581961002	**Foundry Desk Container #716716**	EPA 7470A	777182	EPA 7470A	777295
10581961003	**Green Sand Container #716735**	EPA 7470A	777182	EPA 7470A	777295
10581961004	**No Bake Radaim Container #7167**	EPA 7470A	777182	EPA 7470A	777295

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at https://info.pacelabs.com/hubfs/pas-standard-terms.pdf.

Page : 1 Of 1

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: US Compliance	Report To: Wikstrom, Logan	Attention:
Address: 520 3rd St Suite 100	Copy To:	Company Name:
Excelsior, MN 55331		Address:
Email: lwikstrom@uscompliance.com	Purchase Order #:	Pace Quote:
Phone: (952)567-5678 Fax:	Project Name: Alliant Castings-Wikstrom	Pace Project Manager: bryan.nguyen@pacelabs.com,
Requested Due Date:	Project #:	Pace Profile #: 35366, Line 8

Regulatory Agency

State / Location

WO# : 10581961

10581961

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID (One Character per box. (A-Z, 0-9 / , -) Sample Ids must be unique)	MATRIX CODE (use valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED START DATE	COLLECTED START TIME	COLLECTED END DATE	COLLECTED END TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H2SO4	HNO3	HCl	NaOH	Na2S2O3	Methanol	Other	Analyses Test Y/N	TCLP Metals	Residual Cl	
1	Slag Container # 7166734	SL	G	9/14	11:00	NA	NA	70	1												001
2	Foundry Dust Container #7166716	SL	G	9/14	11:00	NA	NA	70	1												002
3	Green Sand Container #7166735	SL	G	9/14	11:00	NA	NA	70	1												003
4	No Bake Reclaim Container #7166727	SL	G	9/14	11:00	NA	NA	70	1												004
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
				JD – Pace	9.16.21	10.00	1.4.4	N	X	N

JD 10.6.21

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Joey Iossi

SIGNATURE of SAMPLER: [signature] DATE Signed: 9-14-21

TEMP in C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

La Crosse County Landfill
Application for Special Waste Disposal

PART A: WASTE GENERATOR INFORMATION

1. Generator Name City of La Crosse
2. Generator Mailing Address 2000 Marco Drive, La Crosse WI, 54601
3. Facility Address (site of waste generation) 2000 Marco Drive
4. Generator City La Crosse
5. Generator State/Zip Wisconsin, 54601
6. General Contact Person Ashley Freeman
   Phone # and email 608-789-7508, freemana@cityoflacrosse.org
7. Technical Contact Person NA
   Phone # and email NA

---

1. Name of Waste Street Sweepings
2. Process Generating Waste Street Sweeper
3. Waste Color Brown
4. Waste Odor X None ____ Mild ____ Strong
5. Physical State ____ None ____ Liquid X Semi-Solid Other____
6. Free Liquids ____ Yes ____ % X No
7. pH____ <2____ 2-4.0____ 4.1-7.0____ 7.1-10.0____ 10.1-12.5____ >12.5____ N/A X
8. Flash Point (cc) X None _____<140F _____140-199F _____>200
9. a. Waste Composition:

	Range
Sand	99 to 100 %
	____ to ____ %
	____ to ____ %
	____ to ____ %
	____ to ____ %

b. Does Waste Contain

	Yes	No	Do Not Know
PCBS	____	X	____
Cyanide	____	X	____
Sulfide	____	X	____
Phenol	____	X	____
Chlorinated Solvents	____	X	____
Aromatic Solvents	____	X	____

10. Analytical Laboratory Davy Laboratories
11. Date of Analysis 9/14/23 & 10/5/23

PART B: CAR WASH CATCH BASIS SLUDGE INFORMATION

Industrial discharge _____Yes _____No
Tank interiors _____Yes _____No
Vehicle types _____

PART C: TRANSPORTATION INFORMATION

1. Method of delivery _____Drum _____Paper Truck X Dump Truck
   _____Roll-off _____Other _____

2. Waste Quantity/Units 10 ton/per truckload

   ☐ One-time Disposal
   ☑ On-going Disposal

   Frequency 10-20 loads per month

3. Hauler Name and Address City of La Crosse
   Street Department
   2000 Marco Drive, La Crosse, WI, 54601

4. Bill to Name and Address City of La Crosse
   Street Department
   2000 Marco Drive, La Crosse, WI, 54601

To be Completed by La Crosse County Solid Waste

Waste Acceptance/Rejection		
1) Does waste meet requirements of the current Plan of Operations?	■ Yes	☐ No
2) Is waste acceptable upon approval by WDNR?	☐ Yes	☐ No
3) Plan of Operations Approval Required? (Attach copy if yes)	☐ Yes	☐ No
4) Waste accepted for disposal?	■ Yes	☐ No
5) Signature/Title Jackie Davis / Operations Coordinator		

PART D: GENERATOR CERTIFICATION

By signing this application, the generator certifies:

1. This waste is not "Hazardous Waste" as defined by USEPA and/or state regulations.

2. This waste ☐ does ☑ does not contain regulated radioactive materials and ☐ does ☑ does not contain regulated concentrations of PCBs (polychlorinated biphenyls). If "does" is checked, specify level here _____.

3. This waste does not contain regulated infectious waste as defined by NR526.05 Wisconsin Administrative Code.

4. The waste does not contain regulated concentrations of the following pesticides and herbicides: Chlordane, Endrin, Heptachlor (and its epoxide), Lindane, Methoxychlor, Toxaphene, 2, 4, 5-TP (Silvex).

5. The waste does not contain halogenated compounds such as: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, ortho-dichlorobenzene, dichlorodifluoromethane, 1,1,2-trichloro-1, 2,2-trifluoroethane, trichlorofluoromethane, 1,1-dichloroethylene, and 1,2-dichlorethylene at greater than 1% (10,000 ppm) total solvent concentration. This listing includes any combination of the above named halogenated compounds where the total concentration or the sum of the concentration of the individual compounds exceed 1% or 10,000 ppm on a weights to weight basis.

6. This sheet and the attachments contain true and accurate description of the waste material. All relevant information regarding known or suspected hazards in the possession of the Generator has been disclosed.

7. The analytical data presented herein or attached hereto were derived from testing a representative sample taken in accordance with 40 CFR 261.20 © or equivalent rules.

8. If any changes occur in the character of the waste, the Generator shall notify the County prior to providing the waste to the County.

9. Signature Ashley Freeman

10. Title Recycling Coordinator/Street Supervisor

11. Name (Type or print) Ashley Freeman

12. Date 10/10/23

DAVY LABORATORIES
A Division of Davy Engineering Co., Inc.
115 6th Street South
La Crosse, WI 54601
(608) 782-3130
www.davyinc.com

LABORATORY ANALYSIS REPORT

La Crosse, City of , Street Department
Attn: Ashley Freeman
2000 Marcou Dr.
La Crosse, WI 54601

Date: September 25, 2023
Client No: 11388

Sample No: 23I0083-01
Sample Site: 2000 Marcou

Sample Collected: 06-Sep-23 09:00

Sample Received: 06-Sep-23 09:34

Parameter	Result	Units	LOD	LOQ/RL	Dilution	Prepared	Analyzed	Method	Qualifier
Laboratory Results									
Particle Size Distribution (Sieve)	**5**	**% by Volume**			1	14-Sep-23 21:15	14-Sep-23 21:15	ASTM D421-85	Sub-5

Submitted by:
Davy Laboratories

Jennifer M. Buchholz
Jennifer M. Buchholz, Laboratory Director

The laboratory analyses reported were determined in accordance with methods from approved authoritative sources. Approved authoritative sources are defined and listed within the respective state certification codes. The results are representative of the samples only; conditions can be expected to vary at different times and under different sampling conditions. This report may not be reproduced, except in full, without the written approval of the laboratory.
WI Certification 632021390 and WI DATCP 105-216, MN NELAC Certification 055-999-151, IA Certification 304. Revision #3 - 7/29/2019

DAVY LABORATORIES
A Division of Davy Engineering Co., Inc.
115 6th Street South
La Crosse, WI 54601
(608) 782-3130
www.davyinc.com

LABORATORY ANALYSIS REPORT

La Crosse, City of , Street Department
Attn: Ashley Freeman
2000 Marcou Dr.
La Crosse, WI 54601

Date: September 25, 2023
Client No: 11388

Notes and Definitions

Sub-5	Wisconsin Laboratory Certification No. 157066030
LOD	Limit of Detection, adjusted for the dilution factor
LOQ/RL	Limit of Quantitation/Reporting Limit, adjusted for the dilution factor

Total metals are equivalent to total recoverable metals.

Cooler Information

Temperature °C	
Received on Ice	No
Required COC Information completed	Yes
Sample labels match COC	Yes
All samples received in the appropriate Containers	Yes
All samples received with sufficient volume	Yes
All samples received with sufficient holding time	Yes
All sample bottles received with H2SO4 were pH <2	No
All sample bottles received with HNO3 were pH <2	No
All sample bottles received with HCl were pH <2	No
All sample bottles received with NaOH were pH >12	No
All sample bottles for cyanide confirmed Sulfide absent	No
All sample bottles for cyanide confirmed Residual Cl absent	No

Preservation of VOC samples checked by the analyst.
Preservation of FOG samples checked by the analyst.
Residual Chlorine absent checked by the analyst unless noted above.

Case Narrative

DAVY LABORATORIES
A Division of Davy Engineering Co., Inc.
115 6th Street South
La Crosse, WI 54601
(608) 782-3130
www.davyinc.com

LABORATORY ANALYSIS REPORT

La Crosse, City of , Street Department
Attn: Ashley Freeman
2000 Marcou Dr.
La Crosse, WI 54601

Date: October 10, 2023
Client No: 11388

Sample No: 23J0015-01
Sample Site: Sweeper Dump
Sample Collected: 02-Oct-23 12:45
Sample Received: 02-Oct-23 13:00

Parameter	Result	Units	LOD	LOQ/RL	Dilution	Prepared	Analyzed	Method	Qualifier
Subcontracted									
Free Liquid	**0**	**%**			1	05-Oct-23 00:00	05-Oct-23 00:00	EPA 9095B	A-01

Submitted by:
Davy Laboratories

Jennifer M. Buchholz
Jennifer M. Buchholz, Laboratory Director

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WI Certification 632021390 and WI DATCP 105-216, MN NELAC Certification 055-999-151, IA Certification 304. Revision #3 - 7/29/2019

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A Division of Davy Engineering Co., Inc.
115 6th Street South
La Crosse, WI 54601
(608) 782-3130
www.davyinc.com

LABORATORY ANALYSIS REPORT

La Crosse, City of , Street Department
Attn: Ashley Freeman
2000 Marcou Dr.
La Crosse, WI 54601

Date: October 10, 2023
Client No: 11388

Notes and Definitions

Z-01	0
A-01	SUB 445023150
LOD	Limit of Detection, adjusted for the dilution factor
LOQ/RL	Limit of Quantitation/Reporting Limit, adjusted for the dilution factor

Total metals are equivalent to total recoverable metals.

Cooler Information

Temperature °C	
Received on Ice	No
Required COC Information completed	Yes
Sample labels match COC	Yes
All samples received in the appropriate Containers	Yes
All samples received with sufficient volume	Yes
All samples received with sufficient holding time	Yes
All sample bottles received with H2SO4 were pH <2	No
All sample bottles received with HNO3 were pH <2	No
All sample bottles received with HCl were pH <2	No
All sample bottles received with NaOH were pH >12	No
All sample bottles for cyanide confirmed Sulfide absent	No
All sample bottles for cyanide confirmed Residual Cl absent	No
Preservation of VOC samples checked by the analyst.	
Preservation of FOG samples checked by the analyst.	
Residual Chlorine absent checked by the analyst unless noted above.	

Case Narrative

DAVY LABORATORIES
A Division of Davy Engineering Co., Inc.
115 6th Street South
La Crosse, WI 54601
(608) 782-3130
www.davyinc.com

LABORATORY ANALYSIS REPORT

La Crosse, City of
Attn: Erik Schell
905 Joseph Houska Dr.
La Crosse, WI 54601

Date: July 08, 2020
Client No: 00760

Sample No: 20F0251-01
Sample Site: 01-SW Site 0
Sample Collected: 09-Jun-20 08:15
Sample Received: 09-Jun-20 09:49

Parameter	Result	Units	LOD	LOQ/RL	Dilution	Prepared	Analyzed	Method	Qualifier
Laboratory Results									
Free Liquid	**Pass**	**%**			1	24-Jun-20 20:12	24-Jun-20 20:12	EPA 9095B	A-01
Particle Size Distribution (Sieve)	**See Attached**	**% by Volume**			1	02-Jul-20 13:24	02-Jul-20 13:31	ASTM D422	

Submitted by:
Davy Laboratories

Jennifer M. Buchholz
Jennifer M. Buchholz, Laboratory Director

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WI Certification 632021390 and WI DATCP 105-216, MN NELAC Certification 055-999-151, IA Certification 304. Revision #3 - 7/29/2019

DAVY LABORATORIES
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LABORATORY ANALYSIS REPORT

La Crosse, City of
Attn: Erik Schell
905 Joseph Houska Dr.
La Crosse, WI 54601

Date: July 08, 2020
Client No: 00760

Notes and Definitions

Z-01a	See Attached
Z-01	Pass
A-01	Tal CHI = Eurofins TestAmerica, Chicago 2417 Bond Street, University Park, IL 60484 Sub. #999580010
LOD	Limit of Detection, adjusted for the dilution factor
LOQ/RL	Limit of Quantitation/Reporting Limit, adjusted for the dilution factor

Total metals are equivalent to total recoverable metals.

Cooler Information

Temperature 25.80 °C	
Received on Ice	No
Required COC Information completed	Yes
Sample labels match COC	Yes
All samples received in the appropriate Containers	Yes
All samples received with sufficient volume	Yes
All samples received with sufficient holding time	Yes
All sample bottles received with H2SO4 were pH <2	No
All sample bottles received with HNO3 were pH <2	No
All sample bottles received with HCl were pH <2	No
All sample bottles received with NaOH were pH >12	No
All sample bottles for cyanide confirmed Sulfide absent	No
All sample bottles for cyanide confirmed Residual Cl absent	No

Preservation of VOC samples checked by the analyst.
Preservation of FOG samples checked by the analyst.
Residual Chlorine absent checked by the analyst unless noted above.

Case Narrative

Sample temperature upon receipt exceeded 6 °C.

DAVY LABORATORIES
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115 6th Street South
La Crosse, WI 54601
(608) 782-3130
www.davyinc.com

Division of Davy Engineering Co.

LABORATORY ANALYSIS REPORT

La Crosse, City of
Attn: Erik Schell
905 Joseph Houska Dr.
La Crosse, WI 54601

Date: July 08, 2020
Client No: 00760

GRAIN SIZE DISTRIBUTION TEST DATA

7/2/2020

Location: 20F0251-01

Tested by: CCJ

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 100.00
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

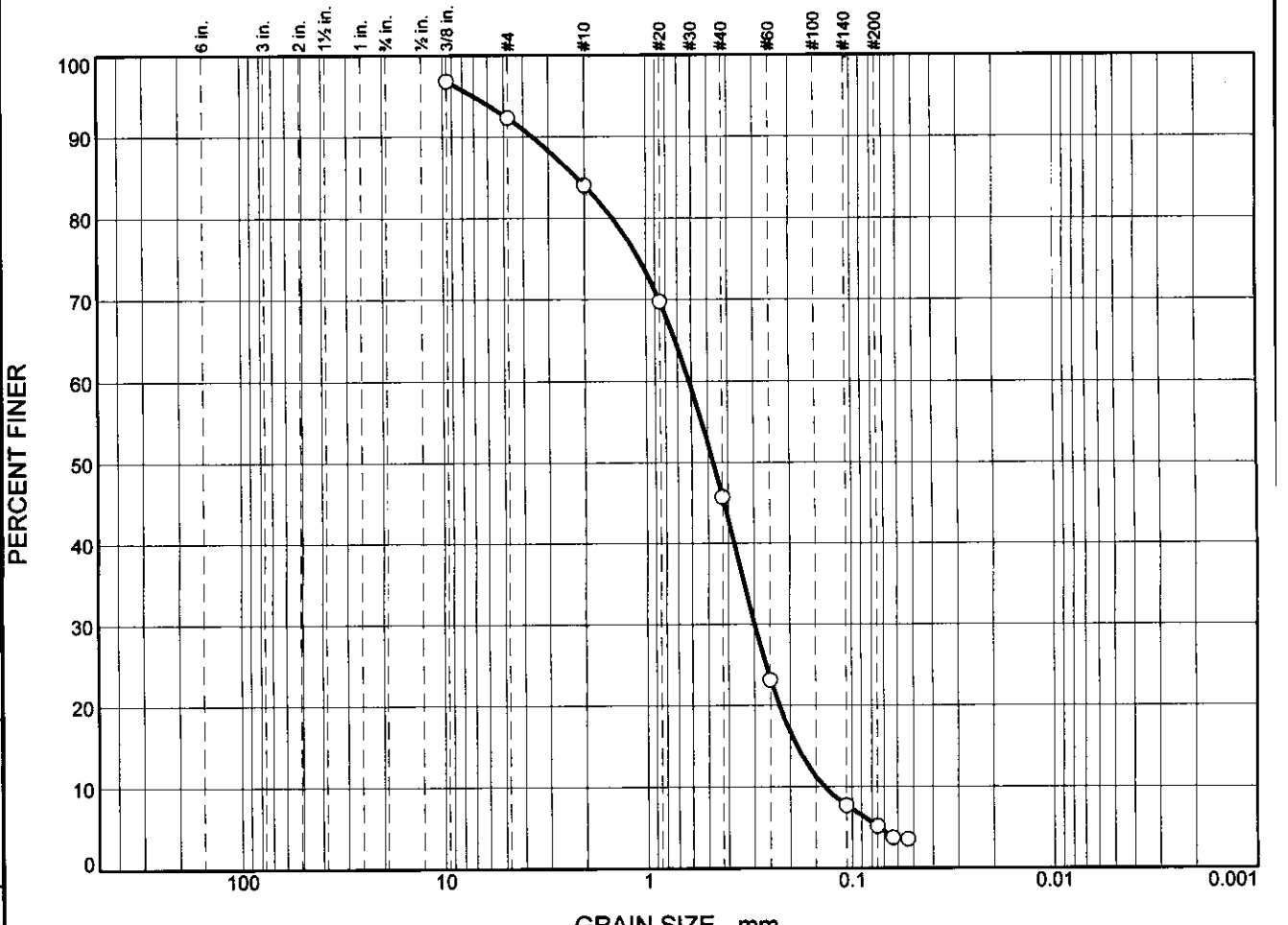
Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
100.00	0.00	0.00	.375	3.17	97
			#4	7.67	92
			#10	16.02	84
			#20	30.33	70
			#40	54.30	46
			#60	76.88	23
			#140	92.34	8
			#200	94.83	5.2
			#230	96.25	3.8
			#270	96.46	3.5

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
				8	38	41	87			5

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.1369	0.1868	0.2271	0.2982	0.4708	0.6146	1.4599	2.1879	3.5891	7.0207

Fineness Modulus	C_u	C_c
2.48	4.49	1.06

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○				8	38	41	5	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			2.1879	0.6146	0.4708	0.2982	0.1868	0.1369	1.06	4.49

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Location:** 20F0251-01

Remarks:

Davy Laboratories

La Crosse, WI

Figure

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

Tested By: CCJ **Checked By:** JAK

Sieve Percentages (passing)

Percent passing #10 sieve: 84

Percent passing #270 sieve:

Percent finer than 2u:

USDA Component Fractions

Sand: 95.8

Silt: 4.2

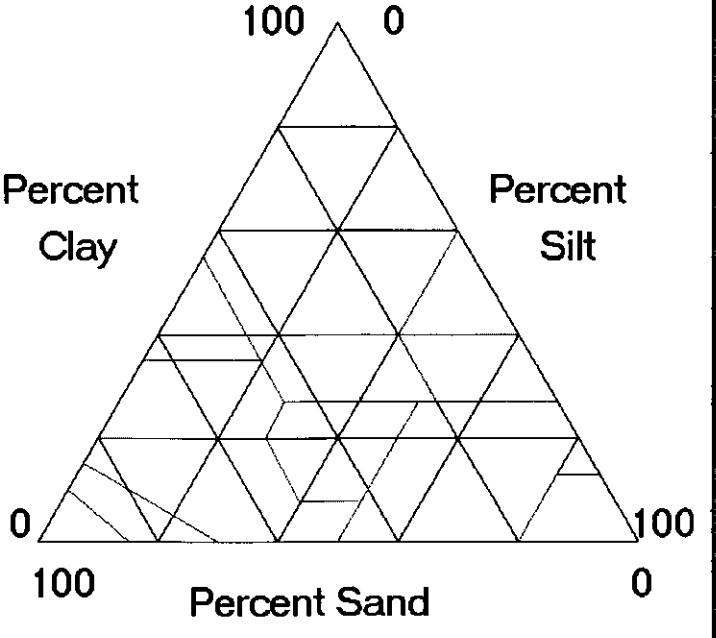
Clay: 0

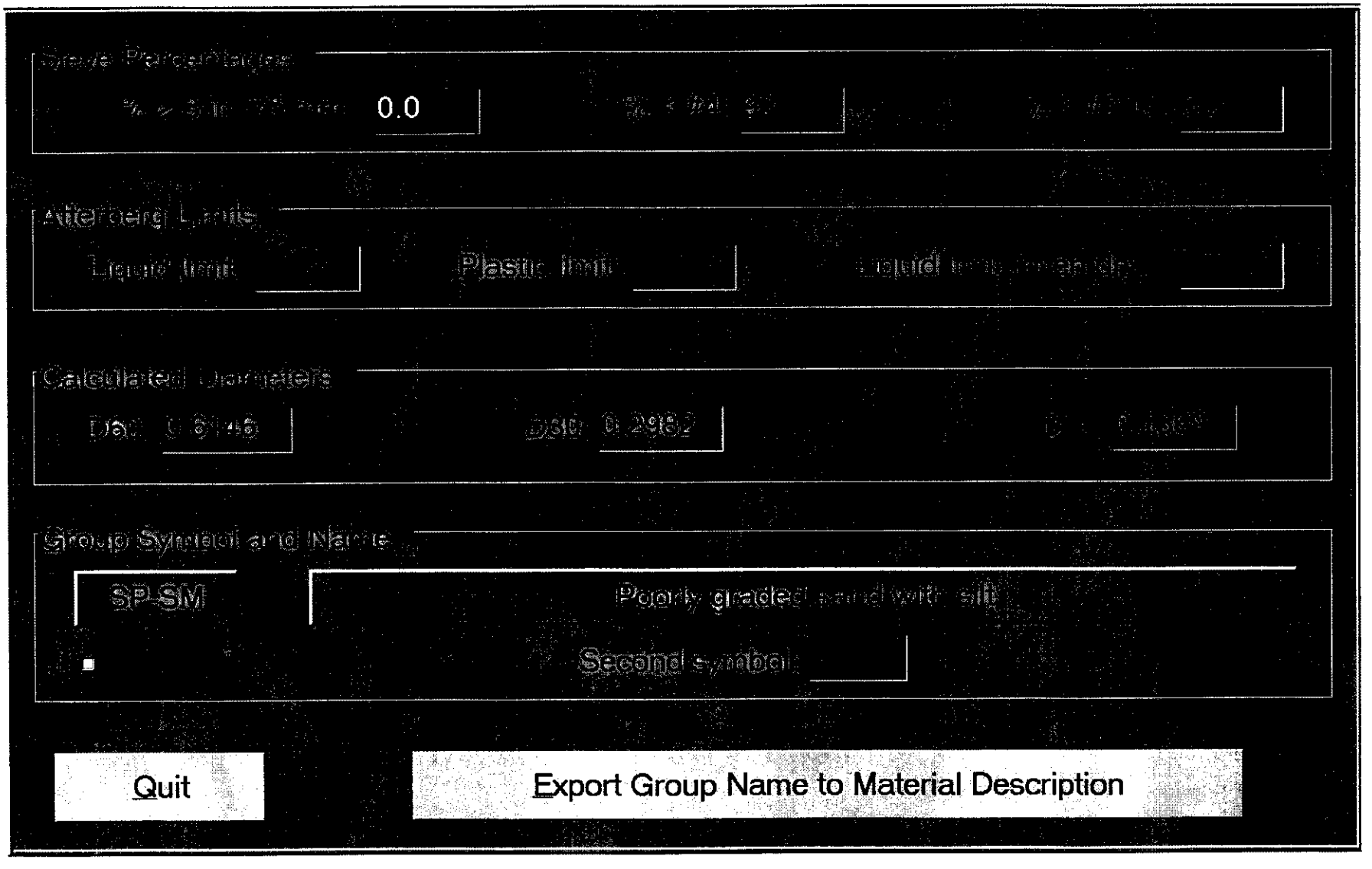
Component fractions are based on the <#1 sample fraction

Quit

Export Class.

Textural Triangle




Gravel Percentages
0.0
Atterberg Limits
Liquid limit
Plastic limit
Calculated Parameters
Group Symbol and Name
SP-SM
Poorly graded sand with silt
Second symbol
Quit
Export Group Name to Material Description

GRAIN SIZE DISTRIBUTION TEST DATA

7/2/2020

Location: 20F0251-01 DUP

Tested by: CCJ

Post #200 Wash Test Weights (grams): **Dry Sample and Tare =** 100.00
Tare Wt. = 0.00
Minus #200 from wash = 0.0%

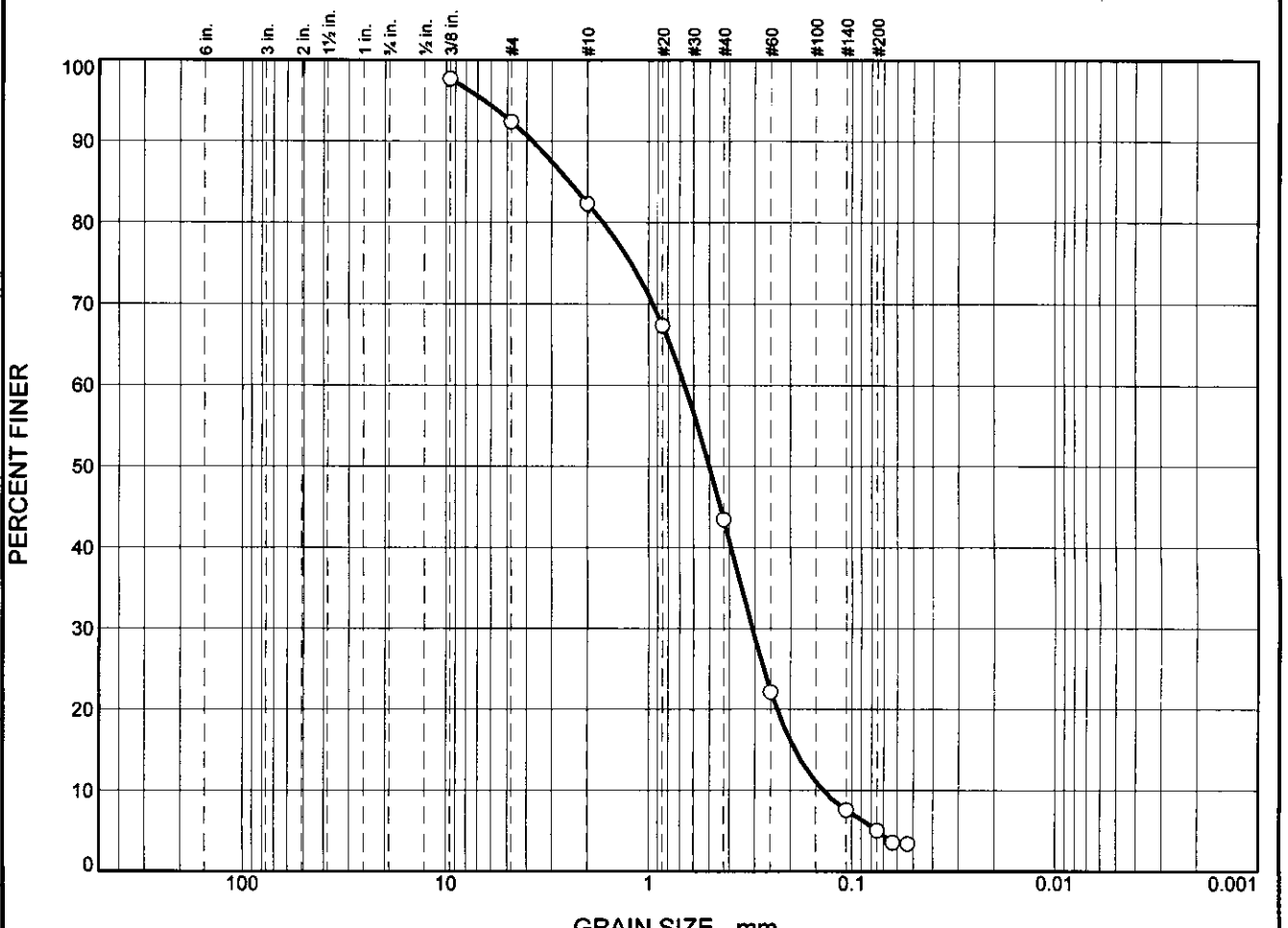
Dry Sample and Tare (grams)	Tare (grams)	Cumulative Pan Tare Weight (grams)	Sieve Opening Size	Cumulative Weight Retained (grams)	Percent Finer
100.00	0.00	0.00	.375	2.28	98
			#4	7.58	92
			#10	17.69	82
			#20	32.71	67
			#40	56.58	43
			#60	77.87	22
			#140	92.44	8
			#200	95.01	5.0
			#230	96.47	3.5
			#270	96.65	3.3

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
				10	39	38	87			5

D_{10}	D_{15}	D_{20}	D_{30}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.1388	0.1909	0.2334	0.3091	0.5006	0.6626	1.6830	2.4621	3.7445	6.4650

Fineness Modulus	C_u	C_c
2.55	4.77	1.04

Particle Size Distribution Report



	% +3"	% Gravel		% Sand			% Fines	
		Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
○				10	39	38	5	

	LL	PL	D_{85}	D_{60}	D_{50}	D_{30}	D_{15}	D_{10}	C_c	C_u
○			2.4621	0.6626	0.5006	0.3091	0.1909	0.1388	1.04	4.77

	Material Description	USCS	AASHTO
○			

Project No. **Client:**

Project:

○ **Location:** 20F0251-01 DUP

Remarks:

Davy Laboratories

La Crosse, WI

Figure

These results are for the exclusive use of the client for whom they were obtained. They apply only to the samples tested and are not indicitive of apparently identical samples.

Tested By: CCJ **Checked By:** JAK

Sieve Percentages (passing)

Percent passing #10 sieve: 82

Percent passing #40 sieve:

Percent passing #200:

USDA Component Fractions

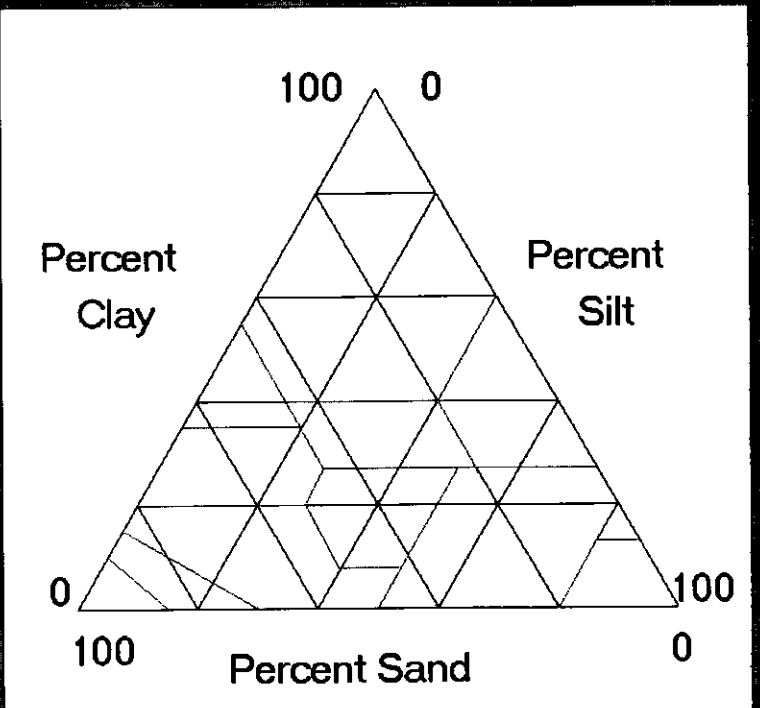
Sand: 95.0

Silt: 4.0

Clay: 1.0

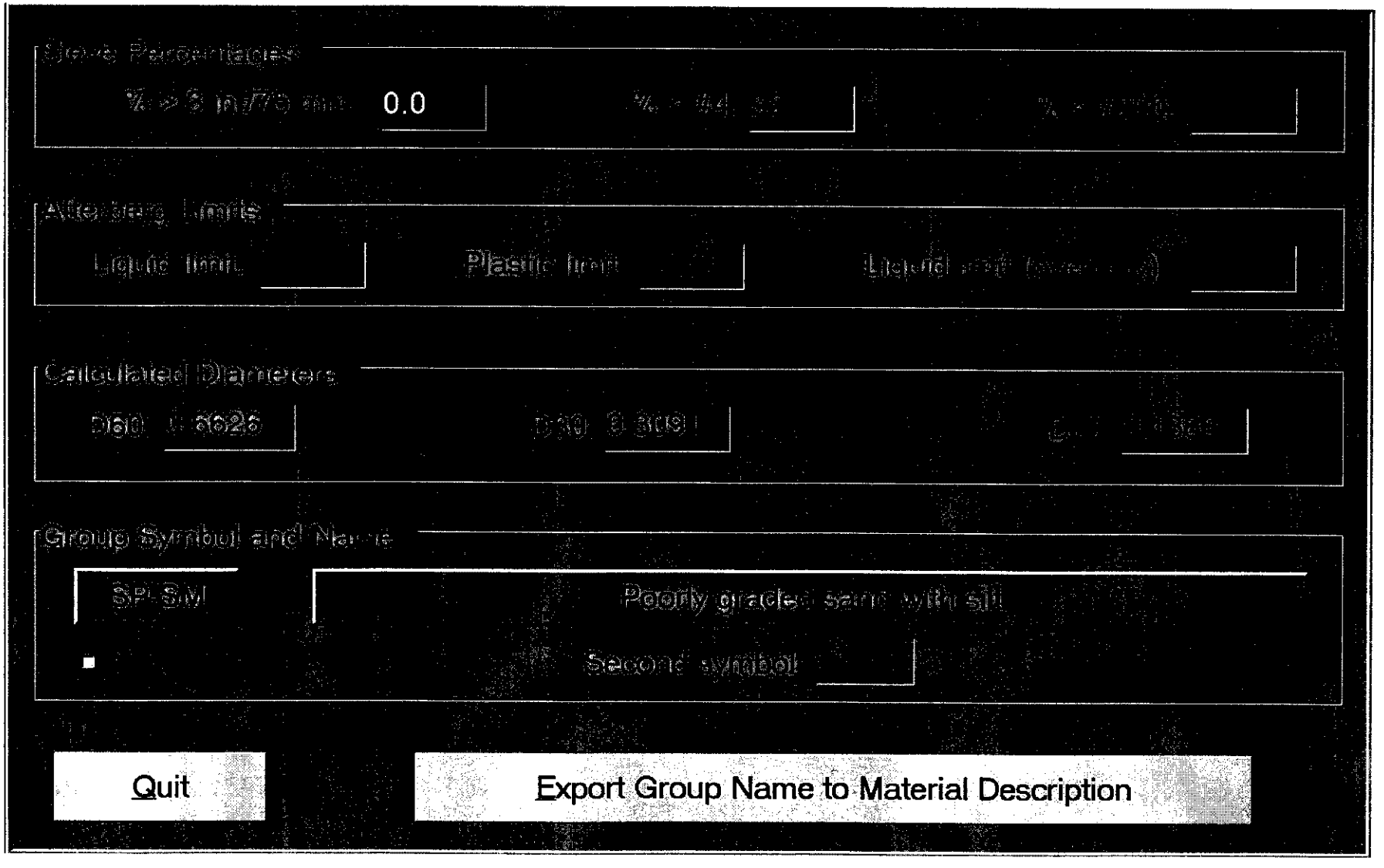
Component fractions are based on the sample portion

Textural Triangle



Quit

Export Class.


Sieve Percentages
0.0
Atterberg Limits
Liquid limit
Plastic limit
Calculated Diameters
Group Symbol and Name
SP-SM
Poorly graded sand with silt
Second symbol
Quit
Export Group Name to Material Description

La Crosse County Landfill
Application for Special Waste Disposal

PART A: WASTE GENERATOR INFORMATION

1. Generator Name CITY OF ONALASKA
2. Generator Mailing Address 415 MAIN STREET, ONALASKA, WI. 54650
3. Facility Address (site of waste generation) CITY WIDE SWEEPING
4. Generator City ONALASKA
5. Generator State/Zip WISCONSIN, 54650
6. General Contact Person JARROD HOLTER
   Phone # and email (608) 781-9537, JHOLTER@ONALASKAWI.GOV
7. Technical Contact Person SAME AS ABOVE
   Phone # and email

---

1. Name of Waste STREET SWEEPING
2. Process Generating Waste SWEEPING CITY STREETS OF SAND/DEBRIS FOR STORMWATER COMPLIANCE
3. Waste Color N/A
4. Waste Odor N/A None _____ Mild _____ Strong
5. Physical State N/A None _____ Liquid _____ Semi-Solid Other_____
6. Free Liquids N/A Yes _____% _____No
7. pH N/A <2____ 2-4.0____ 4.1-7.0____ 7.1-10.0____ 10.1-12.5____ >12.5____ N/A____
8. Flash Point (cc) N/A None _____<140F _____140-199F _____>200
9. a. Waste Composition:

	Range
N/A	_____ to _____%
	_____ to _____%
	_____ to _____%
	_____ to _____%
	_____ to _____%

b. Does Waste Contain (N/A)

	Yes	No	Do Not Know
PCBS	____	____	_____
Cyanide	____	____	_____
Sulfide	____	____	_____
Phenol	____	____	_____
Chlorinated Solvents	____	____	_____
Aromatic Solvents	____	____	_____

10. Analytical Laboratory N/A
11. Date of Analysis N/A

PART B: CAR WASH CATCH BASIS SLUDGE INFORMATION

Industrial discharge N/A _____Yes _____No
Tank interiors _____Yes _____No
Vehicle types _____

PART C: TRANSPORTATION INFORMATION

1. Method of delivery _____Drum _____Paper Truck X Dump Truck
   _____Roll-off _____Other _____

2. Waste Quantity/Units _____

   ☐ One-time Disposal
   ☒ On-going Disposal

   Frequency ~ 4 TIMES A MONTH → APRIL - NOVEMBER

3. Hauler Name and Address CITY OF ONALASKA
   PUBLIC WORKS DEPT.

4. Bill to Name and Address CITY OF ONALASKA
   415 MAIN STREET
   ONALASKA, WI. 54650

To be Completed by La Crosse County Solid Waste

Waste Acceptance/Rejection		
1) Does waste meet requirements of the current Plan of Operations?	☐ Yes	☐ No
2) Is waste acceptable upon approval by WDNR?	☐ Yes	☐ No
3) Plan of Operations Approval Required? (Attach copy if yes)	☐ Yes	☐ No
4) Waste accepted for disposal?	☐ Yes	☐ No
5) Signature/Title _____/_____		

PART D: GENERATOR CERTIFICATION

By signing this application, the generator certifies:

1. This waste is not "Hazardous Waste" as defined by USEPA and/or state regulations.
2. This waste ☐ does ☒ does not contain regulated radioactive materials and ☐ does ☒ does not contain regulated concentrations of PCBs (polychlorinated biphenyls). If "does" is checked, specify level here _____.
3. This waste does not contain regulated infectious waste as defined by NR526.05 Wisconsin Administrative Code.
4. The waste does not contain regulated concentrations of the following pesticides and herbicides: Chlordane, Endrin, Heptachlor (and its epoxide), Lindane, Methoxychlor, Toxaphene, 2, 4, 5-TP (Silvex).
5. The waste does not contain halogenated compounds such as: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, ortho-dichlorobenzene, dichlorodifluoromethane, 1,1,2-trichloro-1, 2,2-trifluoroethane, trichlorofluoromethane, 1,1-dichloroethylene, and 1,2-dichlorethylene at greater than 1% (10,000 ppm) total solvent concentration. This listing includes any combination of the above named halogenated compounds where the total concentration or the sum of the concentration of the individual compounds exceed 1% or 10,000 ppm on a weights to weight basis.
6. This sheet and the attachments contain true and accurate description of the waste material. All relevant information regarding known or suspected hazards in the possession of the Generator has been disclosed.
7. The analytical data presented herein or attached hereto were derived from testing a representative sample taken in accordance with 40 CFR 261.20 © or equivalent rules.
8. If any changes occur in the character of the waste, the Generator shall notify the County prior to providing the waste to the County.
9. Signature C. Jarrod Holtan
10. Title City Engineer / DPW
11. Name (Type or print) C. Jarrod Holtan
12. Date 5.18.21

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

November 02, 2022

Walk-In
Pace Analytical Green Bay
1941 Bellevue St.
Green Bay, WI 54302

RE: Project: HOLEMAN PUMPING SERVICES
Pace Project No.: 40253603

Dear Walk-In:

Enclosed are the analytical results for sample(s) received by the laboratory on October 24, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

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

Sincerely,

Steven Mleczko
steve.mleczko@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Walk-In, PACE Analytical Services, LLC.

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

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: HOLEMAN PUMPING SERVICES
Pace Project No.: 40253603

Pace Analytical Services Green Bay
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
South Carolina Certification #: 83006001
Texas Certification #: T104704529-21-8
Virginia VELAP Certification ID: 11873
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-21-00008
Federal Fish & Wildlife Permit #: 51774A

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: HOLEMAN PUMPING SERVICES
Pace Project No.: 40253603

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40253603001	**CAR WASH CATCH BASIN WASTE**	Solid	10/20/22 00:00	10/24/22 15:07

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SAMPLE ANALYTE COUNT

Project: HOLEMAN PUMPING SERVICES
Pace Project No.: 40253603

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40253603001	**CAR WASH CATCH BASIN WASTE**	EPA 9095	HNT	1	PASI-G
		ASTM D6913	AXW	14	PASI-G

PASI-G = Pace Analytical Services - Green Bay

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: HOLEMAN PUMPING SERVICES
Pace Project No.: 40253603

Sample: CAR WASH CATCH BASIN WASTE **Lab ID: 40253603001** Collected: 10/20/22 00:00 Received: 10/24/22 15:07 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
9095 Paint Filter Liquid Test	Analytical Method: EPA 9095 Pace Analytical Services - Green Bay								
Free Liquids	**Pass**	no units			1		11/01/22 15:15		
ASTM D6913 Grain Size	Analytical Method: ASTM D6913 Pace Analytical Services - Green Bay								
Sieve 3.0"	**100.0**	%			1		10/26/22 12:36		
Sieve 2.0"	**100.0**	%			1		10/26/22 12:36		
Sieve 1.5"	**100.0**	%			1		10/26/22 12:36		
Sieve 1.0"	**100.0**	%			1		10/26/22 12:36		
Sieve 0.75"	**100.0**	%			1		10/26/22 12:36		
Sieve 0.375"	**100.0**	%			1		10/26/22 12:36		
Sieve #4	**99.3**	%			1		10/26/22 12:36		
Sieve #10	**97.8**	%			1		10/26/22 12:36		
Sieve #20	**92.9**	%			1		10/26/22 12:36		
Sieve #40	**79.8**	%			1		10/26/22 12:36		
Sieve #60	**54.1**	%			1		10/26/22 12:36		
Sieve #100	**17.8**	%			1		10/26/22 12:36		
Sieve #140	**8.6**	%			1		10/26/22 12:36		
Sieve #200	**5.1**	%			1		10/26/22 12:36		

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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: HOLEMAN PUMPING SERVICES
Pace Project No.: 40253603

QC Batch: 430342
QC Batch Method: EPA 9095
Analysis Method: EPA 9095
Analysis Description: 9095 PAINT FILTER LIQUID TEST
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40253603001

METHOD BLANK: 2478248 Matrix: Solid
Associated Lab Samples: 40253603001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Free Liquids	no units	Fail		11/01/22 15:11	

LABORATORY CONTROL SAMPLE: 2478249

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Free Liquids	no units		Pass			

SAMPLE DUPLICATE: 2478250

Parameter	Units	40253603001 Result	Dup Result	RPD	Max RPD	Qualifiers
Free Liquids	no units	Pass	Pass			

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

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QUALIFIERS

Project: HOLEMAN PUMPING SERVICES
Pace Project No.: 40253603

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.

BATCH QUALIFIERS

Batch: 429745

[1] coarse and fine sieved 10/27/22; test assisted by OMH

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: HOLEMAN PUMPING SERVICES
Pace Project No.: 40253603

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40253603001	**CAR WASH CATCH BASIN WASTE**	EPA 9095	430342		
40253603001	**CAR WASH CATCH BASIN WASTE**	ASTM D6913	429745		

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(Please Print Clearly)

Company Name:	Holmen pumping service, inc
Branch/Location:	
Project Contact:	Justin Happel
Phone:	608-317-9486
Project Number:	
Project Name:	
Project State:	Wisconsin
Sampled By (Print	
Sampled By (Sign)	
PO #:	Regulatory Program:

Pace Analytical®
www.pacelabs.com

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

COC No. 40253603

CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Quote #:	
Mail To Contact:	Justin Happel
Mail To Company:	Holmen Pumping Servie
Mail To Address:	N15070 County Rd M Galesville, WI 54630
Invoice To Contact:	Justin Happel
Invoice To Company:	Holmen Pumping Servie
Invoice To Address:	N15070 County Rd M Galesville, WI 54630
Invoice To Phone:	608-317-9486

Data Package Options (billable)
- ☐ EPA Level III
- ☐ EPA Level IV

MS/MSD
- ☐ On your sample (billable)
- ☐ NOT needed on your sample

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Wate
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
Sl = Sludge	WP = Wipe

FILTERED? (YES/NO) PRESERVATION (CODE)*

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Y/N	Pick Letter	Analyses Requested: Free Liquids	Analyses Requested: P200 Particle Size	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
G01							x	x			

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed:

Transmit Prelim Rush Results by (complete what you want):

Email #1:	Holmenpumping@yahoo.com
Email #2:	
Telephone:	608-317-9486
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	USPS	Date/Time:	10/24/22 1430
Relinquished By:		Date/Time:	
Relinquished By:		Date/Time:	
Relinquished By:		Date/Time:	
Relinquished By:		Date/Time:	

Received By:	Tampa Pace	Date/Time:	10/24/22 1430
Received By:		Date/Time:	
Received By:		Date/Time:	
Received By:		Date/Time:	
Received By:		Date/Time:	

PACE Project No. 40253603

Receipt Temp = °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / ~~Not Present~~

Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

40253603

Car Wash Catch Basin Wastes

Tests Required	Test Method
Free Liquids	Paint Filter
P200	Particle Size Sieve Analysis

Sample Preservation Receipt Form

Client Name: Holmen Pumping Service Project # 40253603

All containers needing preservation have been checked and noted below: ☐Yes ☐No ☑N/A Initial when completed: Date/ Time:

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

Pace Lab #	Glass: AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	Plastic: BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	Vials: VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	Jars: JGFU	JG9U	WGFU	WPFU	General: SP5T	ZPLC	GN 1	GN 2	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001																									1									2.5 / 5
002																																		2.5 / 5
003																																		2.5 / 5
004																																		2.5 / 5
005																																		2.5 / 5
006																																		2.5 / 5
007																																		2.5 / 5
008																																		2.5 / 5
009																																		2.5 / 5
010																																		2.5 / 5
011																																		2.5 / 5
012																																		2.5 / 5
013																																		2.5 / 5
014																																		2.5 / 5
015																																		2.5 / 5
016																																		2.5 / 5
017																																		2.5 / 5
018																																		2.5 / 5
019																																		2.5 / 5
020																																		2.5 / 5

JP 10/24/22

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: Headspace in VOA Vials (>6mm) : ☐Yes ☐No ☑N/A ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9C	40 mL clear ascorbic w/ HCl	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG5U	100 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH + Zn	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres					GN 1	
						GN 2	

Page 1 of 2

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40253603

40253603

Client Name: Holmen Pumping Service

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☐ Pace Other: USPS

Tracking #: 9505 5156 0962 2293 2963 96

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☑ None ☐ Other

Thermometer Used SR - 110 **Type of Ice:** Wet Blue Dry (None) ☐ Meltwater Only

Cooler Temperature Uncorr: 22 /Corr: 22.5

Temp Blank Present: ☐ yes ☑ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Person examining contents:
Date: 10/24/22 Initials: TP

Labeled By Initials: NK

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☐Yes ☑No ☐N/A	2. proj. name/#, Sample ID, date, time collected, PO #, preserve TP 10/24/22
Chain of Custody Relinquished:	☐Yes ☑No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- DI VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD:	☐Yes ☑No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No	9.
Correct Type: Pace Green Bay, Pace IR, Non-Pace		
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: S	☐Yes ☑No ☐N/A	12. no ID, date, time TP 10/24/22
Trip Blank Present:	☐Yes ☐No ☑N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logi

GRAIN SIZE DISTRIBUTION TEST DATA

10/27/2022

Project Number: 10630557, 10630600, 40253603
Location: CAR WASH CATCH BASIN WASTE
Sample Number: 40253603-001
Material Description: Manual description: moist, somewhat compact, sandy silt
Geosystems description: poorly graded sand with silt
Sample Date: 10/20/22
Date Received: 10/24/22 **PL:** NP **LL:** NV **PI:** NP
USCS Classification: SP-SM **AASHTO Classification:** A-3
Grain Size Test Method: D6913 mod - Sieve Only
Testing Remarks: Batch 48406, HBN 429745; coarse and fine sieved 10/27/22; test assisted by OMH; 16.71g in catch pan (<#200)
Tested By: Anthony Wendel **Test Date:** 10/27/22
Checked By: Brandy Mahoney **Title:** Scientist

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
920.64	582.58	3"	0.00	0.00	100.0
		2"	0.00	0.00	100.0
		1.5"	0.00	0.00	100.0
		1"	0.00	0.00	100.0
		0.75"	0.00	0.00	100.0
		0.375"	0.00	0.00	100.0
		#4	2.43	0.00	99.3
		#10	5.09	0.00	97.8
		#20	16.44	0.00	92.9
		#40	44.40	0.00	79.8
		#60	86.94	0.00	54.1
		#100	122.45	0.00	17.8
		#140	31.26	0.00	8.6
		#200	11.81	0.00	5.1

Fractional Components

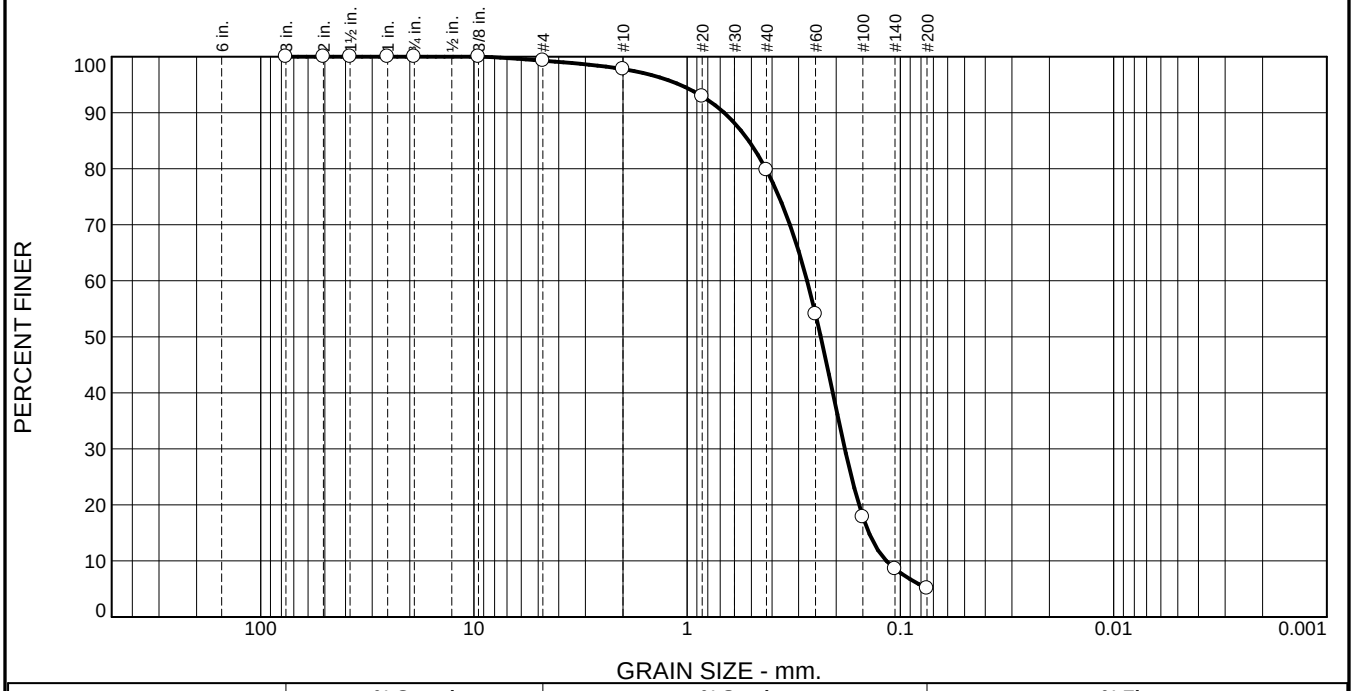
Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	0.7	0.7	1.5	18.0	74.7	94.2			5.1

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
	0.1164	0.1405	0.1563	0.1821	0.2075	0.2363	0.2737	0.4280	0.5145	0.6710	1.0833

Fineness Modulus	C_u	C_c
1.36	2.35	1.04

Pace Analytical Services, Inc.

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	0.7	1.5	18.0	74.7	5.1	

TEST RESULTS (D6913 mod - Sieve Only)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.75"	100.0		
0.375"	100.0		
#4	99.3		
#10	97.8		
#20	92.9		
#40	79.8		
#60	54.1		
#100	17.8		
#140	8.6		
#200	5.1		

* (no specification provided)

Material Description

Manual description: moist, somewhat compact, sandy silt
Geosystems description: poorly graded sand with silt

Atterberg Limits (ASTM D 4318)

PL= NP **LL=** NV **PI=** NP

Classification

USCS (D 2487)= SP-SM **AASHTO (M 145)=** A-3

Coefficients

D_{90}= 0.6710 D_{85}= 0.5145 D_{60}= 0.2737
D_{50}= 0.2363 D_{30}= 0.1821 D_{15}= 0.1405
D_{10}= 0.1164 C_u= 2.35 C_c= 1.04

Remarks

Batch 48406, HBN 429745; coarse and fine sieved 10/27/22; test assisted by OMH; 16.71g in catch pan (<#200)

Date Received: 10/24/22 **Date Tested:** 10/27/22

Tested By: Anthony Wendel

Checked By: Brandy Mahoney

Title: Scientist

Location: CAR WASH CATCH BASIN WASTE
Sample Number: 40253603-001

Date Sampled: 10/20/22

Pace Analytical Services, Inc.

Green Bay, WI

Client:
Project:

Project No: 10630557, 10630600, **Figure**

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

June 02, 2021

John Wyciskalla
Braun Intertec Corporation
2309 Palace Street
La Crosse, WI 54603

RE: Project: B1800433.00 METALS
Pace Project No.: 40227455

Dear John Wyciskalla:

Enclosed are the analytical results for sample(s) received by the laboratory on May 25, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:
- Pace Analytical Services - Green Bay

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

Sincerely,

Brian Basten
brian.basten@pacelabs.com
(920)469-2436
Project Manager

Enclosures

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: B1800433.00 METALS
Pace Project No.: 40227455

Pace Analytical Services Green Bay
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

REPORT OF LABORATORY ANALYSIS

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Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: B1800433.00 METALS
Pace Project No.: 40227455

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40227455001	**SLAG PILE**	Solid	05/24/21 10:15	05/25/21 10:35

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SAMPLE ANALYTE COUNT

Project: B1800433.00 METALS
Pace Project No.: 40227455

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40227455001	**SLAG PILE**	EPA 6010D	TXW	7
		EPA 7470	AJT	1

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SUMMARY OF DETECTION

Project: B1800433.00 METALS
Pace Project No.: 40227455

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40227455001	**SLAG PILE**					
EPA 6010D	Barium	0.031	mg/L	0.010	05/27/21 15:32	1q
EPA 6010D	Silver	0.0075J	mg/L	0.020	05/27/21 15:32	D3

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: B1800433.00 METALS
Pace Project No.: 40227455

Sample: SLAG PILE **Lab ID: 40227455001** Collected: 05/24/21 10:15 Received: 05/25/21 10:35 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
6010D MET ICP, TCLP	Analytical Method: EPA 6010D Preparation Method: EPA 3010A Leachate Method/Date: EPA 1311; 05/26/21 14:12 Pace Analytical Services - Green Bay								
Arsenic	**<0.017**	mg/L	0.050	0.017	2	05/27/21 08:39	05/27/21 15:32	7440-38-2	D3
Barium	**0.031**	mg/L	0.010	0.0030	2	05/27/21 08:39	05/27/21 15:32	7440-39-3	1q
Cadmium	**<0.0027**	mg/L	0.010	0.0027	2	05/27/21 08:39	05/27/21 15:32	7440-43-9	D3
Chromium	**<0.0051**	mg/L	0.020	0.0051	2	05/27/21 08:39	05/27/21 15:32	7440-47-3	D3
Lead	**<0.012**	mg/L	0.040	0.012	2	05/27/21 08:39	05/27/21 15:32	7439-92-1	D3
Selenium	**<0.024**	mg/L	0.080	0.024	2	05/27/21 08:39	05/27/21 15:32	7782-49-2	D3
Silver	**0.0075J**	mg/L	0.020	0.0064	2	05/27/21 08:39	05/27/21 15:32	7440-22-4	D3
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 05/26/21 14:12 Pace Analytical Services - Green Bay								
Mercury	**<0.066**	ug/L	0.20	0.066	1	06/01/21 11:45	06/02/21 08:13	7439-97-6	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: B1800433.00 METALS
Pace Project No.: 40227455

QC Batch: 386782
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury TCLP
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40227455001

METHOD BLANK: 2231769 Matrix: Water
Associated Lab Samples: 40227455001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.066	0.20	06/02/21 08:09	

METHOD BLANK: 2229622 Matrix: Water
Associated Lab Samples: 40227455001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.066	0.20	06/02/21 08:25	

LABORATORY CONTROL SAMPLE: 2231770

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	4.6	91	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2231771 2231772

Parameter	Units	40227455001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	<0.066	5	5	5.0	4.8	99	94	85-115	5	20	

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REPORT OF LABORATORY ANALYSIS

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(920)469-2436

QUALITY CONTROL DATA

Project: B1800433.00 METALS
Pace Project No.: 40227455

QC Batch: 386523
QC Batch Method: EPA 3010A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET TCLP
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40227455001

METHOD BLANK: 2230240 Matrix: Water
Associated Lab Samples: 40227455001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	<0.0084	0.025	05/27/21 15:27	
Barium	mg/L	<0.0015	0.0050	05/27/21 15:27	
Cadmium	mg/L	<0.0013	0.0050	05/27/21 15:27	
Chromium	mg/L	<0.0025	0.010	05/27/21 15:27	
Lead	mg/L	<0.0059	0.020	05/27/21 15:27	
Selenium	mg/L	<0.012	0.040	05/27/21 15:27	
Silver	mg/L	<0.0032	0.010	05/27/21 15:27	

METHOD BLANK: 2229621 Matrix: Solid
Associated Lab Samples: 40227455001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	<0.0084	0.025	05/27/21 15:59	
Barium	mg/L	0.0035J	0.0050	05/27/21 15:59	
Cadmium	mg/L	<0.0013	0.0050	05/27/21 15:59	
Chromium	mg/L	<0.0025	0.010	05/27/21 15:59	
Lead	mg/L	<0.0059	0.020	05/27/21 15:59	
Selenium	mg/L	<0.012	0.040	05/27/21 15:59	
Silver	mg/L	<0.0032	0.010	05/27/21 15:59	

LABORATORY CONTROL SAMPLE: 2230241

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.5	0.49	97	80-120	
Barium	mg/L	0.5	0.46	92	80-120	
Cadmium	mg/L	0.5	0.47	94	80-120	
Chromium	mg/L	0.5	0.49	98	80-120	
Lead	mg/L	0.5	0.49	98	80-120	
Selenium	mg/L	0.5	0.49	99	80-120	
Silver	mg/L	0.25	0.24	96	80-120	

MATRIX SPIKE SAMPLE: 2230242

Parameter	Units	40227166001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	<0.0084	0.5	0.52	102	75-125	

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REPORT OF LABORATORY ANALYSIS

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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: B1800433.00 METALS
Pace Project No.: 40227455

MATRIX SPIKE SAMPLE: 2230242

Parameter	Units	40227166001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	mg/L	0.76	0.5	1.2	98	75-125	
Cadmium	mg/L	<0.0013	0.5	0.49	97	75-125	
Chromium	mg/L	<0.0025	0.5	0.48	96	75-125	
Lead	mg/L	<0.0059	0.5	0.45	90	75-125	
Selenium	mg/L	<0.012	0.5	0.52	104	75-125	
Silver	mg/L	<0.0032	0.25	0.26	104	75-125	

MATRIX SPIKE SAMPLE: 2230243

Parameter	Units	40227410001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	<0.0084	0.5	0.51	101	75-125	
Barium	mg/L	0.96	0.5	1.4	82	75-125	
Cadmium	mg/L	<0.0013	0.5	0.48	96	75-125	
Chromium	mg/L	0.13	0.5	0.59	92	75-125	
Lead	mg/L	<0.0059	0.5	0.45	90	75-125	
Selenium	mg/L	<0.012	0.5	0.50	101	75-125	
Silver	mg/L	<0.0032	0.25	0.25	101	75-125	

MATRIX SPIKE SAMPLE: 2230244

Parameter	Units	40227455001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	<0.017	0.5	0.47	95	75-125	
Barium	mg/L	0.031	0.5	0.50	94	75-125	
Cadmium	mg/L	<0.0027	0.5	0.46	92	75-125	
Chromium	mg/L	<0.0051	0.5	0.49	98	75-125	
Lead	mg/L	<0.012	0.5	0.47	92	75-125	
Selenium	mg/L	<0.024	0.5	0.48	96	75-125	
Silver	mg/L	0.0075J	0.25	0.25	97	75-125	

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Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: B1800433.00 METALS
Pace Project No.: 40227455

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.

ANALYTE QUALIFIERS

1q	Analyte was detected in the associated leach blank at a concentration of 0.0035 mg/L.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: B1800433.00 METALS
Pace Project No.: 40227455

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40227455001	**SLAG PILE**	EPA 3010A	386523	EPA 6010D	386593
40227455001	**SLAG PILE**	EPA 7470	386782	EPA 7470	386896

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CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

Submitting a sample via this chain of custody constitutes acknowledgment and acceptance of the Pace Terms and Conditions found at: https://info.pacelabs.com/hubfs/pas-standard-terms.pdf

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevant fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here: 40227455

ALL BOLD OUTLINED AREAS are for LAB USE ONLY

Company: **Braun Intertec**	Billing Information: same
Address: **2309 Palace St., La Crosse, WI 54603**	
Report To: **John Wyciskalla**	Email To: **jwyciskalla@braunintertec.com**
Copy To:	Site Collection Info/Address: **Katz Metals, 2535 East Avenue South**
Customer Project Name/Number: **Metals / B1800433.00**	State: **WI** County/City: **La Crosse/La Crosse** Time Zone Collected: [ ]PT [ ]MT [x]CT [ ]ET
Phone: Email: **608.781.7277**	Site/Facility ID #: Katz Metals
Collected By (print): **David Bradshaw**	Purchase Order # : Quote #:
Collected By (signature): David M. Bradshaw	Turnaround Date Required: Standard
Sample Disposal: [X] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:	Rush: (Expedite Charges Apply) [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day

Compliance Monitoring? [ ] Yes [ ] No

DW PWS ID #: DW Location Code:

Immediately Packed on Ice: [X] Yes [ ] No

Field Filtered (if applicable): [ ] Yes [ ] No

Analysis: _____

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Container Type: Plastic (P) or Glass (G)	Analyses: Metals, TCLP	Lab Sample # / Comments
Slag pile	SL	~~Grab~~ Composite	5-24-21	10:15				2	G	x	001

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips:	
Sample pH Acceptable	Y N NA
pH Strips:	
Sulfide Present	Y N NA
Lead Acetate Strips:	

LAB USE ONLY: SCUR

Lab Sample # / Comments: 5/25/21 a25

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used: see SCUR 5/25/21 a25

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #:

Samples received via: FEDEX UPS Client Courier Pace Courier

LAB Sample Temperature Info:

Temp Blank Received: Y N NA

Therm ID#: _____

Cooler 1 Temp Upon Receipt: __oC

Cooler 1 Therm Corr. Factor: __oC

Cooler 1 Corrected Temp: _____oC

Comments: see SCUR 5/25/21 a25

Relinquished by/Company: (Signature) Braun David M. Bradshaw	Date/Time: 5-24-21 15:00	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature) Fedex	Date/Time: 5/25/21 1035	Received by/Company: (Signature) Anthony Wendel	Date/Time: 5/25/21 1035
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY

Table #:

Acctnum:

Template:

Prelogin:

PM:

PB:

Trip Blank Received: Y N NA

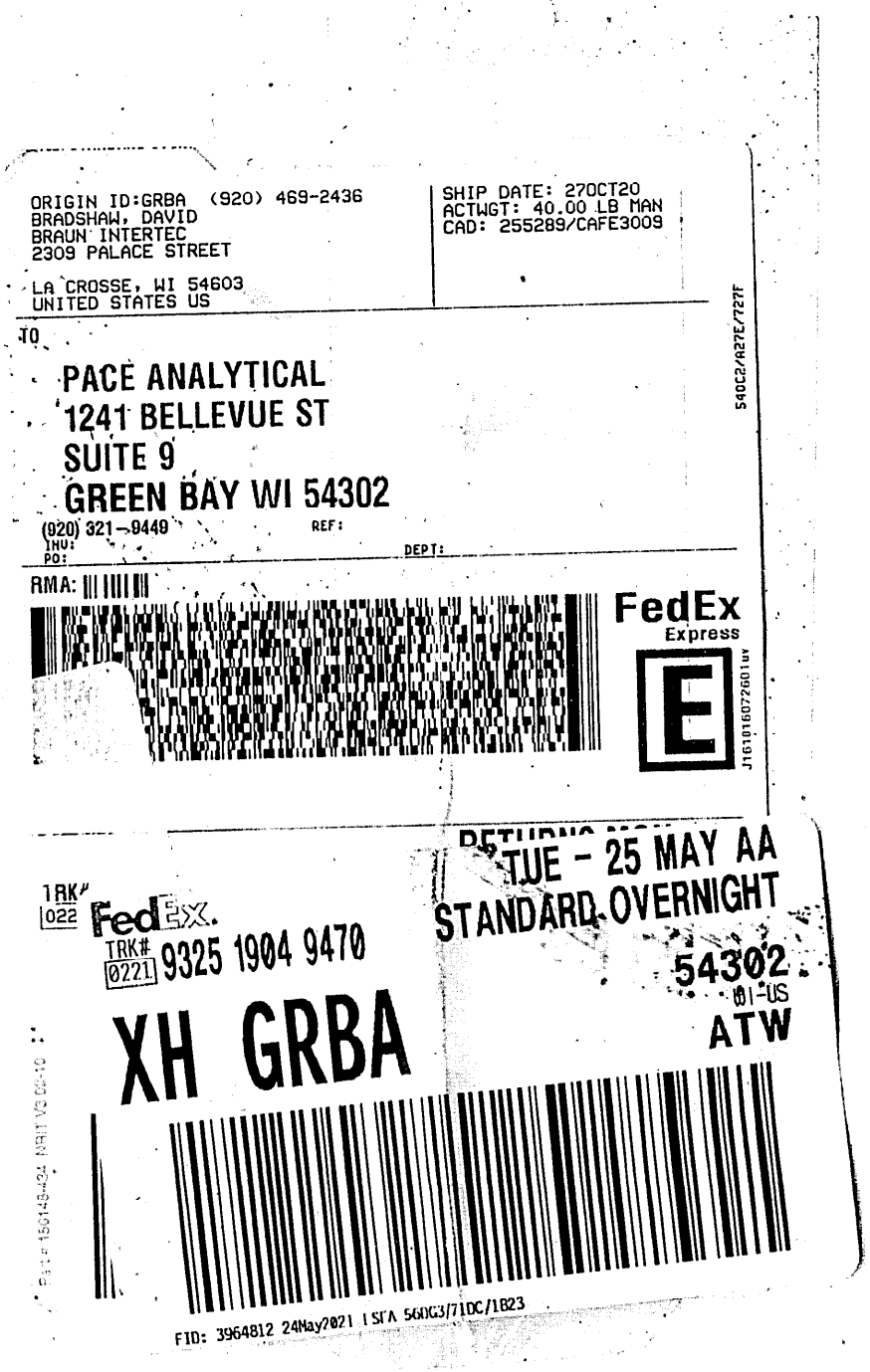
HCL MeOH TSP Other

Non Conformance(s): YES / NO

Page: ~~Page~~ 12 of 15

of: _____

40227455



ORIGIN ID:GRBA (920) 469-2436
BRADSHAW, DAVID
BRAUN INTERTEC
2309 PALACE STREET

LA CROSSE, WI 54603
UNITED STATES US

SHIP DATE: 27OCT20
ACTWGT: 40.00 LB MAN
CAD: 255289/CAFE3009

540C2/A27E/727F

TO

PACE ANALYTICAL
1241 BELLEVUE ST
SUITE 9
GREEN BAY WI 54302

(920) 321-9449 REF:

INV:
PO: DEPT:

RMA:

FedEx Express

J161016072601uv

TRK# 0221 9325 1904 9470

TUE - 25 MAY AA
STANDARD OVERNIGHT

54302
WI-US
ATW

XH GRBA

FID: 3964812 24May2021 LSTA 560G3/71DC/1B23

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Sample Preservation Receipt Form

Client Name: Braun Intertec Project # 40227455

All containers needing preservation have been checked and noted below: □Yes □No ☒N/A Initial when completed: Date/ Time:

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

Pace Lab #	Glass: AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	Plastic: BP1U	BP3U	BP3B	BP3N	BP3S	Vials: VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	Jars: JGFU	JG9U	WGFU	WPFU	General: SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001																				2													2.5 / 5 / 10
002																																	2.5 / 5 / 10
003																																	2.5 / 5 / 10
004																																	2.5 / 5 / 10
005																																	2.5 / 5 / 10
006																																	2.5 / 5 / 10
007																5/25/21																	2.5 / 5 / 10
008																																	2.5 / 5 / 10
009																				025													2.5 / 5 / 10
010																																	2.5 / 5 / 10
011																																	2.5 / 5 / 10
012																																	2.5 / 5 / 10
013																																	2.5 / 5 / 10
014																																	2.5 / 5 / 10
015																																	2.5 / 5 / 10
016																																	2.5 / 5 / 10
017																																	2.5 / 5 / 10
018																																	2.5 / 5 / 10
019																																	2.5 / 5 / 10
020																																	2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other:_____ Headspace in VOA Vials (>6mm) : □Yes □No ☒N/A ***If yes look in headspace column**

AG1U	1 liter amber glass
BG1U	1 liter clear glass
AG1H	1 liter amber glass HCL
AG4S	125 mL amber glass H2SO4
AG4U	120 mL amber glass unpres
AG5U	100 mL amber glass unpres
AG2S	500 mL amber glass H2SO4
BG3U	250 mL clear glass unpres

BP1U	1 liter plastic unpres
BP3U	250 mL plastic unpres
BP3B	250 mL plastic NaOH
BP3N	250 mL plastic HNO3
BP3S	250 mL plastic H2SO4

VG9A	40 mL clear ascorbic
DG9T	40 mL amber Na Thio
VG9U	40 mL clear vial unpres
VG9H	40 mL clear vial HCL
VG9M	40 mL clear vial MeOH
VG9D	40 mL clear vial DI

JGFU	4 oz amber jar unpres
JG9U	9 oz amber jar unpres
WGFU	4 oz clear jar unpres
WPFU	4 oz plastic jar unpres
SP5T	120 mL plastic Na Thiosulfate
ZPLC	ziploc bag
GN	

Pace Analytical® 1241 Bellevue Street, Green Bay, WI 54302	Document Name: **Sample Condition Upon Receipt (SCUR)**	Document Revised: 26Mar2020
	Document No.: **ENV-FRM-GBAY-0014-Rev.00**	Author: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40227455

40227455

Client Name: Braun Intertec

Courier: ☐ CS Logistics ☒ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☐ Pace Other:

Tracking #: 9325 1904 9470

Custody Seal on Cooler/Box Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - 107 **Type of Ice:** (Wet) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 3.5 /Corr: 3.5

Temp Blank Present: ☐ yes ☒ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents: Date: 5/25/21 /Initials: AS

Labeled By Initials: SRK

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☐Yes ☒No ☐N/A	2. no pg # 5/25/21 AS
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☒No	6.
Rush Turn Around Time Requested:	☐Yes ☒No	7.
Sufficient Volume: For Analysis: ☒Yes ☐No MS/MSD: ☐Yes ☒No ☐N/A		8.
Correct Containers Used:	☒Yes ☐No	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☒N/A	
Containers Intact:	☒Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC:	☒Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: S		
Trip Blank Present:	☐Yes ☐No ☒N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logi

Page 2 of 2

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Kevin Nestingen
Kwik Trip Inc
1626 Oak Street
La Crosse, Wisconsin 54602-2107

Generated 3/29/2023 2:57:38 PM

JOB DESCRIPTION

1190 Decorah

JOB NUMBER

310-251763-1

Eurofins Cedar Falls
3019 Venture Way
Cedar Falls IA 50613

See page two for job notes and contact information.

my EOL

Job Notes

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of Eurofins Environment Testing North Central, LLC and its client. All questions regarding this report should be directed to the Eurofins Environment Testing North Central, LLC Project Manager who has signed this report.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Environment Testing North Central, LLC Project Manager.

Authorization

Generated
3/29/2023 2:57:38 PM

Authorized for release by
Bob Michels, Project Manager I
Bob.Michels@et.eurofinsus.com
(319)277-2401

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Case Narrative

Client: Kwik Trip Inc
Project/Site: 1190 Decorah

Job ID: 310-251763-1

Job ID: 310-251763-1

Laboratory: Eurofins Cedar Falls

Narrative

Job Narrative
310-251763-1

Receipt
The sample was received on 3/21/2023 3:45 PM. Unless otherwise noted below, the sample arrived in good condition, and, where required, properly preserved and on ice. The temperature of the cooler at receipt time was -1.8°C

GC/MS VOA
Method 8260D: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for preparation batch 310-381874 and analytical batch 310-381875 recovered outside control limits for the following analytes: Hexane. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

Method 8260D: Surrogate recovery for the following sample was outside control limits: Tank Pit (310-251763-1). Evidence of matrix interference is present; therefore, re-extraction and/or re-analysis was not performed.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Diesel Range Organics
Method OA2: The LCS associated with this sample was out high. Sample is being prepped and analyzed again to confirm results.Tank Pit (310-251763-1)

No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

General Chemistry
No additional analytical or quality issues were noted, other than those described above or in the Definitions/ Glossary page.

Sample Summary

Client: Kwik Trip Inc
Project/Site: 1190 Decorah

Job ID: 310-251763-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
310-251763-1	Tank Pit	Solid	03/21/23 10:00	03/21/23 15:45

Detection Summary

Client: Kwik Trip Inc
Project/Site: 1190 Decorah

Job ID: 310-251763-1

Client Sample ID: Tank Pit

Lab Sample ID: 310-251763-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2,4-Trimethylbenzene	25.7		0.112		mg/Kg	1	☼	8260D	Total/NA
1,3,5-Trimethylbenzene	1.62		0.112		mg/Kg	1	☼	8260D	Total/NA
Ethylbenzene	0.409		0.112		mg/Kg	1	☼	8260D	Total/NA
Hexane	1.73		0.114		mg/Kg	1	☼	8260D	Total/NA
Isopropylbenzene	1.05		0.112		mg/Kg	1	☼	8260D	Total/NA
Naphthalene	0.856		0.280		mg/Kg	1	☼	8260D	Total/NA
n-Butylbenzene	5.90		0.112		mg/Kg	1	☼	8260D	Total/NA
n-Propylbenzene	5.48		0.112		mg/Kg	1	☼	8260D	Total/NA
p-Isopropyltoluene	0.782		0.112		mg/Kg	1	☼	8260D	Total/NA
sec-Butylbenzene	1.38		0.112		mg/Kg	1	☼	8260D	Total/NA
Gasoline	1320		9.68		mg/Kg	1		OA-2	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Kwik Trip Inc
Project/Site: 1190 Decorah

Job ID: 310-251763-1

Client Sample ID: Tank Pit
Date Collected: 03/21/23 10:00
Date Received: 03/21/23 15:45

Lab Sample ID: 310-251763-1
Matrix: Solid
Percent Solids: 90.1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,1,1-Trichloroethane	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,1,2,2-Tetrachloroethane	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,1,2-Trichloroethane	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,1-Dichloroethane	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,1-Dichloroethene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,1-Dichloropropene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,2,3-Trichlorobenzene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,2,3-Trichloropropane	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,2,4-Trichlorobenzene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,2,4-Trimethylbenzene	**25.7**		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,2-Dibromo-3-chloropropane	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,2-Dibromoethane (EDB)	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,2-Dichlorobenzene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,2-Dichloroethane	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,2-Dichloropropane	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,3,5-Trimethylbenzene	**1.62**		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,3-Dichlorobenzene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,3-Dichloropropane	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
1,4-Dichlorobenzene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
2,2-Dichloropropane	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
2-Butanone (MEK)	<0.839		0.839		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
2-Chlorotoluene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
4-Chlorotoluene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Acetone	<0.559		0.559		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Benzene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Bromobenzene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Bromochloromethane	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Bromodichloromethane	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Bromoform	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Bromomethane	<0.559		0.559		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Carbon disulfide	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Carbon tetrachloride	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Chlorobenzene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Chlorodibromomethane	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Chloroethane	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Chloroform	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Chloromethane	<0.280		0.280		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
cis-1,2-Dichloroethene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
cis-1,3-Dichloropropene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Dibromomethane	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Dichlorodifluoromethane	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Ethylbenzene	**0.409**		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Hexachlorobutadiene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Hexane	**1.73**		0.114		mg/Kg	☼	03/24/23 06:37	03/24/23 09:01	1
Isopropylbenzene	**1.05**		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Methyl tert-butyl ether	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Methylene chloride	<0.280		0.280		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Naphthalene	**0.856**		0.280		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1

Client: Kwik Trip Inc
Project/Site: 1190 Decorah

Job ID: 310-251763-1

Client Sample ID: Tank Pit
Date Collected: 03/21/23 10:00
Date Received: 03/21/23 15:45

Lab Sample ID: 310-251763-1
Matrix: Solid
Percent Solids: 90.1

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
n-Butylbenzene	**5.90**		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
n-Propylbenzene	**5.48**		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
p-Isopropyltoluene	**0.782**		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
sec-Butylbenzene	**1.38**		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Styrene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
tert-Butylbenzene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Tetrachloroethene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Toluene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
trans-1,2-Dichloroethene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
trans-1,3-Dichloropropene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Trichloroethene	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Trichlorofluoromethane	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Vinyl chloride	<0.112		0.112		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1
Xylenes, Total	<0.168		0.168		mg/Kg	☼	03/22/23 07:02	03/22/23 14:25	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*92*		*80 - 120*	*03/22/23 07:02*	*03/22/23 14:25*	*1*
Dibromofluoromethane (Surr)	*89*		*80 - 120*	*03/24/23 06:37*	*03/24/23 09:01*	*1*
Toluene-d8 (Surr)	*104*		*80 - 120*	*03/22/23 07:02*	*03/22/23 14:25*	*1*
Toluene-d8 (Surr)	*106*		*80 - 120*	*03/24/23 06:37*	*03/24/23 09:01*	*1*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*	*03/22/23 07:02*	*03/22/23 14:25*	*1*
4-Bromofluorobenzene (Surr)	*121*	*S1+*	*80 - 120*	*03/24/23 06:37*	*03/24/23 09:01*	*1*

Method: Iowa DNR OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	**1320**		9.68		mg/Kg		03/23/23 09:49	03/23/23 16:52	1
Diesel	<9.68	*+	9.68		mg/Kg		03/23/23 09:49	03/23/23 16:52	1
Waste Oil	<9.68		9.68		mg/Kg		03/23/23 09:49	03/23/23 16:52	1
Total Extractable Hydrocarbons	<14.5		14.5		mg/Kg		03/23/23 09:49	03/23/23 16:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
n-Octacosane	*91*		*12 - 126*	*03/23/23 09:49*	*03/23/23 16:52*	*1*

General Chemistry

Analyte	Result	Qualifier	RL	RL	Unit	D	Prepared	Analyzed	Dil Fac
Percent Moisture (EPA Moisture)	**9.9**		0.1		%			03/22/23 06:59	1
Percent Solids (EPA Moisture)	**90.1**		0.1		%			03/22/23 06:59	1

Definitions/Glossary

Client: Kwik Trip Inc
Project/Site: 1190 Decorah

Job ID: 310-251763-1

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
S1+	Surrogate recovery exceeds control limits, high biased.

GC Semi VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Surrogate Summary

Client: Kwik Trip Inc
Project/Site: 1190 Decorah

Job ID: 310-251763-1

Method: 8260D - Volatile Organic Compounds by GC/MS

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)		
		DBFM	TOL	BFB
Lab Sample ID	Client Sample ID	(80-120)	(80-120)	(80-120)
310-251763-1	Tank Pit	92	104	103
310-251763-1	Tank Pit	89	106	121 S1+
LCS 310-381874/2-A	Lab Control Sample	100	100	103
LCS 310-382122/2-A	Lab Control Sample	101	102	100
MB 310-381874/1-A	Method Blank	98	102	96
MB 310-382122/1-A	Method Blank	98	105	97

Surrogate Legend

DBFM = Dibromofluoromethane (Surr)
TOL = Toluene-d8 (Surr)
BFB = 4-Bromofluorobenzene (Surr)

Method: OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Matrix: Solid **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)
		OTCN
Lab Sample ID	Client Sample ID	(12-126)
310-251763-1	Tank Pit	91
LCS 310-382042/2-A	Lab Control Sample	113
MB 310-382042/1-A	Method Blank	89

Surrogate Legend

OTCN = n-Octacosane

Method: 8260D - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 310-381874/1-A
Matrix: Solid
Analysis Batch: 381875

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 381874

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,1,1-Trichloroethane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,1,2,2-Tetrachloroethane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,1,2-Trichloroethane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,1-Dichloroethane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,1-Dichloroethene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,1-Dichloropropene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,2,3-Trichlorobenzene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,2,3-Trichloropropane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,2,4-Trichlorobenzene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,2,4-Trimethylbenzene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,2-Dibromo-3-chloropropane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,2-Dibromoethane (EDB)	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,2-Dichlorobenzene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,2-Dichloroethane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,2-Dichloropropane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,3,5-Trimethylbenzene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,3-Dichlorobenzene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,3-Dichloropropane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
1,4-Dichlorobenzene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
2,2-Dichloropropane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
2-Butanone (MEK)	<0.716		0.716		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
2-Chlorotoluene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
4-Chlorotoluene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Acetone	<0.477		0.477		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Benzene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Bromobenzene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Bromochloromethane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Bromodichloromethane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Bromoform	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Bromomethane	<0.477		0.477		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Carbon disulfide	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Carbon tetrachloride	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Chlorobenzene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Chlorodibromomethane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Chloroethane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Chloroform	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Chloromethane	<0.239		0.239		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
cis-1,2-Dichloroethene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
cis-1,3-Dichloropropene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Dibromomethane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Dichlorodifluoromethane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Ethylbenzene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Hexachlorobutadiene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Hexane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Isopropylbenzene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Methyl tert-butyl ether	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Methylene chloride	<0.239		0.239		mg/Kg		03/22/23 07:02	03/22/23 09:13	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-381874/1-A
Matrix: Solid
Analysis Batch: 381875

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 381874

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Naphthalene	<0.239		0.239		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
n-Butylbenzene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
n-Propylbenzene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
p-Isopropyltoluene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
sec-Butylbenzene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Styrene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
tert-Butylbenzene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Tetrachloroethene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Toluene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
trans-1,2-Dichloroethene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
trans-1,3-Dichloropropene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Trichloroethene	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Trichlorofluoromethane	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Vinyl chloride	<0.0954		0.0954		mg/Kg		03/22/23 07:02	03/22/23 09:13	1
Xylenes, Total	<0.143		0.143		mg/Kg		03/22/23 07:02	03/22/23 09:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*80 - 120*	*03/22/23 07:02*	*03/22/23 09:13*	*1*
Toluene-d8 (Surr)	*102*		*80 - 120*	*03/22/23 07:02*	*03/22/23 09:13*	*1*
4-Bromofluorobenzene (Surr)	*96*		*80 - 120*	*03/22/23 07:02*	*03/22/23 09:13*	*1*

Lab Sample ID: LCS 310-381874/2-A
Matrix: Solid
Analysis Batch: 381875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 381874

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	0.935	1.068		mg/Kg		114	78 - 127
1,1,1-Trichloroethane	0.935	1.110		mg/Kg		119	77 - 136
1,1,2,2-Tetrachloroethane	0.935	1.095		mg/Kg		117	70 - 129
1,1,2-Trichloroethane	0.935	1.129		mg/Kg		121	74 - 130
1,1-Dichloroethane	0.935	1.116		mg/Kg		119	74 - 139
1,1-Dichloroethene	0.935	1.097		mg/Kg		117	62 - 144
1,1-Dichloropropene	0.935	1.118		mg/Kg		120	78 - 136
1,2,3-Trichlorobenzene	0.935	0.9769		mg/Kg		104	50 - 150
1,2,3-Trichloropropane	0.935	1.087		mg/Kg		116	69 - 133
1,2,4-Trichlorobenzene	0.935	1.011		mg/Kg		108	67 - 131
1,2,4-Trimethylbenzene	0.935	1.023		mg/Kg		109	76 - 129
1,2-Dibromo-3-chloropropane	0.935	1.167		mg/Kg		125	50 - 150
1,2-Dibromoethane (EDB)	0.935	1.134		mg/Kg		121	77 - 130
1,2-Dichlorobenzene	0.935	1.002		mg/Kg		107	74 - 123
1,2-Dichloroethane	0.935	1.150		mg/Kg		123	73 - 138
1,2-Dichloropropane	0.935	1.186		mg/Kg		127	79 - 130
1,3,5-Trimethylbenzene	0.935	1.005		mg/Kg		107	76 - 127
1,3-Dichlorobenzene	0.935	0.9906		mg/Kg		106	75 - 123
1,3-Dichloropropane	0.935	1.077		mg/Kg		115	76 - 133
1,4-Dichlorobenzene	0.935	0.9902		mg/Kg		106	76 - 123
2,2-Dichloropropane	0.935	1.175		mg/Kg		126	50 - 150
2-Butanone (MEK)	1.87	2.321		mg/Kg		124	50 - 150

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-381874/2-A
Matrix: Solid
Analysis Batch: 381875

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 381874

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
2-Chlorotoluene	0.935	1.077		mg/Kg		115	77 - 125
4-Chlorotoluene	0.935	1.056		mg/Kg		113	76 - 124
Acetone	1.87	2.428		mg/Kg		130	50 - 150
Benzene	0.935	1.137		mg/Kg		122	80 - 130
Bromobenzene	0.935	1.112		mg/Kg		119	76 - 124
Bromochloromethane	0.935	1.243		mg/Kg		133	78 - 141
Bromodichloromethane	0.935	1.116		mg/Kg		119	74 - 129
Bromoform	0.935	0.8563		mg/Kg		92	63 - 128
Carbon disulfide	0.935	1.122		mg/Kg		120	51 - 149
Carbon tetrachloride	0.935	1.042		mg/Kg		111	75 - 136
Chlorobenzene	0.935	1.045		mg/Kg		112	79 - 125
Chlorodibromomethane	0.935	1.030		mg/Kg		110	73 - 125
Chloroform	0.935	1.073		mg/Kg		115	74 - 133
cis-1,2-Dichloroethene	0.935	1.101		mg/Kg		118	76 - 136
cis-1,3-Dichloropropene	0.935	1.100		mg/Kg		118	78 - 129
Dibromomethane	0.935	1.194		mg/Kg		128	77 - 135
Ethylbenzene	0.935	1.077		mg/Kg		115	80 - 128
Hexachlorobutadiene	0.935	1.150		mg/Kg		123	50 - 150
Hexane	0.935	1.446	*+	mg/Kg		155	45 - 150
Isopropylbenzene	0.935	1.086		mg/Kg		116	80 - 125
Methyl tert-butyl ether	0.935	1.133		mg/Kg		121	70 - 138
Methylene chloride	0.935	1.095		mg/Kg		117	50 - 150
Naphthalene	0.935	0.9547		mg/Kg		102	50 - 150
n-Butylbenzene	0.935	1.058		mg/Kg		113	73 - 126
n-Propylbenzene	0.935	1.072		mg/Kg		115	79 - 126
p-Isopropyltoluene	0.935	1.017		mg/Kg		109	75 - 126
sec-Butylbenzene	0.935	1.025		mg/Kg		110	75 - 126
Styrene	0.935	1.064		mg/Kg		114	79 - 122
tert-Butylbenzene	0.935	1.017		mg/Kg		109	76 - 125
Tetrachloroethene	0.935	1.122		mg/Kg		120	77 - 133
Toluene	0.935	1.113		mg/Kg		119	80 - 127
trans-1,2-Dichloroethene	0.935	1.112		mg/Kg		119	70 - 136
trans-1,3-Dichloropropene	0.935	1.075		mg/Kg		115	74 - 129
Trichloroethene	0.935	1.159		mg/Kg		124	80 - 131
Xylenes, Total	1.87	2.190		mg/Kg		117	80 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*100*		*80 - 120*
Toluene-d8 (Surr)	*100*		*80 - 120*
4-Bromofluorobenzene (Surr)	*103*		*80 - 120*

Lab Sample ID: MB 310-382122/1-A
Matrix: Solid
Analysis Batch: 382123

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382122

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1,2-Tetrachloroethane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
1,1,1-Trichloroethane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-382122/1-A
Matrix: Solid
Analysis Batch: 382123

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382122

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2,2-Tetrachloroethane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
1,1,2-Trichloroethane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
1,1-Dichloroethane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
1,1-Dichloroethene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
1,1-Dichloropropene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
1,2,3-Trichlorobenzene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
1,2,3-Trichloropropane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
1,2,4-Trichlorobenzene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
1,2,4-Trimethylbenzene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
1,2-Dibromo-3-chloropropane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
1,2-Dibromoethane (EDB)	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
1,2-Dichlorobenzene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
1,2-Dichloroethane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
1,2-Dichloropropane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
1,3,5-Trimethylbenzene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
1,3-Dichlorobenzene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
1,3-Dichloropropane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
1,4-Dichlorobenzene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
2,2-Dichloropropane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
2-Butanone (MEK)	<0.738		0.738		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
2-Chlorotoluene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
4-Chlorotoluene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Acetone	<0.492		0.492		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Benzene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Bromobenzene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Bromochloromethane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Bromodichloromethane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Bromoform	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Bromomethane	<0.492		0.492		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Carbon disulfide	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Carbon tetrachloride	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Chlorobenzene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Chlorodibromomethane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Chloroethane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Chloroform	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Chloromethane	<0.246		0.246		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
cis-1,2-Dichloroethene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
cis-1,3-Dichloropropene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Dibromomethane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Dichlorodifluoromethane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Ethylbenzene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Hexachlorobutadiene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Hexane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Isopropylbenzene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Methyl tert-butyl ether	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Methylene chloride	<0.246		0.246		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Naphthalene	<0.246		0.246		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
n-Butylbenzene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
n-Propylbenzene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 310-382122/1-A
Matrix: Solid
Analysis Batch: 382123

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382122

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Isopropyltoluene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
sec-Butylbenzene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Styrene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
tert-Butylbenzene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Tetrachloroethene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Toluene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
trans-1,2-Dichloroethene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
trans-1,3-Dichloropropene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Trichloroethene	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Trichlorofluoromethane	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Vinyl chloride	<0.0984		0.0984		mg/Kg		03/24/23 06:37	03/24/23 08:13	1
Xylenes, Total	<0.148		0.148		mg/Kg		03/24/23 06:37	03/24/23 08:13	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Dibromofluoromethane (Surr)	*98*		*80 - 120*	*03/24/23 06:37*	*03/24/23 08:13*	*1*
Toluene-d8 (Surr)	*105*		*80 - 120*	*03/24/23 06:37*	*03/24/23 08:13*	*1*
4-Bromofluorobenzene (Surr)	*97*		*80 - 120*	*03/24/23 06:37*	*03/24/23 08:13*	*1*

Lab Sample ID: LCS 310-382122/2-A
Matrix: Solid
Analysis Batch: 382123

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382122

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1,2-Tetrachloroethane	0.930	1.020		mg/Kg		110	78 - 127
1,1,1-Trichloroethane	0.930	1.064		mg/Kg		114	77 - 136
1,1,2,2-Tetrachloroethane	0.930	1.048		mg/Kg		113	70 - 129
1,1,2-Trichloroethane	0.930	1.084		mg/Kg		116	74 - 130
1,1-Dichloroethane	0.930	1.116		mg/Kg		120	74 - 139
1,1-Dichloroethene	0.930	1.095		mg/Kg		118	62 - 144
1,1-Dichloropropene	0.930	1.093		mg/Kg		118	78 - 136
1,2,3-Trichlorobenzene	0.930	0.9849		mg/Kg		106	50 - 150
1,2,3-Trichloropropane	0.930	1.054		mg/Kg		113	69 - 133
1,2,4-Trichlorobenzene	0.930	0.9803		mg/Kg		105	67 - 131
1,2,4-Trimethylbenzene	0.930	0.9951		mg/Kg		107	76 - 129
1,2-Dibromo-3-chloropropane	0.930	1.114		mg/Kg		120	50 - 150
1,2-Dibromoethane (EDB)	0.930	1.043		mg/Kg		112	77 - 130
1,2-Dichlorobenzene	0.930	1.016		mg/Kg		109	74 - 123
1,2-Dichloroethane	0.930	1.120		mg/Kg		120	73 - 138
1,2-Dichloropropane	0.930	1.111		mg/Kg		119	79 - 130
1,3,5-Trimethylbenzene	0.930	1.005		mg/Kg		108	76 - 127
1,3-Dichlorobenzene	0.930	0.9906		mg/Kg		106	75 - 123
1,3-Dichloropropane	0.930	1.066		mg/Kg		115	76 - 133
1,4-Dichlorobenzene	0.930	0.9854		mg/Kg		106	76 - 123
2,2-Dichloropropane	0.930	1.168		mg/Kg		126	50 - 150
2-Butanone (MEK)	1.86	2.281		mg/Kg		123	50 - 150
2-Chlorotoluene	0.930	1.050		mg/Kg		113	77 - 125
4-Chlorotoluene	0.930	1.036		mg/Kg		111	76 - 124
Acetone	1.86	2.544		mg/Kg		137	50 - 150

Method: 8260D - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 310-382122/2-A
Matrix: Solid
Analysis Batch: 382123

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382122

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Benzene	0.930	1.100		mg/Kg		118	80 - 130
Bromobenzene	0.930	1.064		mg/Kg		114	76 - 124
Bromochloromethane	0.930	1.166		mg/Kg		125	78 - 141
Bromodichloromethane	0.930	1.002		mg/Kg		108	74 - 129
Bromoform	0.930	0.7735		mg/Kg		83	63 - 128
Carbon disulfide	0.930	0.9388		mg/Kg		101	51 - 149
Carbon tetrachloride	0.930	1.056		mg/Kg		114	75 - 136
Chlorobenzene	0.930	1.032		mg/Kg		111	79 - 125
Chlorodibromomethane	0.930	0.9302		mg/Kg		100	73 - 125
Chloroform	0.930	1.070		mg/Kg		115	74 - 133
cis-1,2-Dichloroethene	0.930	1.052		mg/Kg		113	76 - 136
cis-1,3-Dichloropropene	0.930	1.080		mg/Kg		116	78 - 129
Dibromomethane	0.930	1.163		mg/Kg		125	77 - 135
Ethylbenzene	0.930	1.050		mg/Kg		113	80 - 128
Hexachlorobutadiene	0.930	1.116		mg/Kg		120	50 - 150
Hexane	0.930	1.380		mg/Kg		148	45 - 150
Isopropylbenzene	0.930	1.046		mg/Kg		112	80 - 125
Methyl tert-butyl ether	0.930	1.118		mg/Kg		120	70 - 138
Methylene chloride	0.930	0.9488		mg/Kg		102	50 - 150
Naphthalene	0.930	0.9264		mg/Kg		100	50 - 150
n-Butylbenzene	0.930	1.038		mg/Kg		112	73 - 126
n-Propylbenzene	0.930	1.042		mg/Kg		112	79 - 126
p-Isopropyltoluene	0.930	1.015		mg/Kg		109	75 - 126
sec-Butylbenzene	0.930	0.9888		mg/Kg		106	75 - 126
Styrene	0.930	1.016		mg/Kg		109	79 - 122
tert-Butylbenzene	0.930	1.017		mg/Kg		109	76 - 125
Tetrachloroethene	0.930	1.091		mg/Kg		117	77 - 133
Toluene	0.930	1.065		mg/Kg		115	80 - 127
trans-1,2-Dichloroethene	0.930	1.125		mg/Kg		121	70 - 136
trans-1,3-Dichloropropene	0.930	1.053		mg/Kg		113	74 - 129
Trichloroethene	0.930	1.080		mg/Kg		116	80 - 131
Xylenes, Total	1.86	2.114		mg/Kg		114	80 - 128

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Dibromofluoromethane (Surr)	*101*		*80 - 120*
Toluene-d8 (Surr)	*102*		*80 - 120*
4-Bromofluorobenzene (Surr)	*100*		*80 - 120*

Method: OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC)

Lab Sample ID: MB 310-382042/1-A
Matrix: Solid
Analysis Batch: 381999

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 382042

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Gasoline	<9.86		9.86		mg/Kg		03/23/23 09:49	03/23/23 16:23	1
Diesel	<9.86		9.86		mg/Kg		03/23/23 09:49	03/23/23 16:23	1
Waste Oil	<9.86		9.86		mg/Kg		03/23/23 09:49	03/23/23 16:23	1
Total Extractable Hydrocarbons	<14.8		14.8		mg/Kg		03/23/23 09:49	03/23/23 16:23	1

Method: OA-2 - Iowa - Extractable Petroleum Hydrocarbons (GC) (Continued)

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
n-Octacosane	89		12 - 126	03/23/23 09:49	03/23/23 16:23	1

Lab Sample ID: LCS 310-382042/2-A
Matrix: Solid
Analysis Batch: 381999

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 382042

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits		
Diesel			126	161.6	*+	mg/Kg		128	34 - 120		

Surrogate	LCS %Recovery	LCS Qualifier	Limits
n-Octacosane	113		12 - 126

Method: Moisture - Percent Moisture

Lab Sample ID: 310-251763-1 DU
Matrix: Solid
Analysis Batch: 381873

Client Sample ID: Tank Pit
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Percent Moisture	9.9			7.5		%				27	39
Percent Solids	90.1			92.5		%				3	10

QC Association Summary

Client: Kwik Trip Inc
Project/Site: 1190 Decorah

Job ID: 310-251763-1

GC/MS VOA

Prep Batch: 381874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-251763-1	Tank Pit	Total/NA	Solid	5035	
MB 310-381874/1-A	Method Blank	Total/NA	Solid	5035	
LCS 310-381874/2-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 381875

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-251763-1	Tank Pit	Total/NA	Solid	8260D	381874
MB 310-381874/1-A	Method Blank	Total/NA	Solid	8260D	381874
LCS 310-381874/2-A	Lab Control Sample	Total/NA	Solid	8260D	381874

Prep Batch: 382122

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-251763-1	Tank Pit	Total/NA	Solid	5035	
MB 310-382122/1-A	Method Blank	Total/NA	Solid	5035	
LCS 310-382122/2-A	Lab Control Sample	Total/NA	Solid	5035	

Analysis Batch: 382123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-251763-1	Tank Pit	Total/NA	Solid	8260D	382122
MB 310-382122/1-A	Method Blank	Total/NA	Solid	8260D	382122
LCS 310-382122/2-A	Lab Control Sample	Total/NA	Solid	8260D	382122

GC Semi VOA

Analysis Batch: 381999

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-251763-1	Tank Pit	Total/NA	Solid	OA-2	382042
MB 310-382042/1-A	Method Blank	Total/NA	Solid	OA-2	382042
LCS 310-382042/2-A	Lab Control Sample	Total/NA	Solid	OA-2	382042

Prep Batch: 382042

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-251763-1	Tank Pit	Total/NA	Solid	3546	
MB 310-382042/1-A	Method Blank	Total/NA	Solid	3546	
LCS 310-382042/2-A	Lab Control Sample	Total/NA	Solid	3546	

General Chemistry

Analysis Batch: 381873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
310-251763-1	Tank Pit	Total/NA	Solid	Moisture	
310-251763-1 DU	Tank Pit	Total/NA	Solid	Moisture	

Lab Chronicle

Client: Kwik Trip Inc
Project/Site: 1190 Decorah

Job ID: 310-251763-1

Client Sample ID: Tank Pit

Lab Sample ID: 310-251763-1

Date Collected: 03/21/23 10:00

Matrix: Solid

Date Received: 03/21/23 15:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	3546			382042	GW4G	EET CF	03/23/23 09:49
Total/NA	Analysis	OA-2		1	381999	C3AA	EET CF	03/23/23 16:52
Total/NA	Analysis	Moisture		1	381873	DGU1	EET CF	03/22/23 06:59

Client Sample ID: Tank Pit

Lab Sample ID: 310-251763-1

Date Collected: 03/21/23 10:00

Matrix: Solid

Date Received: 03/21/23 15:45

Percent Solids: 90.1

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Prep	5035			381874	MZR8	EET CF	03/22/23 07:02
Total/NA	Analysis	8260D		1	381875	MZR8	EET CF	03/22/23 14:25
Total/NA	Prep	5035			382122	MZR8	EET CF	03/24/23 06:37
Total/NA	Analysis	8260D		1	382123	MZR8	EET CF	03/24/23 09:01

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

Accreditation/Certification Summary

Client: Kwik Trip Inc
Project/Site: 1190 Decorah

Job ID: 310-251763-1

Laboratory: Eurofins Cedar Falls

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Iowa	State	007	12-01-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
8260D	5035	Solid	1,2,3-Trichlorobenzene
8260D	5035	Solid	1,2,4-Trichlorobenzene
8260D	5035	Solid	Bromobenzene
8260D	5035	Solid	Hexane
8260D	5035	Solid	p-Isopropyltoluene
8260D	5035	Solid	sec-Butylbenzene
8260D	5035	Solid	tert-Butylbenzene
Moisture		Solid	Percent Moisture
Moisture		Solid	Percent Solids

Method Summary

Client: Kwik Trip Inc
Project/Site: 1190 Decorah

Job ID: 310-251763-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CF
OA-2	Iowa - Extractable Petroleum Hydrocarbons (GC)	Iowa DNR	EET CF
Moisture	Percent Moisture	EPA	EET CF
3546	Microwave Extraction	SW846	EET CF
5035	Closed System Purge and Trap	SW846	EET CF

Protocol References:

EPA = US Environmental Protection Agency

Iowa DNR = Iowa Department of Natural Resources

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

EET CF = Eurofins Cedar Falls, 3019 Venture Way, Cedar Falls, IA 50613, TEL (319)277-2401

eurofins | Environment Testing America

310-251763 Chain of Custody

Cooler/Sample Receipt and Temperature Log Form

Client Information			
Client:	K.K Trip		
City/State:	CITY: La Crosse	STATE: WI	Project: 1190 Decorah
Receipt Information			
Date/Time Received:	DATE: 1545	TIME: 1545	Received By: TO

Delivery Type: ☐ UPS ☐ FedEx ☐ FedEx Ground ☐ US Mail ☐ Spee-Dee ☐ Lab Courier ☐ Lab Field Services ☑ Client Drop-off ☐ Other:_____

Condition of Cooler/Containers

Sample(s) received in Cooler?	☑ Yes	☐ No	*If yes:* Cooler ID:
Multiple Coolers?	☐ Yes	☑ No	*If yes:* Cooler # _____ of _____
Cooler Custody Seals Present?	☐ Yes	☑ No	*If yes:* Cooler custody seals intact? ☐ Yes ☐ No
Sample Custody Seals Present?	☐ Yes	☑ No	*If yes:* Sample custody seals intact? ☐ Yes ☐ No
Trip Blank Present?	☐ Yes	☑ No	*If yes:* Which VOA samples are in cooler? ↓

Temperature Record

Coolant: ☑ Wet ice ☐ Blue ice ☐ Dry ice ☐ Other:_____ ☐ NONE

Thermometer ID: U	Correction Factor (°C): 0.0

Temp Blank Temperature – If no temp blank, or temp blank temperature above criteria, proceed to Sample Container Temperature

Uncorrected Temp (°C): -1.8	Corrected Temp (°C): -1.8

Sample Container Temperature

	CONTAINER 1	CONTAINER 2
Container(s) used:		
Uncorrected Temp (°C):		
Corrected Temp (°C):		

Exceptions Noted

1) If temperature exceeds criteria, was sample(s) received same day of sampling? ☐ Yes ☐ No
   a) *If yes:* Is there evidence that the chilling process began? ☐ Yes ☐ No

2) If temperature is <0°C, are there obvious signs that the integrity of sample containers is compromised? (e.g., bulging septa, broken/cracked bottles, frozen solid?) ☐ Yes ☑ No

NOTE: If yes, contact PM before proceeding. If no, proceed with login

Additional Comments

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Cedar Falls Division
704 Enterprise Drive
Cedar Falls, IA 50613

Phone 319-277-2401 or 800-750-2401
Fax 319-277-2425

To assist us in using the proper analytical methods, is this work being conducted for regulatory purposes?
Compliance Monitoring _____

Client Name: Kwik Trip Client #: _____
Address: _____
City/State/Zip Code: La Crosse WI
Project Manager: Kevin Nestingen
Email Address: KNestingen@kwiktrip.com
Telephone Number: 608-793-6464 Fax: _____
Sampler Name (Print Name): Dave Cleary
Sampler Signature: Dave Cleary

Project Name: 1190 Decorah
Project #: 1190 Decorah
Site/Location ID: Decorah State: IA
Report To: Terracon and Kwik Trip
Invoice To: Kwik Trip
Quote #: _____ PO#: M797392872

TAT
___ Standard
X Rush (surcharges may apply)
Date Needed: _____
Fax Results: Y N
Email Results (Y) N

QC Deliverables
___ None
___ Level 2 *(Batch QC)*
___ Level 3
___ Level 4
Other _____

SAMPLE ID	Date Sampled	Time Sampled	G = Grab, C = Composite	Field Filtered	Matrix: SL - Sludge, DW - Drinking Water, GW - Groundwater, S - Soil/Solid, WW - Wastewater, Specify, Other	Preservation & # of Containers: HNO_3	HCl	NaOH	H_2SO_4	Methanol	None	Other (Specify)	Analyze For: VOC 8260	OA-2	TCLP (Hold)	REMARKS
Tank Pit	3-21-23	10:00	G								3		1	1	Hold	
eMail to Kevin and						Dave Cleary w/ Terracon										

Special Instructions:
Rush VOC + OA-2 (TCLP will be pending these Results

LABORATORY COMMENTS:

Relinquished By: Daly	3-21-23 Date	1500 Time	Received By: Rob Bergma	3-21-23 Date	1500 Time
Relinquished By: Rob Bergma	3-21-23 Date	1545 Time	Received By: TL	3/21/23 Date	1545 Time
Relinquished By	Date	Time	Received By	Date	Time

TAL-0033 (0708)

Page _____ of _____

Login Sample Receipt Checklist

Client: Kwik Trip Inc

Job Number: 310-251763-1

Login Number: 251763

List Source: Eurofins Cedar Falls

List Number: 1

Creator: Costello, Mackenzie K

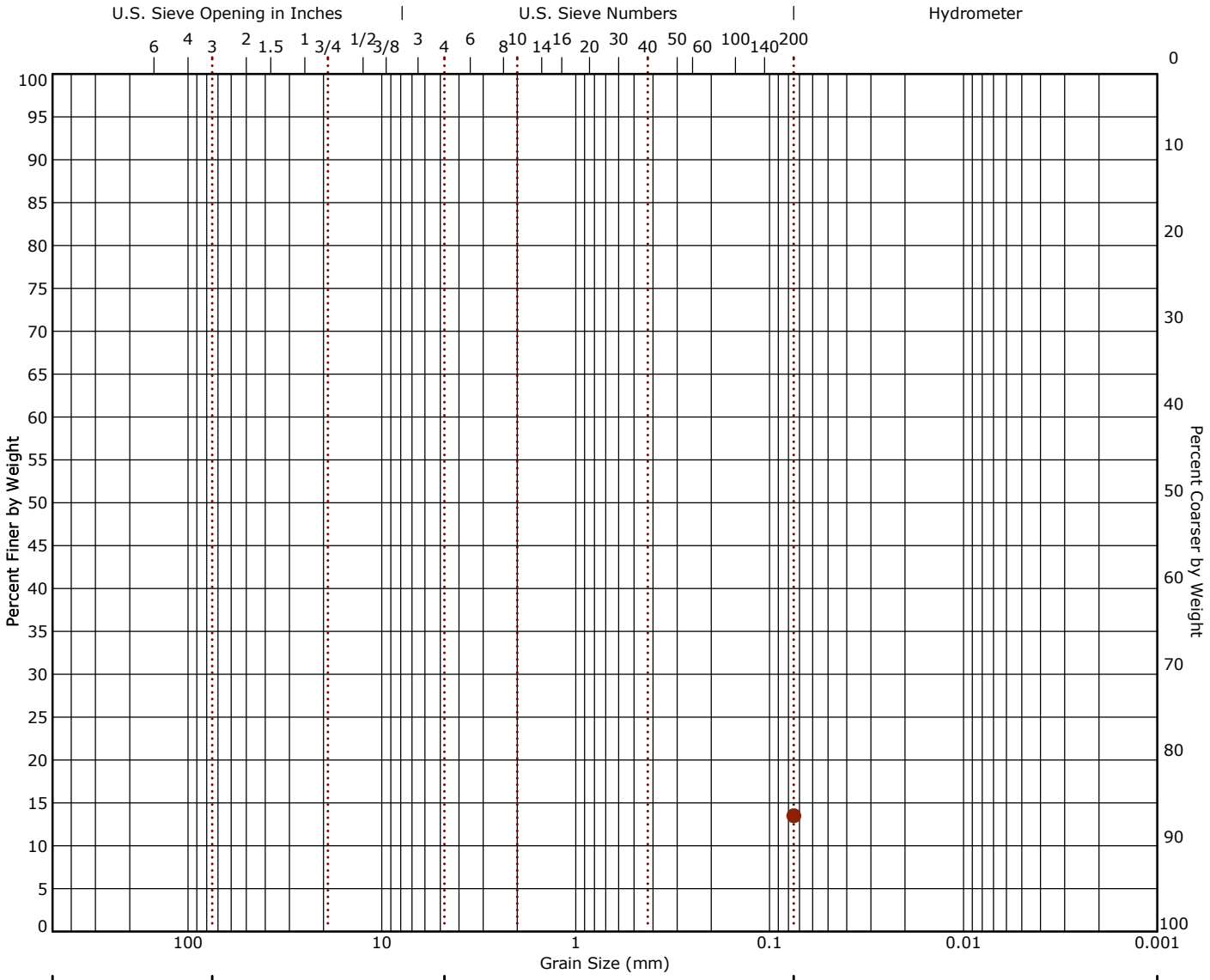
Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	N/A	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Kwik Trip 1190 Decorah
302 - 308 College Drive | Decorah, IA
Terracon Project No. 13217030A

Terracon
3105 Capital Way, Ste 5
Cedar Falls, IA

Grain Size Distribution

ASTM D422 / ASTM C136



Cobbles	Gravel		Sand			Silt or Clay
	coarse	fine	coarse	medium	fine	

Boring ID	Depth	% Cobbles	% Gravel	% Sand	% Fines	% Silt	% Clay	USCS
Test Pit	9 - 10				13.5			SP-SC

Description
SAND, with gravel and clay, fine to coarse grained, dark brown

Remarks
Moisture Content: 11.1%

Sieve	% Finer	Sieve	% Finer	Sieve	% Finer
#200	13.5				

Grain Size			
D_{60}			
D_{30}			
D_{10}			

Coefficients			
C_c			
C_u			

Laboratory tests are not valid if separated from original report.

DAVY LABORATORIES
A Division of Davy Engineering Co., Inc.
115 6th Street South
La Crosse, WI 54601
(608) 782-3130
www.davyinc.com

Division of Davy Engineering Co.

LABORATORY ANALYSIS REPORT

La Crosse Hwy Dept.
Attn: Jay Anderson
301 Carlson Rd
West Salem, WI 54669

Date: December 27, 2023
Client No: 5006

Sample No: 23L0242-01
Sample Site: Midway Shop
Sample Collected: 08-Dec-23 10:45
Sample Received: 11-Dec-23 08:33

Parameter	Result	Units	LOD	LOQ/RL	Dilution	Prepared	Analyzed	Method	Qualifier
Laboratory Results									
Particle Size Distribution (Sieve)	**3**	**% by Volume**			1	12-Dec-23 00:00	12-Dec-23 00:00	ASTM D421-85	Sub-5
Subcontracted									
Free Liquid	**0.00**	**%**			1	15-Dec-23 00:00	15-Dec-23 00:00	EPA 9095B	A-01

Submitted by:
Davy Laboratories

Jennifer M. Buchholz
Jennifer M. Buchholz, Laboratory Director

The laboratory analyses reported were determined in accordance with methods from approved authoritative sources. Approved authoritative sources are defined and listed within the respective state certification codes. The results are representative of the samples only; conditions can be expected to vary at different times and under different sampling conditions. This report may not be reproduced, except in full, without the written approval of the laboratory.
WI Certification 632021390 and WI DATCP 105-216, MN NELAC Certification 055-999-151, IA Certification 304. Revision #3 - 7/29/2019

DAVY LABORATORIES
A Division of Davy Engineering Co., Inc.
115 6th Street South
La Crosse, WI 54601
(608) 782-3130
www.davyinc.com

LABORATORY ANALYSIS REPORT

La Crosse Hwy Dept.
Attn: Jay Anderson
301 Carlson Rd
West Salem, WI 54669

Date: December 27, 2023
Client No: 5006

Notes and Definitions

Z-01	0.00
Sub-5	Wisconsin Laboratory Certification No. 157066030
A-01	WI DNR Cert # 445023150
LOD	Limit of Detection, adjusted for the dilution factor
LOQ/RL	Limit of Quantitation/Reporting Limit, adjusted for the dilution factor

Total metals are equivalent to total recoverable metals.

Cooler Information

Temperature °C	
Received on Ice	No
Required COC Information completed	Yes
Sample labels match COC	Yes
All samples received in the appropriate Containers	Yes
All samples received with sufficient volume	Yes
All samples received with sufficient holding time	Yes
All sample bottles received with H2SO4 were pH <2	No
All sample bottles received with HNO3 were pH <2	No
All sample bottles received with HCl were pH <2	No
All sample bottles received with NaOH were pH >12	No
All sample bottles for cyanide confirmed Sulfide absent	No
All sample bottles for cyanide confirmed Residual Cl absent	No

Preservation of VOC samples checked by the analyst.
Preservation of FOG samples checked by the analyst.
Residual Chlorine absent checked by the analyst unless noted above.

Case Narrative

DAVY LABORATORIES
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www.davyinc.com

Division of Davy Engineering Co.

LABORATORY ANALYSIS REPORT

La Crosse Hwy Dept.
Attn: Jay Anderson
301 Carlson Rd
West Salem, WI 54669

Date: December 27, 2023
Client No: 5006

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

March 19, 2020

Paul Lenaker
Terracon, Inc. - Franklin
9856 S. 57th Street
Franklin, WI 53132

RE: Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Dear Paul Lenaker:
Enclosed are the analytical results for sample(s) received by the laboratory on March 13, 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,

Dan Milewsky
dan.milewsky@pacelabs.com
(920)469-2436
Project Manager

Enclosures

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Pace Analytical Services Green Bay
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

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40204699001	P-1	Water	03/11/20 12:25	03/13/20 08:20
40204699002	P-2	Water	03/11/20 13:20	03/13/20 08:20
40204699003	P-3	Water	03/11/20 14:49	03/13/20 08:20
40204699004	P-4	Water	03/11/20 15:10	03/13/20 08:20
40204699005	P-5	Water	03/11/20 16:05	03/13/20 08:20
40204699006	P-6	Water	03/11/20 16:55	03/13/20 08:20
40204699007	P-7	Water	03/11/20 17:58	03/13/20 08:20
40204699008	P-8	Water	03/11/20 19:10	03/13/20 08:20
40204699009	P-9	Water	03/11/20 18:41	03/13/20 08:20
40204699010	P-1 (1')	Solid	03/11/20 12:15	03/13/20 08:20
40204699011	P-1 (24')	Solid	03/11/20 12:16	03/13/20 08:20
40204699012	P-2 (1')	Solid	03/11/20 13:10	03/13/20 08:20
40204699013	P-2 (24')	Solid	03/11/20 13:11	03/13/20 08:20
40204699014	P-3 (0.5')	Solid	03/11/20 14:25	03/13/20 08:20
40204699015	P-3 (23')	Solid	03/11/20 14:26	03/13/20 08:20
40204699016	P-4 (2')	Solid	03/11/20 15:00	03/13/20 08:20
40204699017	P-4 (24.5')	Solid	03/11/20 15:01	03/13/20 08:20
40204699018	P-5 (2.5')	Solid	03/11/20 15:45	03/13/20 08:20
40204699019	P-5 (23')	Solid	03/11/20 15:46	03/13/20 08:20
40204699020	P-6 (2.5')	Solid	03/11/20 16:40	03/13/20 08:20
40204699021	P-6 (25')	Solid	03/11/20 16:41	03/13/20 08:20
40204699022	P-7 (1')	Solid	03/11/20 17:45	03/13/20 08:20
40204699023	P-7 (25')	Solid	03/11/20 17:46	03/13/20 08:20
40204699024	P-8 (5')	Solid	03/11/20 19:01	03/13/20 08:20
40204699025	P-8 (24')	Solid	03/11/20 19:02	03/13/20 08:20
40204699026	P-9 (2')	Solid	03/11/20 18:23	03/13/20 08:20
40204699027	P-9 (23')	Solid	03/11/20 18:24	03/13/20 08:20
40204699028	TRIP-SOIL	Solid	03/11/20 19:15	03/13/20 08:20

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40204699001	**P-1**	EPA 8260	LAP	64	PASI-G
40204699002	**P-2**	EPA 8260	HNW	64	PASI-G
40204699003	**P-3**	EPA 8260	HNW	64	PASI-G
40204699004	**P-4**	EPA 8260	HNW	64	PASI-G
40204699005	**P-5**	EPA 8260	HNW	64	PASI-G
40204699006	**P-6**	EPA 8260	HNW	64	PASI-G
40204699007	**P-7**	EPA 8260	HNW	64	PASI-G
40204699008	**P-8**	EPA 8260	HNW	64	PASI-G
40204699009	**P-9**	EPA 8260	HNW	64	PASI-G
40204699010	**P-1 (1')**	WI MOD DRO	MRN	1	PASI-G
		EPA 6010	TXW	1	PASI-G
		EPA 8260	MDS	64	PASI-G
		ASTM D2974-87	MMX	1	PASI-G
40204699011	**P-1 (24')**	WI MOD DRO	MRN	1	PASI-G
		EPA 6010	TXW	1	PASI-G
		EPA 8260	MDS	64	PASI-G
		ASTM D2974-87	MMX	1	PASI-G
40204699012	**P-2 (1')**	WI MOD DRO	MRN	1	PASI-G
		EPA 6010	TXW	1	PASI-G
		EPA 8260	MDS	64	PASI-G
		ASTM D2974-87	MMX	1	PASI-G
40204699013	**P-2 (24')**	WI MOD DRO	MRN	1	PASI-G
		EPA 6010	TXW	1	PASI-G
		EPA 8260	MDS	64	PASI-G
		ASTM D2974-87	MMX	1	PASI-G
40204699014	**P-3 (0.5')**	WI MOD DRO	MRN	1	PASI-G
		EPA 6010	TXW	1	PASI-G
		EPA 8260	MDS	64	PASI-G
		ASTM D2974-87	MMX	1	PASI-G
40204699015	**P-3 (23')**	WI MOD DRO	MRN	1	PASI-G
		EPA 6010	TXW	1	PASI-G
		EPA 8260	MDS	64	PASI-G
		ASTM D2974-87	MMX	1	PASI-G
40204699016	**P-4 (2')**	WI MOD DRO	MRN	1	PASI-G
		EPA 6010	TXW	1	PASI-G
		EPA 8260	MDS	64	PASI-G
		ASTM D2974-87	MMX	1	PASI-G

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40204699017	**P-4 (24.5')**	WI MOD DRO	MRN	1	PASI-G
		EPA 6010	TXW	1	PASI-G
		EPA 8260	MDS	64	PASI-G
		ASTM D2974-87	MMX	1	PASI-G
40204699018	**P-5 (2.5')**	WI MOD DRO	MRN	1	PASI-G
		EPA 6010	TXW	1	PASI-G
		EPA 8260	MDS	64	PASI-G
		ASTM D2974-87	MMX	1	PASI-G
40204699019	**P-5 (23')**	WI MOD DRO	MRN	1	PASI-G
		EPA 6010	TXW	1	PASI-G
		EPA 8260	MDS	64	PASI-G
		ASTM D2974-87	MMX	1	PASI-G
40204699020	**P-6 (2.5')**	WI MOD DRO	MRN	1	PASI-G
		EPA 6010	TXW	1	PASI-G
		EPA 8260	MDS	64	PASI-G
		ASTM D2974-87	MMX	1	PASI-G
40204699021	**P-6 (25')**	WI MOD DRO	MRN	1	PASI-G
		EPA 6010	TXW	1	PASI-G
		EPA 8260	MDS	64	PASI-G
		ASTM D2974-87	MMX	1	PASI-G
40204699022	**P-7 (1')**	WI MOD DRO	MRN	1	PASI-G
		EPA 6010	TXW	1	PASI-G
		EPA 8260	MDS	64	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40204699023	**P-7 (25')**	WI MOD DRO	MRN	1	PASI-G
		EPA 6010	TXW	1	PASI-G
		EPA 8260	MDS	64	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40204699024	**P-8 (5')**	WI MOD DRO	MRN	1	PASI-G
		EPA 6010	TXW	1	PASI-G
		EPA 8260	MDS	64	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40204699025	**P-8 (24')**	WI MOD DRO	MRN	1	PASI-G
		EPA 6010	TXW	1	PASI-G
		EPA 8260	MDS	64	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40204699026	**P-9 (2')**	WI MOD DRO	MRN	1	PASI-G

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SAMPLE ANALYTE COUNT

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6010	TXW	1	PASI-G
		EPA 8260	MDS	64	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40204699027	**P-9 (23')**	WI MOD DRO	MRN	1	PASI-G
		EPA 6010	TXW	1	PASI-G
		EPA 8260	MDS	64	PASI-G
		ASTM D2974-87	SKW	1	PASI-G
40204699028	**TRIP-SOIL**	EPA 8260	MDS	64	PASI-G

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SUMMARY OF DETECTION

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40204699001	**P-1**					
EPA 8260	Chloroform	1.4J	ug/L	5.0	03/16/20 16:22	
40204699008	**P-8**					
EPA 8260	Ethylbenzene	0.39J	ug/L	1.1	03/16/20 18:34	
EPA 8260	Toluene	0.51J	ug/L	0.90	03/16/20 18:34	
40204699010	**P-1 (1')**					
EPA 6010	Lead	14.2	mg/kg	2.4	03/16/20 18:33	
ASTM D2974-87	Percent Moisture	17.8	%	0.10	03/14/20 11:45	
40204699011	**P-1 (24')**					
WI MOD DRO	Diesel Range Organics	1.6J	mg/kg	3.6	03/17/20 07:33	
EPA 6010	Lead	1.9J	mg/kg	2.0	03/16/20 18:40	
ASTM D2974-87	Percent Moisture	3.6	%	0.10	03/14/20 11:45	
40204699012	**P-2 (1')**					
EPA 6010	Lead	18.9	mg/kg	2.4	03/16/20 18:43	
ASTM D2974-87	Percent Moisture	20.5	%	0.10	03/14/20 11:45	
40204699013	**P-2 (24')**					
EPA 6010	Lead	1.5J	mg/kg	2.0	03/16/20 18:45	
ASTM D2974-87	Percent Moisture	3.7	%	0.10	03/14/20 11:45	
40204699014	**P-3 (0.5')**					
WI MOD DRO	Diesel Range Organics	1.5J	mg/kg	4.5	03/17/20 08:00	
EPA 6010	Lead	20.2	mg/kg	2.4	03/16/20 18:47	
ASTM D2974-87	Percent Moisture	17.7	%	0.10	03/14/20 11:45	
40204699015	**P-3 (23')**					
EPA 6010	Lead	1.7J	mg/kg	1.9	03/16/20 18:50	
ASTM D2974-87	Percent Moisture	3.5	%	0.10	03/14/20 11:45	
40204699016	**P-4 (2')**					
EPA 6010	Lead	18.8	mg/kg	2.4	03/16/20 18:57	
ASTM D2974-87	Percent Moisture	19.2	%	0.10	03/14/20 11:45	
40204699017	**P-4 (24.5')**					
EPA 6010	Lead	1.4J	mg/kg	2.0	03/16/20 18:59	
ASTM D2974-87	Percent Moisture	3.8	%	0.10	03/14/20 11:45	
40204699018	**P-5 (2.5')**					
EPA 6010	Lead	12.1	mg/kg	2.6	03/16/20 19:02	
ASTM D2974-87	Percent Moisture	26.0	%	0.10	03/14/20 11:45	
40204699019	**P-5 (23')**					
EPA 6010	Lead	1.3J	mg/kg	2.0	03/16/20 19:04	
ASTM D2974-87	Percent Moisture	3.1	%	0.10	03/14/20 11:45	
40204699020	**P-6 (2.5')**					
WI MOD DRO	Diesel Range Organics	2.8J	mg/kg	4.1	03/19/20 07:30	
EPA 6010	Lead	31.4	mg/kg	2.4	03/16/20 19:06	
ASTM D2974-87	Percent Moisture	19.7	%	0.10	03/14/20 11:46	

REPORT OF LABORATORY ANALYSIS

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SUMMARY OF DETECTION

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40204699021	**P-6 (25')**					
EPA 6010	Lead	1.8J	mg/kg	2.0	03/16/20 19:09	
ASTM D2974-87	Percent Moisture	3.3	%	0.10	03/14/20 11:46	
40204699022	**P-7 (1')**					
WI MOD DRO	Diesel Range Organics	2.1J	mg/kg	3.7	03/19/20 07:39	
EPA 6010	Lead	9.1	mg/kg	2.0	03/16/20 19:11	
ASTM D2974-87	Percent Moisture	7.4	%	0.10	03/16/20 13:05	
40204699023	**P-7 (25')**					
EPA 6010	Lead	1.8J	mg/kg	2.0	03/16/20 19:13	
ASTM D2974-87	Percent Moisture	3.8	%	0.10	03/16/20 13:05	
40204699024	**P-8 (5')**					
EPA 6010	Lead	9.3	mg/kg	2.3	03/16/20 19:16	
ASTM D2974-87	Percent Moisture	17.7	%	0.10	03/16/20 13:05	
40204699025	**P-8 (24')**					
EPA 6010	Lead	1.3J	mg/kg	2.0	03/16/20 19:18	
ASTM D2974-87	Percent Moisture	2.2	%	0.10	03/16/20 13:05	
40204699026	**P-9 (2')**					
WI MOD DRO	Diesel Range Organics	49.0	mg/kg	4.1	03/19/20 07:48	DC
EPA 6010	Lead	415	mg/kg	2.2	03/16/20 19:25	
EPA 8260	Naphthalene	44.1J	ug/kg	102	03/17/20 20:41	
EPA 8260	Toluene	33.4J	ug/kg	67.4	03/17/20 20:41	
ASTM D2974-87	Percent Moisture	10.9	%	0.10	03/16/20 13:05	
40204699027	**P-9 (23')**					
EPA 6010	Lead	2.3	mg/kg	2.2	03/16/20 19:28	
ASTM D2974-87	Percent Moisture	7.9	%	0.10	03/16/20 13:06	

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PROJECT NARRATIVE

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Method: **WI MOD DRO**
Description: WIDRO GCS
Client: Terracon, Inc. - Franklin
Date: March 19, 2020

General Information:
18 samples were analyzed for WI MOD DRO. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with WI MOD DRO with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Terracon, Inc. - Franklin
Date: March 19, 2020

General Information:
18 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Method: **EPA 8260**
Description: 8260 MSV Med Level Normal List
Client: Terracon, Inc. - Franklin
Date: March 19, 2020

General Information:
19 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5035/5030B with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Method: **EPA 8260**
Description: 8260 MSV
Client: Terracon, Inc. - Franklin
Date: March 19, 2020

General Information:
9 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

pH: Post-analysis pH measurement indicates insufficient VOA sample preservation.
- P-8 (Lab ID: 40204699008)

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: 350022

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
- LCS (Lab ID: 2027985)
  - 1,2,4-Trichlorobenzene

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-1 **Lab ID: 40204699001** Collected: 03/11/20 12:25 Received: 03/13/20 08:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		03/16/20 16:22	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		03/16/20 16:22	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		03/16/20 16:22	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		03/16/20 16:22	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		03/16/20 16:22	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		03/16/20 16:22	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 16:22	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		03/16/20 16:22	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		03/16/20 16:22	98-06-6	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		03/16/20 16:22	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 16:22	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		03/16/20 16:22	75-00-3	
Chloroform	**1.4J**	ug/L	5.0	1.3	1		03/16/20 16:22	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		03/16/20 16:22	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		03/16/20 16:22	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		03/16/20 16:22	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		03/16/20 16:22	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		03/16/20 16:22	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		03/16/20 16:22	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		03/16/20 16:22	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 16:22	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		03/16/20 16:22	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		03/16/20 16:22	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		03/16/20 16:22	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		03/16/20 16:22	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 16:22	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		03/16/20 16:22	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		03/16/20 16:22	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		03/16/20 16:22	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 16:22	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		03/16/20 16:22	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		03/16/20 16:22	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		03/16/20 16:22	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		03/16/20 16:22	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		03/16/20 16:22	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		03/16/20 16:22	108-20-3	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		03/16/20 16:22	100-41-4	
Hexachloro-1,3-butadiene	**<1.5**	ug/L	4.9	1.5	1		03/16/20 16:22	87-68-3	
Isopropylbenzene (Cumene)	**<1.7**	ug/L	5.6	1.7	1		03/16/20 16:22	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		03/16/20 16:22	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		03/16/20 16:22	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		03/16/20 16:22	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		03/16/20 16:22	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		03/16/20 16:22	103-65-1	
Styrene	**<3.0**	ug/L	10.0	3.0	1		03/16/20 16:22	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		03/16/20 16:22	630-20-6	

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-1 **Lab ID: 40204699001** Collected: 03/11/20 12:25 Received: 03/13/20 08:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 16:22	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		03/16/20 16:22	127-18-4	
Toluene	**<0.27**	ug/L	0.90	0.27	1		03/16/20 16:22	108-88-3	
1,2,3-Trichlorobenzene	**<2.2**	ug/L	7.4	2.2	1		03/16/20 16:22	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		03/16/20 16:22	120-82-1	L2
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		03/16/20 16:22	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		03/16/20 16:22	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/16/20 16:22	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		03/16/20 16:22	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		03/16/20 16:22	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		03/16/20 16:22	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		03/16/20 16:22	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		03/16/20 16:22	75-01-4	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		03/16/20 16:22	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		03/16/20 16:22	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	88	%	70-130		1		03/16/20 16:22	460-00-4	
Dibromofluoromethane (S)	117	%	70-130		1		03/16/20 16:22	1868-53-7	
Toluene-d8 (S)	102	%	70-130		1		03/16/20 16:22	2037-26-5	

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-2 **Lab ID: 40204699002** Collected: 03/11/20 13:20 Received: 03/13/20 08:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		03/16/20 15:59	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		03/16/20 15:59	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		03/16/20 15:59	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		03/16/20 15:59	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		03/16/20 15:59	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		03/16/20 15:59	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 15:59	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		03/16/20 15:59	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		03/16/20 15:59	98-06-6	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		03/16/20 15:59	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 15:59	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		03/16/20 15:59	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		03/16/20 15:59	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		03/16/20 15:59	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		03/16/20 15:59	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		03/16/20 15:59	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		03/16/20 15:59	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		03/16/20 15:59	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		03/16/20 15:59	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		03/16/20 15:59	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 15:59	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		03/16/20 15:59	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		03/16/20 15:59	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		03/16/20 15:59	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		03/16/20 15:59	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 15:59	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		03/16/20 15:59	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		03/16/20 15:59	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		03/16/20 15:59	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 15:59	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		03/16/20 15:59	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		03/16/20 15:59	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		03/16/20 15:59	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		03/16/20 15:59	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		03/16/20 15:59	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		03/16/20 15:59	108-20-3	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		03/16/20 15:59	100-41-4	
Hexachloro-1,3-butadiene	**<1.5**	ug/L	4.9	1.5	1		03/16/20 15:59	87-68-3	
Isopropylbenzene (Cumene)	**<1.7**	ug/L	5.6	1.7	1		03/16/20 15:59	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		03/16/20 15:59	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		03/16/20 15:59	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		03/16/20 15:59	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		03/16/20 15:59	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		03/16/20 15:59	103-65-1	
Styrene	**<3.0**	ug/L	10.0	3.0	1		03/16/20 15:59	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		03/16/20 15:59	630-20-6	

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-2 **Lab ID: 40204699002** Collected: 03/11/20 13:20 Received: 03/13/20 08:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 15:59	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		03/16/20 15:59	127-18-4	
Toluene	**<0.27**	ug/L	0.90	0.27	1		03/16/20 15:59	108-88-3	
1,2,3-Trichlorobenzene	**<2.2**	ug/L	7.4	2.2	1		03/16/20 15:59	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		03/16/20 15:59	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		03/16/20 15:59	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		03/16/20 15:59	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/16/20 15:59	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		03/16/20 15:59	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		03/16/20 15:59	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		03/16/20 15:59	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		03/16/20 15:59	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		03/16/20 15:59	75-01-4	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		03/16/20 15:59	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		03/16/20 15:59	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	94	%	70-130		1		03/16/20 15:59	460-00-4	
Dibromofluoromethane (S)	109	%	70-130		1		03/16/20 15:59	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		03/16/20 15:59	2037-26-5	

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-3 **Lab ID: 40204699003** Collected: 03/11/20 14:49 Received: 03/13/20 08:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		03/16/20 16:42	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		03/16/20 16:42	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		03/16/20 16:42	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		03/16/20 16:42	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		03/16/20 16:42	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		03/16/20 16:42	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 16:42	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		03/16/20 16:42	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		03/16/20 16:42	98-06-6	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		03/16/20 16:42	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 16:42	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		03/16/20 16:42	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		03/16/20 16:42	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		03/16/20 16:42	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		03/16/20 16:42	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		03/16/20 16:42	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		03/16/20 16:42	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		03/16/20 16:42	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		03/16/20 16:42	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		03/16/20 16:42	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 16:42	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		03/16/20 16:42	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		03/16/20 16:42	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		03/16/20 16:42	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		03/16/20 16:42	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 16:42	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		03/16/20 16:42	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		03/16/20 16:42	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		03/16/20 16:42	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 16:42	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		03/16/20 16:42	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		03/16/20 16:42	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		03/16/20 16:42	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		03/16/20 16:42	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		03/16/20 16:42	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		03/16/20 16:42	108-20-3	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		03/16/20 16:42	100-41-4	
Hexachloro-1,3-butadiene	**<1.5**	ug/L	4.9	1.5	1		03/16/20 16:42	87-68-3	
Isopropylbenzene (Cumene)	**<1.7**	ug/L	5.6	1.7	1		03/16/20 16:42	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		03/16/20 16:42	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		03/16/20 16:42	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		03/16/20 16:42	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		03/16/20 16:42	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		03/16/20 16:42	103-65-1	
Styrene	**<3.0**	ug/L	10.0	3.0	1		03/16/20 16:42	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		03/16/20 16:42	630-20-6	

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-3 **Lab ID: 40204699003** Collected: 03/11/20 14:49 Received: 03/13/20 08:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 16:42	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		03/16/20 16:42	127-18-4	
Toluene	**<0.27**	ug/L	0.90	0.27	1		03/16/20 16:42	108-88-3	
1,2,3-Trichlorobenzene	**<2.2**	ug/L	7.4	2.2	1		03/16/20 16:42	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		03/16/20 16:42	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		03/16/20 16:42	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		03/16/20 16:42	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/16/20 16:42	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		03/16/20 16:42	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		03/16/20 16:42	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		03/16/20 16:42	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		03/16/20 16:42	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		03/16/20 16:42	75-01-4	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		03/16/20 16:42	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		03/16/20 16:42	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	93	%	70-130		1		03/16/20 16:42	460-00-4	
Dibromofluoromethane (S)	92	%	70-130		1		03/16/20 16:42	1868-53-7	
Toluene-d8 (S)	103	%	70-130		1		03/16/20 16:42	2037-26-5	

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-4 **Lab ID: 40204699004** Collected: 03/11/20 15:10 Received: 03/13/20 08:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		03/16/20 17:04	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		03/16/20 17:04	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		03/16/20 17:04	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		03/16/20 17:04	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		03/16/20 17:04	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		03/16/20 17:04	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 17:04	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		03/16/20 17:04	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		03/16/20 17:04	98-06-6	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		03/16/20 17:04	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 17:04	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		03/16/20 17:04	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		03/16/20 17:04	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		03/16/20 17:04	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		03/16/20 17:04	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		03/16/20 17:04	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		03/16/20 17:04	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		03/16/20 17:04	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		03/16/20 17:04	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		03/16/20 17:04	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 17:04	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		03/16/20 17:04	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		03/16/20 17:04	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		03/16/20 17:04	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		03/16/20 17:04	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 17:04	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		03/16/20 17:04	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		03/16/20 17:04	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		03/16/20 17:04	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 17:04	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		03/16/20 17:04	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		03/16/20 17:04	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		03/16/20 17:04	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		03/16/20 17:04	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		03/16/20 17:04	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		03/16/20 17:04	108-20-3	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		03/16/20 17:04	100-41-4	
Hexachloro-1,3-butadiene	**<1.5**	ug/L	4.9	1.5	1		03/16/20 17:04	87-68-3	
Isopropylbenzene (Cumene)	**<1.7**	ug/L	5.6	1.7	1		03/16/20 17:04	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		03/16/20 17:04	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		03/16/20 17:04	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		03/16/20 17:04	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		03/16/20 17:04	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		03/16/20 17:04	103-65-1	
Styrene	**<3.0**	ug/L	10.0	3.0	1		03/16/20 17:04	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		03/16/20 17:04	630-20-6	

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-4 **Lab ID: 40204699004** Collected: 03/11/20 15:10 Received: 03/13/20 08:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 17:04	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		03/16/20 17:04	127-18-4	
Toluene	**<0.27**	ug/L	0.90	0.27	1		03/16/20 17:04	108-88-3	
1,2,3-Trichlorobenzene	**<2.2**	ug/L	7.4	2.2	1		03/16/20 17:04	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		03/16/20 17:04	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		03/16/20 17:04	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		03/16/20 17:04	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/16/20 17:04	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		03/16/20 17:04	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		03/16/20 17:04	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		03/16/20 17:04	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		03/16/20 17:04	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		03/16/20 17:04	75-01-4	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		03/16/20 17:04	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		03/16/20 17:04	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	94	%	70-130		1		03/16/20 17:04	460-00-4	
Dibromofluoromethane (S)	110	%	70-130		1		03/16/20 17:04	1868-53-7	
Toluene-d8 (S)	102	%	70-130		1		03/16/20 17:04	2037-26-5	

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-5 **Lab ID: 40204699005** Collected: 03/11/20 16:05 Received: 03/13/20 08:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		03/16/20 17:27	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		03/16/20 17:27	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		03/16/20 17:27	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		03/16/20 17:27	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		03/16/20 17:27	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		03/16/20 17:27	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 17:27	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		03/16/20 17:27	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		03/16/20 17:27	98-06-6	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		03/16/20 17:27	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 17:27	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		03/16/20 17:27	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		03/16/20 17:27	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		03/16/20 17:27	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		03/16/20 17:27	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		03/16/20 17:27	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		03/16/20 17:27	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		03/16/20 17:27	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		03/16/20 17:27	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		03/16/20 17:27	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 17:27	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		03/16/20 17:27	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		03/16/20 17:27	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		03/16/20 17:27	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		03/16/20 17:27	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 17:27	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		03/16/20 17:27	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		03/16/20 17:27	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		03/16/20 17:27	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 17:27	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		03/16/20 17:27	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		03/16/20 17:27	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		03/16/20 17:27	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		03/16/20 17:27	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		03/16/20 17:27	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		03/16/20 17:27	108-20-3	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		03/16/20 17:27	100-41-4	
Hexachloro-1,3-butadiene	**<1.5**	ug/L	4.9	1.5	1		03/16/20 17:27	87-68-3	
Isopropylbenzene (Cumene)	**<1.7**	ug/L	5.6	1.7	1		03/16/20 17:27	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		03/16/20 17:27	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		03/16/20 17:27	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		03/16/20 17:27	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		03/16/20 17:27	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		03/16/20 17:27	103-65-1	
Styrene	**<3.0**	ug/L	10.0	3.0	1		03/16/20 17:27	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		03/16/20 17:27	630-20-6	

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-5 **Lab ID: 40204699005** Collected: 03/11/20 16:05 Received: 03/13/20 08:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 17:27	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		03/16/20 17:27	127-18-4	
Toluene	**<0.27**	ug/L	0.90	0.27	1		03/16/20 17:27	108-88-3	
1,2,3-Trichlorobenzene	**<2.2**	ug/L	7.4	2.2	1		03/16/20 17:27	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		03/16/20 17:27	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		03/16/20 17:27	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		03/16/20 17:27	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/16/20 17:27	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		03/16/20 17:27	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		03/16/20 17:27	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		03/16/20 17:27	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		03/16/20 17:27	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		03/16/20 17:27	75-01-4	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		03/16/20 17:27	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		03/16/20 17:27	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	94	%	70-130		1		03/16/20 17:27	460-00-4	
Dibromofluoromethane (S)	109	%	70-130		1		03/16/20 17:27	1868-53-7	
Toluene-d8 (S)	102	%	70-130		1		03/16/20 17:27	2037-26-5	

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-6 **Lab ID: 40204699006** Collected: 03/11/20 16:55 Received: 03/13/20 08:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		03/16/20 17:49	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		03/16/20 17:49	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		03/16/20 17:49	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		03/16/20 17:49	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		03/16/20 17:49	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		03/16/20 17:49	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 17:49	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		03/16/20 17:49	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		03/16/20 17:49	98-06-6	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		03/16/20 17:49	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 17:49	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		03/16/20 17:49	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		03/16/20 17:49	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		03/16/20 17:49	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		03/16/20 17:49	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		03/16/20 17:49	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		03/16/20 17:49	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		03/16/20 17:49	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		03/16/20 17:49	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		03/16/20 17:49	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 17:49	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		03/16/20 17:49	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		03/16/20 17:49	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		03/16/20 17:49	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		03/16/20 17:49	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 17:49	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		03/16/20 17:49	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		03/16/20 17:49	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		03/16/20 17:49	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 17:49	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		03/16/20 17:49	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		03/16/20 17:49	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		03/16/20 17:49	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		03/16/20 17:49	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		03/16/20 17:49	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		03/16/20 17:49	108-20-3	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		03/16/20 17:49	100-41-4	
Hexachloro-1,3-butadiene	**<1.5**	ug/L	4.9	1.5	1		03/16/20 17:49	87-68-3	
Isopropylbenzene (Cumene)	**<1.7**	ug/L	5.6	1.7	1		03/16/20 17:49	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		03/16/20 17:49	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		03/16/20 17:49	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		03/16/20 17:49	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		03/16/20 17:49	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		03/16/20 17:49	103-65-1	
Styrene	**<3.0**	ug/L	10.0	3.0	1		03/16/20 17:49	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		03/16/20 17:49	630-20-6	

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-6 **Lab ID: 40204699006** Collected: 03/11/20 16:55 Received: 03/13/20 08:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 17:49	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		03/16/20 17:49	127-18-4	
Toluene	**<0.27**	ug/L	0.90	0.27	1		03/16/20 17:49	108-88-3	
1,2,3-Trichlorobenzene	**<2.2**	ug/L	7.4	2.2	1		03/16/20 17:49	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		03/16/20 17:49	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		03/16/20 17:49	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		03/16/20 17:49	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/16/20 17:49	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		03/16/20 17:49	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		03/16/20 17:49	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		03/16/20 17:49	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		03/16/20 17:49	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		03/16/20 17:49	75-01-4	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		03/16/20 17:49	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		03/16/20 17:49	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	93	%	70-130		1		03/16/20 17:49	460-00-4	
Dibromofluoromethane (S)	109	%	70-130		1		03/16/20 17:49	1868-53-7	
Toluene-d8 (S)	101	%	70-130		1		03/16/20 17:49	2037-26-5	

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-7 **Lab ID: 40204699007** Collected: 03/11/20 17:58 Received: 03/13/20 08:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		03/16/20 18:12	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		03/16/20 18:12	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		03/16/20 18:12	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		03/16/20 18:12	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		03/16/20 18:12	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		03/16/20 18:12	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 18:12	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		03/16/20 18:12	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		03/16/20 18:12	98-06-6	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		03/16/20 18:12	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 18:12	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		03/16/20 18:12	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		03/16/20 18:12	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		03/16/20 18:12	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		03/16/20 18:12	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		03/16/20 18:12	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		03/16/20 18:12	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		03/16/20 18:12	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		03/16/20 18:12	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		03/16/20 18:12	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 18:12	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		03/16/20 18:12	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		03/16/20 18:12	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		03/16/20 18:12	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		03/16/20 18:12	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 18:12	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		03/16/20 18:12	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		03/16/20 18:12	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		03/16/20 18:12	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 18:12	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		03/16/20 18:12	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		03/16/20 18:12	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		03/16/20 18:12	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		03/16/20 18:12	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		03/16/20 18:12	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		03/16/20 18:12	108-20-3	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		03/16/20 18:12	100-41-4	
Hexachloro-1,3-butadiene	**<1.5**	ug/L	4.9	1.5	1		03/16/20 18:12	87-68-3	
Isopropylbenzene (Cumene)	**<1.7**	ug/L	5.6	1.7	1		03/16/20 18:12	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		03/16/20 18:12	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		03/16/20 18:12	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		03/16/20 18:12	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		03/16/20 18:12	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		03/16/20 18:12	103-65-1	
Styrene	**<3.0**	ug/L	10.0	3.0	1		03/16/20 18:12	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		03/16/20 18:12	630-20-6	

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-7 **Lab ID: 40204699007** Collected: 03/11/20 17:58 Received: 03/13/20 08:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 18:12	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		03/16/20 18:12	127-18-4	
Toluene	**<0.27**	ug/L	0.90	0.27	1		03/16/20 18:12	108-88-3	
1,2,3-Trichlorobenzene	**<2.2**	ug/L	7.4	2.2	1		03/16/20 18:12	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		03/16/20 18:12	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		03/16/20 18:12	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		03/16/20 18:12	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/16/20 18:12	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		03/16/20 18:12	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		03/16/20 18:12	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		03/16/20 18:12	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		03/16/20 18:12	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		03/16/20 18:12	75-01-4	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		03/16/20 18:12	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		03/16/20 18:12	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	94	%	70-130		1		03/16/20 18:12	460-00-4	
Dibromofluoromethane (S)	110	%	70-130		1		03/16/20 18:12	1868-53-7	
Toluene-d8 (S)	102	%	70-130		1		03/16/20 18:12	2037-26-5	

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-8 **Lab ID: 40204699008** Collected: 03/11/20 19:10 Received: 03/13/20 08:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		03/16/20 18:34	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		03/16/20 18:34	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		03/16/20 18:34	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		03/16/20 18:34	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		03/16/20 18:34	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		03/16/20 18:34	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 18:34	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		03/16/20 18:34	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		03/16/20 18:34	98-06-6	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		03/16/20 18:34	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 18:34	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		03/16/20 18:34	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		03/16/20 18:34	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		03/16/20 18:34	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		03/16/20 18:34	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		03/16/20 18:34	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		03/16/20 18:34	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		03/16/20 18:34	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		03/16/20 18:34	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		03/16/20 18:34	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		03/16/20 18:34	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		03/16/20 18:34	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		03/16/20 18:34	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		03/16/20 18:34	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		03/16/20 18:34	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 18:34	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		03/16/20 18:34	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		03/16/20 18:34	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		03/16/20 18:34	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 18:34	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		03/16/20 18:34	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		03/16/20 18:34	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		03/16/20 18:34	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		03/16/20 18:34	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		03/16/20 18:34	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		03/16/20 18:34	108-20-3	
Ethylbenzene	**0.39J**	ug/L	1.1	0.32	1		03/16/20 18:34	100-41-4	
Hexachloro-1,3-butadiene	**<1.5**	ug/L	4.9	1.5	1		03/16/20 18:34	87-68-3	
Isopropylbenzene (Cumene)	**<1.7**	ug/L	5.6	1.7	1		03/16/20 18:34	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		03/16/20 18:34	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		03/16/20 18:34	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		03/16/20 18:34	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		03/16/20 18:34	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		03/16/20 18:34	103-65-1	
Styrene	**<3.0**	ug/L	10.0	3.0	1		03/16/20 18:34	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		03/16/20 18:34	630-20-6	

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-8 **Lab ID: 40204699008** Collected: 03/11/20 19:10 Received: 03/13/20 08:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		03/16/20 18:34	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		03/16/20 18:34	127-18-4	
Toluene	**0.51J**	ug/L	0.90	0.27	1		03/16/20 18:34	108-88-3	
1,2,3-Trichlorobenzene	**<2.2**	ug/L	7.4	2.2	1		03/16/20 18:34	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		03/16/20 18:34	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		03/16/20 18:34	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		03/16/20 18:34	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/16/20 18:34	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		03/16/20 18:34	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		03/16/20 18:34	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		03/16/20 18:34	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		03/16/20 18:34	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		03/16/20 18:34	75-01-4	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		03/16/20 18:34	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		03/16/20 18:34	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	93	%	70-130		1		03/16/20 18:34	460-00-4	pH
Dibromofluoromethane (S)	110	%	70-130		1		03/16/20 18:34	1868-53-7	
Toluene-d8 (S)	102	%	70-130		1		03/16/20 18:34	2037-26-5	

REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-9 **Lab ID: 40204699009** Collected: 03/11/20 18:41 Received: 03/13/20 08:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
Benzene	**<0.25**	ug/L	1.0	0.25	1		03/17/20 23:15	71-43-2	
Bromobenzene	**<0.24**	ug/L	1.0	0.24	1		03/17/20 23:15	108-86-1	
Bromochloromethane	**<0.36**	ug/L	5.0	0.36	1		03/17/20 23:15	74-97-5	
Bromodichloromethane	**<0.36**	ug/L	1.2	0.36	1		03/17/20 23:15	75-27-4	
Bromoform	**<4.0**	ug/L	13.2	4.0	1		03/17/20 23:15	75-25-2	
Bromomethane	**<0.97**	ug/L	5.0	0.97	1		03/17/20 23:15	74-83-9	
n-Butylbenzene	**<0.71**	ug/L	2.4	0.71	1		03/17/20 23:15	104-51-8	
sec-Butylbenzene	**<0.85**	ug/L	5.0	0.85	1		03/17/20 23:15	135-98-8	
tert-Butylbenzene	**<0.30**	ug/L	1.0	0.30	1		03/17/20 23:15	98-06-6	
Carbon tetrachloride	**<1.1**	ug/L	3.6	1.1	1		03/17/20 23:15	56-23-5	
Chlorobenzene	**<0.71**	ug/L	2.4	0.71	1		03/17/20 23:15	108-90-7	
Chloroethane	**<1.3**	ug/L	5.0	1.3	1		03/17/20 23:15	75-00-3	
Chloroform	**<1.3**	ug/L	5.0	1.3	1		03/17/20 23:15	67-66-3	
Chloromethane	**<2.2**	ug/L	7.3	2.2	1		03/17/20 23:15	74-87-3	
2-Chlorotoluene	**<0.93**	ug/L	5.0	0.93	1		03/17/20 23:15	95-49-8	
4-Chlorotoluene	**<0.76**	ug/L	2.5	0.76	1		03/17/20 23:15	106-43-4	
1,2-Dibromo-3-chloropropane	**<1.8**	ug/L	5.9	1.8	1		03/17/20 23:15	96-12-8	
Dibromochloromethane	**<2.6**	ug/L	8.7	2.6	1		03/17/20 23:15	124-48-1	
1,2-Dibromoethane (EDB)	**<0.83**	ug/L	2.8	0.83	1		03/17/20 23:15	106-93-4	
Dibromomethane	**<0.94**	ug/L	3.1	0.94	1		03/17/20 23:15	74-95-3	
1,2-Dichlorobenzene	**<0.71**	ug/L	2.4	0.71	1		03/17/20 23:15	95-50-1	
1,3-Dichlorobenzene	**<0.63**	ug/L	2.1	0.63	1		03/17/20 23:15	541-73-1	
1,4-Dichlorobenzene	**<0.94**	ug/L	3.1	0.94	1		03/17/20 23:15	106-46-7	
Dichlorodifluoromethane	**<0.50**	ug/L	5.0	0.50	1		03/17/20 23:15	75-71-8	
1,1-Dichloroethane	**<0.27**	ug/L	1.0	0.27	1		03/17/20 23:15	75-34-3	
1,2-Dichloroethane	**<0.28**	ug/L	1.0	0.28	1		03/17/20 23:15	107-06-2	
1,1-Dichloroethene	**<0.24**	ug/L	1.0	0.24	1		03/17/20 23:15	75-35-4	
cis-1,2-Dichloroethene	**<0.27**	ug/L	1.0	0.27	1		03/17/20 23:15	156-59-2	
trans-1,2-Dichloroethene	**<1.1**	ug/L	3.6	1.1	1		03/17/20 23:15	156-60-5	
1,2-Dichloropropane	**<0.28**	ug/L	1.0	0.28	1		03/17/20 23:15	78-87-5	
1,3-Dichloropropane	**<0.83**	ug/L	2.8	0.83	1		03/17/20 23:15	142-28-9	
2,2-Dichloropropane	**<2.3**	ug/L	7.6	2.3	1		03/17/20 23:15	594-20-7	
1,1-Dichloropropene	**<0.54**	ug/L	1.8	0.54	1		03/17/20 23:15	563-58-6	
cis-1,3-Dichloropropene	**<3.6**	ug/L	12.1	3.6	1		03/17/20 23:15	10061-01-5	
trans-1,3-Dichloropropene	**<4.4**	ug/L	14.6	4.4	1		03/17/20 23:15	10061-02-6	
Diisopropyl ether	**<1.9**	ug/L	6.3	1.9	1		03/17/20 23:15	108-20-3	
Ethylbenzene	**<0.32**	ug/L	1.1	0.32	1		03/17/20 23:15	100-41-4	
Hexachloro-1,3-butadiene	**<1.5**	ug/L	4.9	1.5	1		03/17/20 23:15	87-68-3	
Isopropylbenzene (Cumene)	**<1.7**	ug/L	5.6	1.7	1		03/17/20 23:15	98-82-8	
p-Isopropyltoluene	**<0.80**	ug/L	2.7	0.80	1		03/17/20 23:15	99-87-6	
Methylene Chloride	**<0.58**	ug/L	5.0	0.58	1		03/17/20 23:15	75-09-2	
Methyl-tert-butyl ether	**<1.2**	ug/L	4.2	1.2	1		03/17/20 23:15	1634-04-4	
Naphthalene	**<1.2**	ug/L	5.0	1.2	1		03/17/20 23:15	91-20-3	
n-Propylbenzene	**<0.81**	ug/L	5.0	0.81	1		03/17/20 23:15	103-65-1	
Styrene	**<3.0**	ug/L	10.0	3.0	1		03/17/20 23:15	100-42-5	
1,1,1,2-Tetrachloroethane	**<0.27**	ug/L	1.0	0.27	1		03/17/20 23:15	630-20-6	

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-9 **Lab ID: 40204699009** Collected: 03/11/20 18:41 Received: 03/13/20 08:20 Matrix: Water

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 8260								
1,1,2,2-Tetrachloroethane	**<0.28**	ug/L	1.0	0.28	1		03/17/20 23:15	79-34-5	
Tetrachloroethene	**<0.33**	ug/L	1.1	0.33	1		03/17/20 23:15	127-18-4	
Toluene	**<0.27**	ug/L	0.90	0.27	1		03/17/20 23:15	108-88-3	
1,2,3-Trichlorobenzene	**<2.2**	ug/L	7.4	2.2	1		03/17/20 23:15	87-61-6	
1,2,4-Trichlorobenzene	**<0.95**	ug/L	5.0	0.95	1		03/17/20 23:15	120-82-1	
1,1,1-Trichloroethane	**<0.24**	ug/L	1.0	0.24	1		03/17/20 23:15	71-55-6	
1,1,2-Trichloroethane	**<0.55**	ug/L	5.0	0.55	1		03/17/20 23:15	79-00-5	
Trichloroethene	**<0.26**	ug/L	1.0	0.26	1		03/17/20 23:15	79-01-6	
Trichlorofluoromethane	**<0.21**	ug/L	1.0	0.21	1		03/17/20 23:15	75-69-4	
1,2,3-Trichloropropane	**<0.59**	ug/L	5.0	0.59	1		03/17/20 23:15	96-18-4	
1,2,4-Trimethylbenzene	**<0.84**	ug/L	2.8	0.84	1		03/17/20 23:15	95-63-6	
1,3,5-Trimethylbenzene	**<0.87**	ug/L	2.9	0.87	1		03/17/20 23:15	108-67-8	
Vinyl chloride	**<0.17**	ug/L	1.0	0.17	1		03/17/20 23:15	75-01-4	
m&p-Xylene	**<0.47**	ug/L	2.0	0.47	1		03/17/20 23:15	179601-23-1	
o-Xylene	**<0.26**	ug/L	1.0	0.26	1		03/17/20 23:15	95-47-6	
Surrogates									
4-Bromofluorobenzene (S)	92	%	70-130		1		03/17/20 23:15	460-00-4	
Dibromofluoromethane (S)	103	%	70-130		1		03/17/20 23:15	1868-53-7	
Toluene-d8 (S)	95	%	70-130		1		03/17/20 23:15	2037-26-5	

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-1 (1') **Lab ID: 40204699010** Collected: 03/11/20 12:15 Received: 03/13/20 08:20 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 Preparation Method: WI MOD DRO								
Diesel Range Organics	**<1.2**	mg/kg	4.2	1.2	1	03/16/20 09:17	03/17/20 07:24		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**14.2**	mg/kg	2.4	0.72	1	03/16/20 06:45	03/16/20 18:33	7439-92-1	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 14:54	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/17/20 14:54	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 14:54	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/17/20 14:54	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/17/20 14:54	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 14:54	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 14:54	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/17/20 14:54	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/17/20 14:54	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/17/20 14:54	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 14:54	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 14:54	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/17/20 14:54	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/17/20 14:54	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 14:54	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/17/20 14:54	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/17/20 14:54	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/17/20 14:54	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/17/20 14:54	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	98-82-8	W

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-1 (1') **Lab ID: 40204699010** Collected: 03/11/20 12:15 Received: 03/13/20 08:20 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 Preparation Method: EPA 5035/5030B								
p-Isopropyltoluene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 14:54	99-87-6	W
Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/17/20 14:54	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	1634-04-4	W
Naphthalene	**<27.3**	ug/kg	91.0	27.3	1	03/17/20 07:15	03/17/20 14:54	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	100-42-5	W
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/17/20 14:54	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	108-88-3	W
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/17/20 14:54	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/17/20 14:54	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/17/20 14:54	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/17/20 14:54	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/17/20 14:54	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:54	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	106	%	57-146		1	03/17/20 07:15	03/17/20 14:54	1868-53-7	
Toluene-d8 (S)	107	%	64-134		1	03/17/20 07:15	03/17/20 14:54	2037-26-5	
4-Bromofluorobenzene (S)	98	%	54-126		1	03/17/20 07:15	03/17/20 14:54	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**17.8**	%	0.10	0.10	1		03/14/20 11:45		

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-1 (24') **Lab ID: 40204699011** Collected: 03/11/20 12:16 Received: 03/13/20 08:20 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 Preparation Method: WI MOD DRO								
Diesel Range Organics	**1.6J**	mg/kg	3.6	1.1	1	03/16/20 09:17	03/17/20 07:33		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**1.9J**	mg/kg	2.0	0.59	1	03/16/20 06:45	03/16/20 18:40	7439-92-1	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 15:17	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/17/20 15:17	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 15:17	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/17/20 15:17	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/17/20 15:17	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 15:17	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 15:17	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/17/20 15:17	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/17/20 15:17	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/17/20 15:17	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 15:17	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 15:17	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/17/20 15:17	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/17/20 15:17	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 15:17	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/17/20 15:17	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/17/20 15:17	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/17/20 15:17	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/17/20 15:17	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	98-82-8	W

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
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(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-1 (24') **Lab ID: 40204699011** Collected: 03/11/20 12:16 Received: 03/13/20 08:20 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 Preparation Method: EPA 5035/5030B								
p-Isopropyltoluene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 15:17	99-87-6	W
Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/17/20 15:17	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	1634-04-4	W
Naphthalene	**<27.3**	ug/kg	91.0	27.3	1	03/17/20 07:15	03/17/20 15:17	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	100-42-5	W
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/17/20 15:17	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	108-88-3	W
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/17/20 15:17	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/17/20 15:17	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/17/20 15:17	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/17/20 15:17	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/17/20 15:17	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:17	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	115	%	57-146		1	03/17/20 07:15	03/17/20 15:17	1868-53-7	
Toluene-d8 (S)	114	%	64-134		1	03/17/20 07:15	03/17/20 15:17	2037-26-5	
4-Bromofluorobenzene (S)	105	%	54-126		1	03/17/20 07:15	03/17/20 15:17	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**3.6**	%	0.10	0.10	1		03/14/20 11:45		

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(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-2 (1') **Lab ID: 40204699012** Collected: 03/11/20 13:10 Received: 03/13/20 08:20 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 Preparation Method: WI MOD DRO								
Diesel Range Organics	**<1.4**	mg/kg	4.7	1.4	1	03/16/20 09:17	03/17/20 07:42		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**18.9**	mg/kg	2.4	0.73	1	03/16/20 06:45	03/16/20 18:43	7439-92-1	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 14:30	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/17/20 14:30	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 14:30	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/17/20 14:30	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/17/20 14:30	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 14:30	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 14:30	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/17/20 14:30	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/17/20 14:30	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/17/20 14:30	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 14:30	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 14:30	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/17/20 14:30	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/17/20 14:30	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 14:30	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/17/20 14:30	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/17/20 14:30	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/17/20 14:30	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/17/20 14:30	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	98-82-8	W

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Pace Project No.: 40204699

Sample: P-2 (1') **Lab ID: 40204699012** Collected: 03/11/20 13:10 Received: 03/13/20 08:20 Matrix: Solid

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Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/17/20 14:30	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	1634-04-4	W
Naphthalene	**<27.3**	ug/kg	91.0	27.3	1	03/17/20 07:15	03/17/20 14:30	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	100-42-5	W
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/17/20 14:30	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	108-88-3	W
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/17/20 14:30	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/17/20 14:30	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/17/20 14:30	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/17/20 14:30	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/17/20 14:30	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 14:30	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	96	%	57-146		1	03/17/20 07:15	03/17/20 14:30	1868-53-7	
Toluene-d8 (S)	98	%	64-134		1	03/17/20 07:15	03/17/20 14:30	2037-26-5	
4-Bromofluorobenzene (S)	91	%	54-126		1	03/17/20 07:15	03/17/20 14:30	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**20.5**	%	0.10	0.10	1		03/14/20 11:45		

REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-2 (24') **Lab ID: 40204699013** Collected: 03/11/20 13:11 Received: 03/13/20 08:20 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 Preparation Method: WI MOD DRO								
Diesel Range Organics	**<1.1**	mg/kg	3.5	1.1	1	03/16/20 09:17	03/17/20 07:51		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**1.5J**	mg/kg	2.0	0.60	1	03/16/20 06:45	03/16/20 18:45	7439-92-1	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 15:40	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/17/20 15:40	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 15:40	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/17/20 15:40	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/17/20 15:40	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 15:40	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 15:40	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/17/20 15:40	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/17/20 15:40	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/17/20 15:40	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 15:40	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 15:40	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/17/20 15:40	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/17/20 15:40	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 15:40	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/17/20 15:40	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/17/20 15:40	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/17/20 15:40	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/17/20 15:40	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	98-82-8	W

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(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-2 (24') **Lab ID: 40204699013** Collected: 03/11/20 13:11 Received: 03/13/20 08:20 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 Preparation Method: EPA 5035/5030B								
p-Isopropyltoluene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 15:40	99-87-6	W
Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/17/20 15:40	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	1634-04-4	W
Naphthalene	**<27.3**	ug/kg	91.0	27.3	1	03/17/20 07:15	03/17/20 15:40	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	100-42-5	W
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/17/20 15:40	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	108-88-3	W
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/17/20 15:40	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/17/20 15:40	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/17/20 15:40	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/17/20 15:40	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/17/20 15:40	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 15:40	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	103	%	57-146		1	03/17/20 07:15	03/17/20 15:40	1868-53-7	
Toluene-d8 (S)	104	%	64-134		1	03/17/20 07:15	03/17/20 15:40	2037-26-5	
4-Bromofluorobenzene (S)	95	%	54-126		1	03/17/20 07:15	03/17/20 15:40	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**3.7**	%	0.10	0.10	1		03/14/20 11:45		

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-3 (0.5') **Lab ID: 40204699014** Collected: 03/11/20 14:25 Received: 03/13/20 08:20 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 Preparation Method: WI MOD DRO								
Diesel Range Organics	**1.5J**	mg/kg	4.5	1.3	1	03/16/20 09:17	03/17/20 08:00		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**20.2**	mg/kg	2.4	0.71	1	03/16/20 06:45	03/16/20 18:47	7439-92-1	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 16:03	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/17/20 16:03	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 16:03	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/17/20 16:03	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/17/20 16:03	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 16:03	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 16:03	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/17/20 16:03	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/17/20 16:03	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/17/20 16:03	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 16:03	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 16:03	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/17/20 16:03	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/17/20 16:03	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 16:03	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/17/20 16:03	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/17/20 16:03	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/17/20 16:03	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/17/20 16:03	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	98-82-8	W

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-3 (0.5') **Lab ID: 40204699014** Collected: 03/11/20 14:25 Received: 03/13/20 08:20 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 Preparation Method: EPA 5035/5030B								
p-Isopropyltoluene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 16:03	99-87-6	W
Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/17/20 16:03	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	1634-04-4	W
Naphthalene	**<27.3**	ug/kg	91.0	27.3	1	03/17/20 07:15	03/17/20 16:03	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	100-42-5	W
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/17/20 16:03	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	108-88-3	W
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/17/20 16:03	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/17/20 16:03	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/17/20 16:03	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/17/20 16:03	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/17/20 16:03	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:03	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	102	%	57-146		1	03/17/20 07:15	03/17/20 16:03	1868-53-7	
Toluene-d8 (S)	104	%	64-134		1	03/17/20 07:15	03/17/20 16:03	2037-26-5	
4-Bromofluorobenzene (S)	95	%	54-126		1	03/17/20 07:15	03/17/20 16:03	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**17.7**	%	0.10	0.10	1		03/14/20 11:45		

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-3 (23') **Lab ID: 40204699015** Collected: 03/11/20 14:26 Received: 03/13/20 08:20 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 Preparation Method: WI MOD DRO								
Diesel Range Organics	**<1.2**	mg/kg	4.0	1.2	1	03/16/20 09:17	03/17/20 08:09		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**1.7J**	mg/kg	1.9	0.57	1	03/16/20 06:45	03/16/20 18:50	7439-92-1	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 16:26	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/17/20 16:26	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 16:26	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/17/20 16:26	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/17/20 16:26	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 16:26	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 16:26	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/17/20 16:26	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/17/20 16:26	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/17/20 16:26	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 16:26	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 16:26	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/17/20 16:26	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/17/20 16:26	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 16:26	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/17/20 16:26	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/17/20 16:26	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/17/20 16:26	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/17/20 16:26	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	98-82-8	W

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-3 (23') **Lab ID: 40204699015** Collected: 03/11/20 14:26 Received: 03/13/20 08:20 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 Preparation Method: EPA 5035/5030B								
p-Isopropyltoluene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 16:26	99-87-6	W
Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/17/20 16:26	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	1634-04-4	W
Naphthalene	**<27.3**	ug/kg	91.0	27.3	1	03/17/20 07:15	03/17/20 16:26	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	100-42-5	W
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/17/20 16:26	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	108-88-3	W
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/17/20 16:26	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/17/20 16:26	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/17/20 16:26	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/17/20 16:26	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/17/20 16:26	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:26	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	97	%	57-146		1	03/17/20 07:15	03/17/20 16:26	1868-53-7	
Toluene-d8 (S)	99	%	64-134		1	03/17/20 07:15	03/17/20 16:26	2037-26-5	
4-Bromofluorobenzene (S)	94	%	54-126		1	03/17/20 07:15	03/17/20 16:26	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**3.5**	%	0.10	0.10	1		03/14/20 11:45		

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(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-4 (2') **Lab ID: 40204699016** Collected: 03/11/20 15:00 Received: 03/13/20 08:20 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 Preparation Method: WI MOD DRO								
Diesel Range Organics	**<1.3**	mg/kg	4.5	1.3	1	03/16/20 09:17	03/17/20 08:18		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**18.8**	mg/kg	2.4	0.72	1	03/16/20 06:45	03/16/20 18:57	7439-92-1	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 16:49	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/17/20 16:49	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 16:49	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/17/20 16:49	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/17/20 16:49	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 16:49	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 16:49	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/17/20 16:49	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/17/20 16:49	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/17/20 16:49	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 16:49	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 16:49	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/17/20 16:49	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/17/20 16:49	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 16:49	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/17/20 16:49	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/17/20 16:49	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/17/20 16:49	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/17/20 16:49	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	98-82-8	W

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-4 (2') **Lab ID: 40204699016** Collected: 03/11/20 15:00 Received: 03/13/20 08:20 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 Preparation Method: EPA 5035/5030B								
p-Isopropyltoluene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 16:49	99-87-6	W
Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/17/20 16:49	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	1634-04-4	W
Naphthalene	**<27.3**	ug/kg	91.0	27.3	1	03/17/20 07:15	03/17/20 16:49	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	100-42-5	W
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/17/20 16:49	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	108-88-3	W
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/17/20 16:49	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/17/20 16:49	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/17/20 16:49	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/17/20 16:49	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/17/20 16:49	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 16:49	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	76	%	57-146		1	03/17/20 07:15	03/17/20 16:49	1868-53-7	
Toluene-d8 (S)	75	%	64-134		1	03/17/20 07:15	03/17/20 16:49	2037-26-5	
4-Bromofluorobenzene (S)	68	%	54-126		1	03/17/20 07:15	03/17/20 16:49	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**19.2**	%	0.10	0.10	1		03/14/20 11:45		

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-4 (24.5') **Lab ID: 40204699017** Collected: 03/11/20 15:01 Received: 03/13/20 08:20 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 Preparation Method: WI MOD DRO								
Diesel Range Organics	**<1.1**	mg/kg	3.7	1.1	1	03/16/20 09:17	03/17/20 08:27		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**1.4J**	mg/kg	2.0	0.61	1	03/16/20 06:45	03/16/20 18:59	7439-92-1	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 17:12	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/17/20 17:12	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 17:12	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/17/20 17:12	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/17/20 17:12	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 17:12	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 17:12	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/17/20 17:12	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/17/20 17:12	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/17/20 17:12	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 17:12	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 17:12	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/17/20 17:12	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/17/20 17:12	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 17:12	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/17/20 17:12	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/17/20 17:12	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/17/20 17:12	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/17/20 17:12	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	98-82-8	W

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-4 (24.5') **Lab ID: 40204699017** Collected: 03/11/20 15:01 Received: 03/13/20 08:20 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 Preparation Method: EPA 5035/5030B								
p-Isopropyltoluene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 17:12	99-87-6	W
Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/17/20 17:12	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	1634-04-4	W
Naphthalene	**<27.3**	ug/kg	91.0	27.3	1	03/17/20 07:15	03/17/20 17:12	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	100-42-5	W
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/17/20 17:12	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	108-88-3	W
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/17/20 17:12	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/17/20 17:12	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/17/20 17:12	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/17/20 17:12	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/17/20 17:12	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:12	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	100	%	57-146		1	03/17/20 07:15	03/17/20 17:12	1868-53-7	
Toluene-d8 (S)	100	%	64-134		1	03/17/20 07:15	03/17/20 17:12	2037-26-5	
4-Bromofluorobenzene (S)	91	%	54-126		1	03/17/20 07:15	03/17/20 17:12	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**3.8**	%	0.10	0.10	1		03/14/20 11:45		

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(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-5 (2.5') **Lab ID: 40204699018** Collected: 03/11/20 15:45 Received: 03/13/20 08:20 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 Preparation Method: WI MOD DRO								
Diesel Range Organics	**<1.4**	mg/kg	4.7	1.4	1	03/16/20 09:17	03/17/20 08:36		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**12.1**	mg/kg	2.6	0.78	1	03/16/20 06:45	03/16/20 19:02	7439-92-1	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 17:35	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/17/20 17:35	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 17:35	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/17/20 17:35	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/17/20 17:35	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 17:35	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 17:35	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/17/20 17:35	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/17/20 17:35	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/17/20 17:35	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 17:35	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 17:35	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/17/20 17:35	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/17/20 17:35	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 17:35	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/17/20 17:35	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/17/20 17:35	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/17/20 17:35	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/17/20 17:35	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	98-82-8	W

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-5 (2.5') **Lab ID: 40204699018** Collected: 03/11/20 15:45 Received: 03/13/20 08:20 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 Preparation Method: EPA 5035/5030B								
p-Isopropyltoluene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 17:35	99-87-6	W
Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/17/20 17:35	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	1634-04-4	W
Naphthalene	**<27.3**	ug/kg	91.0	27.3	1	03/17/20 07:15	03/17/20 17:35	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	100-42-5	W
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/17/20 17:35	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	108-88-3	W
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/17/20 17:35	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/17/20 17:35	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/17/20 17:35	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/17/20 17:35	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/17/20 17:35	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:35	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	99	%	57-146		1	03/17/20 07:15	03/17/20 17:35	1868-53-7	
Toluene-d8 (S)	101	%	64-134		1	03/17/20 07:15	03/17/20 17:35	2037-26-5	
4-Bromofluorobenzene (S)	94	%	54-126		1	03/17/20 07:15	03/17/20 17:35	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**26.0**	%	0.10	0.10	1		03/14/20 11:45		

REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-5 (23') **Lab ID: 40204699019** Collected: 03/11/20 15:46 Received: 03/13/20 08:20 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 Preparation Method: WI MOD DRO								
Diesel Range Organics	**<1.1**	mg/kg	3.5	1.1	1	03/16/20 09:17	03/17/20 08:45		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**1.3J**	mg/kg	2.0	0.60	1	03/16/20 06:45	03/16/20 19:04	7439-92-1	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 17:59	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/17/20 17:59	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 17:59	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/17/20 17:59	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/17/20 17:59	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 17:59	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 17:59	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/17/20 17:59	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/17/20 17:59	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/17/20 17:59	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 17:59	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 17:59	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/17/20 17:59	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/17/20 17:59	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 17:59	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/17/20 17:59	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/17/20 17:59	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/17/20 17:59	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/17/20 17:59	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	98-82-8	W

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-5 (23') **Lab ID: 40204699019** Collected: 03/11/20 15:46 Received: 03/13/20 08:20 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 Preparation Method: EPA 5035/5030B								
p-Isopropyltoluene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 17:59	99-87-6	W
Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/17/20 17:59	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	1634-04-4	W
Naphthalene	**<27.3**	ug/kg	91.0	27.3	1	03/17/20 07:15	03/17/20 17:59	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	100-42-5	W
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/17/20 17:59	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	108-88-3	W
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/17/20 17:59	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/17/20 17:59	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/17/20 17:59	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/17/20 17:59	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/17/20 17:59	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 17:59	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	107	%	57-146		1	03/17/20 07:15	03/17/20 17:59	1868-53-7	
Toluene-d8 (S)	106	%	64-134		1	03/17/20 07:15	03/17/20 17:59	2037-26-5	
4-Bromofluorobenzene (S)	96	%	54-126		1	03/17/20 07:15	03/17/20 17:59	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**3.1**	%	0.10	0.10	1		03/14/20 11:45		

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-6 (2.5') **Lab ID: 40204699020** Collected: 03/11/20 16:40 Received: 03/13/20 08:20 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 Preparation Method: WI MOD DRO								
Diesel Range Organics	**2.8J**	mg/kg	4.1	1.2	1	03/18/20 09:15	03/19/20 07:30		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**31.4**	mg/kg	2.4	0.70	1	03/16/20 06:45	03/16/20 19:06	7439-92-1	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 18:22	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/17/20 18:22	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 18:22	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/17/20 18:22	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/17/20 18:22	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 18:22	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 18:22	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/17/20 18:22	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/17/20 18:22	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/17/20 18:22	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 18:22	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 18:22	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/17/20 18:22	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/17/20 18:22	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 18:22	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/17/20 18:22	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/17/20 18:22	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/17/20 18:22	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/17/20 18:22	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	98-82-8	W

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-6 (2.5') **Lab ID: 40204699020** Collected: 03/11/20 16:40 Received: 03/13/20 08:20 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 Preparation Method: EPA 5035/5030B								
p-Isopropyltoluene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 18:22	99-87-6	W
Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/17/20 18:22	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	1634-04-4	W
Naphthalene	**<27.3**	ug/kg	91.0	27.3	1	03/17/20 07:15	03/17/20 18:22	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	100-42-5	W
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/17/20 18:22	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	108-88-3	W
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/17/20 18:22	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/17/20 18:22	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/17/20 18:22	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/17/20 18:22	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/17/20 18:22	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:22	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	97	%	57-146		1	03/17/20 07:15	03/17/20 18:22	1868-53-7	
Toluene-d8 (S)	99	%	64-134		1	03/17/20 07:15	03/17/20 18:22	2037-26-5	
4-Bromofluorobenzene (S)	92	%	54-126		1	03/17/20 07:15	03/17/20 18:22	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**19.7**	%	0.10	0.10	1		03/14/20 11:46		

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-6 (25') **Lab ID: 40204699021** Collected: 03/11/20 16:41 Received: 03/13/20 08:20 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 Preparation Method: WI MOD DRO								
Diesel Range Organics	**<1.1**	mg/kg	3.8	1.1	1	03/18/20 09:15	03/19/20 07:21		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**1.8J**	mg/kg	2.0	0.59	1	03/16/20 06:45	03/16/20 19:09	7439-92-1	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 18:45	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/17/20 18:45	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 18:45	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/17/20 18:45	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/17/20 18:45	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 18:45	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 18:45	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/17/20 18:45	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/17/20 18:45	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/17/20 18:45	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 18:45	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 18:45	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/17/20 18:45	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/17/20 18:45	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 18:45	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/17/20 18:45	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/17/20 18:45	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/17/20 18:45	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/17/20 18:45	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	98-82-8	W

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-6 (25') **Lab ID: 40204699021** Collected: 03/11/20 16:41 Received: 03/13/20 08:20 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 Preparation Method: EPA 5035/5030B								
p-Isopropyltoluene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 18:45	99-87-6	W
Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/17/20 18:45	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	1634-04-4	W
Naphthalene	**<27.3**	ug/kg	91.0	27.3	1	03/17/20 07:15	03/17/20 18:45	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	100-42-5	W
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/17/20 18:45	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	108-88-3	W
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/17/20 18:45	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/17/20 18:45	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/17/20 18:45	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/17/20 18:45	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/17/20 18:45	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 18:45	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	106	%	57-146		1	03/17/20 07:15	03/17/20 18:45	1868-53-7	
Toluene-d8 (S)	104	%	64-134		1	03/17/20 07:15	03/17/20 18:45	2037-26-5	
4-Bromofluorobenzene (S)	97	%	54-126		1	03/17/20 07:15	03/17/20 18:45	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**3.3**	%	0.10	0.10	1		03/14/20 11:46		

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-7 (1') **Lab ID: 40204699022** Collected: 03/11/20 17:45 Received: 03/13/20 08:20 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 Preparation Method: WI MOD DRO								
Diesel Range Organics	**2.1J**	mg/kg	3.7	1.1	1	03/18/20 09:15	03/19/20 07:39		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**9.1**	mg/kg	2.0	0.61	1	03/16/20 06:45	03/16/20 19:11	7439-92-1	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 19:08	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/17/20 19:08	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 19:08	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/17/20 19:08	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/17/20 19:08	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 19:08	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 19:08	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/17/20 19:08	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/17/20 19:08	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/17/20 19:08	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 19:08	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 19:08	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/17/20 19:08	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/17/20 19:08	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 19:08	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/17/20 19:08	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/17/20 19:08	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/17/20 19:08	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/17/20 19:08	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	98-82-8	W

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(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-7 (1') **Lab ID: 40204699022** Collected: 03/11/20 17:45 Received: 03/13/20 08:20 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 Preparation Method: EPA 5035/5030B								
p-Isopropyltoluene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 19:08	99-87-6	W
Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/17/20 19:08	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	1634-04-4	W
Naphthalene	**<27.3**	ug/kg	91.0	27.3	1	03/17/20 07:15	03/17/20 19:08	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	100-42-5	W
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/17/20 19:08	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	108-88-3	W
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/17/20 19:08	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/17/20 19:08	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/17/20 19:08	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/17/20 19:08	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/17/20 19:08	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:08	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	99	%	57-146		1	03/17/20 07:15	03/17/20 19:08	1868-53-7	
Toluene-d8 (S)	98	%	64-134		1	03/17/20 07:15	03/17/20 19:08	2037-26-5	
4-Bromofluorobenzene (S)	90	%	54-126		1	03/17/20 07:15	03/17/20 19:08	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**7.4**	%	0.10	0.10	1		03/16/20 13:05		

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-7 (25') **Lab ID: 40204699023** Collected: 03/11/20 17:46 Received: 03/13/20 08:20 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 Preparation Method: WI MOD DRO								
Diesel Range Organics	**<1.2**	mg/kg	4.0	1.2	1	03/18/20 09:15	03/19/20 06:45		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**1.8J**	mg/kg	2.0	0.60	1	03/16/20 06:45	03/16/20 19:13	7439-92-1	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 19:31	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/17/20 19:31	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 19:31	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/17/20 19:31	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/17/20 19:31	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 19:31	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 19:31	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/17/20 19:31	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/17/20 19:31	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/17/20 19:31	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 19:31	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 19:31	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/17/20 19:31	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/17/20 19:31	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 19:31	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/17/20 19:31	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/17/20 19:31	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/17/20 19:31	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/17/20 19:31	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	98-82-8	W

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-7 (25') **Lab ID: 40204699023** Collected: 03/11/20 17:46 Received: 03/13/20 08:20 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 Preparation Method: EPA 5035/5030B								
p-Isopropyltoluene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 19:31	99-87-6	W
Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/17/20 19:31	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	1634-04-4	W
Naphthalene	**<27.3**	ug/kg	91.0	27.3	1	03/17/20 07:15	03/17/20 19:31	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	100-42-5	W
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/17/20 19:31	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	108-88-3	W
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/17/20 19:31	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/17/20 19:31	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/17/20 19:31	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/17/20 19:31	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/17/20 19:31	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:31	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	106	%	57-146		1	03/17/20 07:15	03/17/20 19:31	1868-53-7	
Toluene-d8 (S)	105	%	64-134		1	03/17/20 07:15	03/17/20 19:31	2037-26-5	
4-Bromofluorobenzene (S)	94	%	54-126		1	03/17/20 07:15	03/17/20 19:31	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**3.8**	%	0.10	0.10	1		03/16/20 13:05		

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-8 (5') **Lab ID: 40204699024** Collected: 03/11/20 19:01 Received: 03/13/20 08:20 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 Preparation Method: WI MOD DRO								
Diesel Range Organics	**<1.3**	mg/kg	4.2	1.3	1	03/18/20 09:15	03/19/20 06:54		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**9.3**	mg/kg	2.3	0.69	1	03/16/20 06:45	03/16/20 19:16	7439-92-1	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 19:55	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/17/20 19:55	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 19:55	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/17/20 19:55	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/17/20 19:55	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 19:55	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 19:55	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/17/20 19:55	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/17/20 19:55	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/17/20 19:55	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 19:55	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 19:55	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/17/20 19:55	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/17/20 19:55	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 19:55	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/17/20 19:55	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/17/20 19:55	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/17/20 19:55	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/17/20 19:55	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	98-82-8	W

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-8 (5') **Lab ID: 40204699024** Collected: 03/11/20 19:01 Received: 03/13/20 08:20 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 Preparation Method: EPA 5035/5030B								
p-Isopropyltoluene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 19:55	99-87-6	W
Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/17/20 19:55	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	1634-04-4	W
Naphthalene	**<27.3**	ug/kg	91.0	27.3	1	03/17/20 07:15	03/17/20 19:55	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	100-42-5	W
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/17/20 19:55	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	108-88-3	W
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/17/20 19:55	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/17/20 19:55	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/17/20 19:55	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/17/20 19:55	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/17/20 19:55	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 19:55	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	107	%	57-146		1	03/17/20 07:15	03/17/20 19:55	1868-53-7	
Toluene-d8 (S)	108	%	64-134		1	03/17/20 07:15	03/17/20 19:55	2037-26-5	
4-Bromofluorobenzene (S)	98	%	54-126		1	03/17/20 07:15	03/17/20 19:55	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**17.7**	%	0.10	0.10	1		03/16/20 13:05		

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-8 (24') **Lab ID: 40204699025** Collected: 03/11/20 19:02 Received: 03/13/20 08:20 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 Preparation Method: WI MOD DRO								
Diesel Range Organics	**<1.1**	mg/kg	3.7	1.1	1	03/18/20 09:15	03/19/20 07:03		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**1.3J**	mg/kg	2.0	0.60	1	03/16/20 06:45	03/16/20 19:18	7439-92-1	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 20:18	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/17/20 20:18	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 20:18	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/17/20 20:18	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/17/20 20:18	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 20:18	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 20:18	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/17/20 20:18	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/17/20 20:18	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/17/20 20:18	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 20:18	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 20:18	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/17/20 20:18	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/17/20 20:18	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 20:18	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/17/20 20:18	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/17/20 20:18	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/17/20 20:18	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/17/20 20:18	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	98-82-8	W

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-8 (24') **Lab ID: 40204699025** Collected: 03/11/20 19:02 Received: 03/13/20 08:20 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 Preparation Method: EPA 5035/5030B								
p-Isopropyltoluene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 20:18	99-87-6	W
Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/17/20 20:18	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	1634-04-4	W
Naphthalene	**<27.3**	ug/kg	91.0	27.3	1	03/17/20 07:15	03/17/20 20:18	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	100-42-5	W
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/17/20 20:18	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	108-88-3	W
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/17/20 20:18	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/17/20 20:18	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/17/20 20:18	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/17/20 20:18	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/17/20 20:18	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:18	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	99	%	57-146		1	03/17/20 07:15	03/17/20 20:18	1868-53-7	
Toluene-d8 (S)	101	%	64-134		1	03/17/20 07:15	03/17/20 20:18	2037-26-5	
4-Bromofluorobenzene (S)	92	%	54-126		1	03/17/20 07:15	03/17/20 20:18	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**2.2**	%	0.10	0.10	1		03/16/20 13:05		

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-9 (2') **Lab ID: 40204699026** Collected: 03/11/20 18:23 Received: 03/13/20 08:20 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 Preparation Method: WI MOD DRO								
Diesel Range Organics	**49.0**	mg/kg	4.1	1.2	1	03/18/20 09:15	03/19/20 07:48		DC
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**415**	mg/kg	2.2	0.66	1	03/16/20 06:45	03/16/20 19:25	7439-92-1	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 20:41	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/17/20 20:41	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 20:41	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/17/20 20:41	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/17/20 20:41	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 20:41	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/17/20 20:41	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/17/20 20:41	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/17/20 20:41	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/17/20 20:41	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 20:41	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/17/20 20:41	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/17/20 20:41	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/17/20 20:41	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 20:41	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/17/20 20:41	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/17/20 20:41	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/17/20 20:41	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/17/20 20:41	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	98-82-8	W

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(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-9 (2') **Lab ID: 40204699026** Collected: 03/11/20 18:23 Received: 03/13/20 08:20 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 Preparation Method: EPA 5035/5030B								
p-Isopropyltoluene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/17/20 20:41	99-87-6	W
Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/17/20 20:41	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	1634-04-4	W
Naphthalene	**44.1J**	ug/kg	102	30.6	1	03/17/20 07:15	03/17/20 20:41	91-20-3	
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	100-42-5	W
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/17/20 20:41	127-18-4	W
Toluene	**33.4J**	ug/kg	67.4	28.1	1	03/17/20 07:15	03/17/20 20:41	108-88-3	
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/17/20 20:41	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/17/20 20:41	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/17/20 20:41	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/17/20 20:41	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/17/20 20:41	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/17/20 20:41	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	98	%	57-146		1	03/17/20 07:15	03/17/20 20:41	1868-53-7	
Toluene-d8 (S)	99	%	64-134		1	03/17/20 07:15	03/17/20 20:41	2037-26-5	
4-Bromofluorobenzene (S)	90	%	54-126		1	03/17/20 07:15	03/17/20 20:41	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**10.9**	%	0.10	0.10	1		03/16/20 13:05		

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-9 (23') **Lab ID: 40204699027** Collected: 03/11/20 18:24 Received: 03/13/20 08:20 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 Preparation Method: WI MOD DRO								
Diesel Range Organics	**<1.1**	mg/kg	3.8	1.1	1	03/18/20 09:15	03/19/20 07:12		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**2.3**	mg/kg	2.2	0.65	1	03/16/20 06:45	03/16/20 19:28	7439-92-1	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/18/20 11:44	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/18/20 11:44	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/18/20 11:44	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/18/20 11:44	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/18/20 11:44	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/18/20 11:44	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/18/20 11:44	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/18/20 11:44	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/18/20 11:44	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/18/20 11:44	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/18/20 11:44	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/18/20 11:44	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/18/20 11:44	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/18/20 11:44	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/18/20 11:44	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/18/20 11:44	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/18/20 11:44	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/18/20 11:44	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/18/20 11:44	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	98-82-8	W

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: P-9 (23') **Lab ID: 40204699027** Collected: 03/11/20 18:24 Received: 03/13/20 08:20 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 Preparation Method: EPA 5035/5030B								
p-Isopropyltoluene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/18/20 11:44	99-87-6	W
Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/18/20 11:44	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	1634-04-4	W
Naphthalene	**<27.3**	ug/kg	91.0	27.3	1	03/17/20 07:15	03/18/20 11:44	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	100-42-5	W
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/18/20 11:44	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	108-88-3	W
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/18/20 11:44	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/18/20 11:44	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/18/20 11:44	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/18/20 11:44	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/18/20 11:44	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:44	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	102	%	57-146		1	03/17/20 07:15	03/18/20 11:44	1868-53-7	
Toluene-d8 (S)	102	%	64-134		1	03/17/20 07:15	03/18/20 11:44	2037-26-5	
4-Bromofluorobenzene (S)	90	%	54-126		1	03/17/20 07:15	03/18/20 11:44	460-00-4	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**7.9**	%	0.10	0.10	1		03/16/20 13:06		

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: TRIP-SOIL **Lab ID: 40204699028** Collected: 03/11/20 19:15 Received: 03/13/20 08:20 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 8260 Preparation Method: EPA 5035/5030B								
Benzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	71-43-2	W
Bromobenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/18/20 11:21	108-86-1	W
Bromochloromethane	**<25.0**	ug/kg	70.0	25.0	1	03/17/20 07:15	03/18/20 11:21	74-97-5	W
Bromodichloromethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	75-27-4	W
Bromoform	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/18/20 11:21	75-25-2	W
Bromomethane	**<63.8**	ug/kg	250	63.8	1	03/17/20 07:15	03/18/20 11:21	74-83-9	W
n-Butylbenzene	**<30.0**	ug/kg	100	30.0	1	03/17/20 07:15	03/18/20 11:21	104-51-8	W
sec-Butylbenzene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/18/20 11:21	135-98-8	W
tert-Butylbenzene	**<25.0**	ug/kg	62.0	25.0	1	03/17/20 07:15	03/18/20 11:21	98-06-6	W
Carbon tetrachloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	56-23-5	W
Chlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	108-90-7	W
Chloroethane	**<46.4**	ug/kg	250	46.4	1	03/17/20 07:15	03/18/20 11:21	75-00-3	W
Chloroform	**<47.5**	ug/kg	250	47.5	1	03/17/20 07:15	03/18/20 11:21	67-66-3	W
Chloromethane	**<25.0**	ug/kg	80.0	25.0	1	03/17/20 07:15	03/18/20 11:21	74-87-3	W
2-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/18/20 11:21	95-49-8	W
4-Chlorotoluene	**<25.0**	ug/kg	64.0	25.0	1	03/17/20 07:15	03/18/20 11:21	106-43-4	W
1,2-Dibromo-3-chloropropane	**<237**	ug/kg	789	237	1	03/17/20 07:15	03/18/20 11:21	96-12-8	W
Dibromochloromethane	**<229**	ug/kg	763	229	1	03/17/20 07:15	03/18/20 11:21	124-48-1	W
1,2-Dibromoethane (EDB)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	106-93-4	W
Dibromomethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	74-95-3	W
1,2-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	95-50-1	W
1,3-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	541-73-1	W
1,4-Dichlorobenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	106-46-7	W
Dichlorodifluoromethane	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/18/20 11:21	75-71-8	W
1,1-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	75-34-3	W
1,2-Dichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	107-06-2	W
1,1-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	75-35-4	W
cis-1,2-Dichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	156-59-2	W
trans-1,2-Dichloroethene	**<25.0**	ug/kg	67.0	25.0	1	03/17/20 07:15	03/18/20 11:21	156-60-5	W
1,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	78-87-5	W
1,3-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	142-28-9	W
2,2-Dichloropropane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	594-20-7	W
1,1-Dichloropropene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	563-58-6	W
cis-1,3-Dichloropropene	**<42.3**	ug/kg	141	42.3	1	03/17/20 07:15	03/18/20 11:21	10061-01-5	W
trans-1,3-Dichloropropene	**<25.0**	ug/kg	74.0	25.0	1	03/17/20 07:15	03/18/20 11:21	10061-02-6	W
Diisopropyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	108-20-3	W
Ethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	100-41-4	W
Hexachloro-1,3-butadiene	**<68.7**	ug/kg	229	68.7	1	03/17/20 07:15	03/18/20 11:21	87-68-3	W
Isopropylbenzene (Cumene)	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	98-82-8	W
p-Isopropyltoluene	**<25.0**	ug/kg	72.0	25.0	1	03/17/20 07:15	03/18/20 11:21	99-87-6	W
Methylene Chloride	**<26.3**	ug/kg	88.0	26.3	1	03/17/20 07:15	03/18/20 11:21	75-09-2	W
Methyl-tert-butyl ether	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	1634-04-4	W
Naphthalene	**<27.3**	ug/kg	91.0	27.3	1	03/17/20 07:15	03/18/20 11:21	91-20-3	W
n-Propylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	103-65-1	W
Styrene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	100-42-5	W

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(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Sample: TRIP-SOIL **Lab ID: 40204699028** Collected: 03/11/20 19:15 Received: 03/13/20 08:20 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 8260 Preparation Method: EPA 5035/5030B								
1,1,1,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	630-20-6	W
1,1,2,2-Tetrachloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	79-34-5	W
Tetrachloroethene	**<38.7**	ug/kg	129	38.7	1	03/17/20 07:15	03/18/20 11:21	127-18-4	W
Toluene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	108-88-3	W
1,2,3-Trichlorobenzene	**<47.3**	ug/kg	158	47.3	1	03/17/20 07:15	03/18/20 11:21	87-61-6	W
1,2,4-Trichlorobenzene	**<41.7**	ug/kg	250	41.7	1	03/17/20 07:15	03/18/20 11:21	120-82-1	W
1,1,1-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	71-55-6	W
1,1,2-Trichloroethane	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	79-00-5	W
Trichloroethene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	79-01-6	W
Trichlorofluoromethane	**<25.0**	ug/kg	65.0	25.0	1	03/17/20 07:15	03/18/20 11:21	75-69-4	W
1,2,3-Trichloropropane	**<37.4**	ug/kg	125	37.4	1	03/17/20 07:15	03/18/20 11:21	96-18-4	W
1,2,4-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	95-63-6	W
1,3,5-Trimethylbenzene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	108-67-8	W
Vinyl chloride	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	75-01-4	W
m&p-Xylene	**<50.0**	ug/kg	120	50.0	1	03/17/20 07:15	03/18/20 11:21	179601-23-1	W
o-Xylene	**<25.0**	ug/kg	60.0	25.0	1	03/17/20 07:15	03/18/20 11:21	95-47-6	W
Surrogates									
Dibromofluoromethane (S)	88	%	57-146		1	03/17/20 07:15	03/18/20 11:21	1868-53-7	
Toluene-d8 (S)	83	%	64-134		1	03/17/20 07:15	03/18/20 11:21	2037-26-5	
4-Bromofluorobenzene (S)	87	%	54-126		1	03/17/20 07:15	03/18/20 11:21	460-00-4	

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QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

QC Batch: 350023 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 40204699010, 40204699011, 40204699012, 40204699013, 40204699014, 40204699015, 40204699016, 40204699017, 40204699018, 40204699019, 40204699020, 40204699021, 40204699022, 40204699023, 40204699024, 40204699025, 40204699026, 40204699027

METHOD BLANK: 2027986 Matrix: Solid
Associated Lab Samples: 40204699010, 40204699011, 40204699012, 40204699013, 40204699014, 40204699015, 40204699016, 40204699017, 40204699018, 40204699019, 40204699020, 40204699021, 40204699022, 40204699023, 40204699024, 40204699025, 40204699026, 40204699027

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/kg	<0.60	2.0	03/16/20 18:29	

LABORATORY CONTROL SAMPLE: 2027987

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	50	52.4	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2027988 2027989

Parameter	Units	40204699010 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	mg/kg	14.2	60.5	60.3	73.0	71.4	97	95	75-125	2	20	

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QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

QC Batch: 350160 Analysis Method: EPA 8260
QC Batch Method: EPA 5035/5030B Analysis Description: 8260 MSV Med Level Normal List
Associated Lab Samples: 40204699010, 40204699011, 40204699012, 40204699013, 40204699014, 40204699015, 40204699016, 40204699017, 40204699018, 40204699019, 40204699020, 40204699021, 40204699022, 40204699023, 40204699024, 40204699025, 40204699026, 40204699027, 40204699028

METHOD BLANK: 2028480 Matrix: Solid
Associated Lab Samples: 40204699010, 40204699011, 40204699012, 40204699013, 40204699014, 40204699015, 40204699016, 40204699017, 40204699018, 40204699019, 40204699020, 40204699021, 40204699022, 40204699023, 40204699024, 40204699025, 40204699026, 40204699027, 40204699028

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<7.8	50.0	03/17/20 10:39	
1,1,1-Trichloroethane	ug/kg	<13.5	50.0	03/17/20 10:39	
1,1,2,2-Tetrachloroethane	ug/kg	<15.7	52.0	03/17/20 10:39	
1,1,2-Trichloroethane	ug/kg	<15.7	52.0	03/17/20 10:39	
1,1-Dichloroethane	ug/kg	<13.5	50.0	03/17/20 10:39	
1,1-Dichloroethene	ug/kg	<11.8	50.0	03/17/20 10:39	
1,1-Dichloropropene	ug/kg	<10.7	50.0	03/17/20 10:39	
1,2,3-Trichlorobenzene	ug/kg	<47.3	158	03/17/20 10:39	
1,2,3-Trichloropropane	ug/kg	<37.4	125	03/17/20 10:39	
1,2,4-Trichlorobenzene	ug/kg	<41.7	250	03/17/20 10:39	
1,2,4-Trimethylbenzene	ug/kg	<18.1	60.0	03/17/20 10:39	
1,2-Dibromo-3-chloropropane	ug/kg	<237	789	03/17/20 10:39	
1,2-Dibromoethane (EDB)	ug/kg	<17.0	57.0	03/17/20 10:39	
1,2-Dichlorobenzene	ug/kg	<13.1	50.0	03/17/20 10:39	
1,2-Dichloroethane	ug/kg	<13.8	50.0	03/17/20 10:39	
1,2-Dichloropropane	ug/kg	<13.5	50.0	03/17/20 10:39	
1,3,5-Trimethylbenzene	ug/kg	<16.0	53.0	03/17/20 10:39	
1,3-Dichlorobenzene	ug/kg	<13.0	50.0	03/17/20 10:39	
1,3-Dichloropropane	ug/kg	<11.0	50.0	03/17/20 10:39	
1,4-Dichlorobenzene	ug/kg	<12.0	50.0	03/17/20 10:39	
2,2-Dichloropropane	ug/kg	<15.7	52.0	03/17/20 10:39	
2-Chlorotoluene	ug/kg	<19.3	64.0	03/17/20 10:39	
4-Chlorotoluene	ug/kg	<19.3	64.0	03/17/20 10:39	
Benzene	ug/kg	<12.5	42.0	03/17/20 10:39	
Bromobenzene	ug/kg	<18.5	62.0	03/17/20 10:39	
Bromochloromethane	ug/kg	<20.9	70.0	03/17/20 10:39	
Bromodichloromethane	ug/kg	<10.0	50.0	03/17/20 10:39	
Bromoform	ug/kg	<21.6	72.0	03/17/20 10:39	
Bromomethane	ug/kg	<63.8	250	03/17/20 10:39	
Carbon tetrachloride	ug/kg	<7.5	50.0	03/17/20 10:39	
Chlorobenzene	ug/kg	<16.8	56.0	03/17/20 10:39	
Chloroethane	ug/kg	<46.4	250	03/17/20 10:39	
Chloroform	ug/kg	<47.5	250	03/17/20 10:39	
Chloromethane	ug/kg	<24.0	80.0	03/17/20 10:39	
cis-1,2-Dichloroethene	ug/kg	<14.8	50.0	03/17/20 10:39	
cis-1,3-Dichloropropene	ug/kg	<42.3	141	03/17/20 10:39	
Dibromochloromethane	ug/kg	<229	763	03/17/20 10:39	
Dibromomethane	ug/kg	<17.7	59.0	03/17/20 10:39	

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QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

METHOD BLANK: 2028480 Matrix: Solid

Associated Lab Samples: 40204699010, 40204699011, 40204699012, 40204699013, 40204699014, 40204699015, 40204699016, 40204699017, 40204699018, 40204699019, 40204699020, 40204699021, 40204699022, 40204699023, 40204699024, 40204699025, 40204699026, 40204699027, 40204699028

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Dichlorodifluoromethane	ug/kg	<21.7	72.0	03/17/20 10:39	
Diisopropyl ether	ug/kg	<14.0	50.0	03/17/20 10:39	
Ethylbenzene	ug/kg	<14.5	50.0	03/17/20 10:39	
Hexachloro-1,3-butadiene	ug/kg	<68.7	229	03/17/20 10:39	
Isopropylbenzene (Cumene)	ug/kg	<17.7	59.0	03/17/20 10:39	
m&p-Xylene	ug/kg	<32.4	108	03/17/20 10:39	
Methyl-tert-butyl ether	ug/kg	<16.2	54.0	03/17/20 10:39	
Methylene Chloride	ug/kg	<26.3	88.0	03/17/20 10:39	
n-Butylbenzene	ug/kg	<30.0	100	03/17/20 10:39	
n-Propylbenzene	ug/kg	<17.8	59.0	03/17/20 10:39	
Naphthalene	ug/kg	<27.3	91.0	03/17/20 10:39	
o-Xylene	ug/kg	<18.1	60.0	03/17/20 10:39	
p-Isopropyltoluene	ug/kg	<21.7	72.0	03/17/20 10:39	
sec-Butylbenzene	ug/kg	<21.5	72.0	03/17/20 10:39	
Styrene	ug/kg	<12.3	50.0	03/17/20 10:39	
tert-Butylbenzene	ug/kg	<18.7	62.0	03/17/20 10:39	
Tetrachloroethene	ug/kg	<38.7	129	03/17/20 10:39	
Toluene	ug/kg	<13.1	50.0	03/17/20 10:39	
trans-1,2-Dichloroethene	ug/kg	<20.2	67.0	03/17/20 10:39	
trans-1,3-Dichloropropene	ug/kg	<22.2	74.0	03/17/20 10:39	
Trichloroethene	ug/kg	<12.8	50.0	03/17/20 10:39	
Trichlorofluoromethane	ug/kg	<19.6	65.0	03/17/20 10:39	
Vinyl chloride	ug/kg	<14.5	50.0	03/17/20 10:39	
4-Bromofluorobenzene (S)	%	78	54-126	03/17/20 10:39	
Dibromofluoromethane (S)	%	88	57-146	03/17/20 10:39	
Toluene-d8 (S)	%	87	64-134	03/17/20 10:39	

LABORATORY CONTROL SAMPLE: 2028481

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2470	99	70-132	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2580	103	70-130	
1,1,2-Trichloroethane	ug/kg	2500	2340	94	70-130	
1,1-Dichloroethane	ug/kg	2500	2470	99	70-130	
1,1-Dichloroethene	ug/kg	2500	2360	95	77-126	
1,2,4-Trichlorobenzene	ug/kg	2500	2240	90	66-130	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2310	93	54-129	
1,2-Dibromoethane (EDB)	ug/kg	2500	2370	95	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2520	101	70-130	
1,2-Dichloroethane	ug/kg	2500	2370	95	70-134	
1,2-Dichloropropane	ug/kg	2500	2350	94	74-124	
1,3-Dichlorobenzene	ug/kg	2500	2510	100	70-130	

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QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

LABORATORY CONTROL SAMPLE: 2028481

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/kg	2500	2510	100	70-130	
Benzene	ug/kg	2500	2490	100	70-130	
Bromodichloromethane	ug/kg	2500	2390	96	70-130	
Bromoform	ug/kg	2500	1990	80	47-115	
Bromomethane	ug/kg	2500	2180	87	64-165	
Carbon tetrachloride	ug/kg	2500	2440	98	70-131	
Chlorobenzene	ug/kg	2500	2370	95	70-130	
Chloroethane	ug/kg	2500	2540	102	28-197	
Chloroform	ug/kg	2500	2410	96	80-131	
Chloromethane	ug/kg	2500	1920	77	45-118	
cis-1,2-Dichloroethene	ug/kg	2500	2450	98	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2490	100	70-130	
Dibromochloromethane	ug/kg	2500	2400	96	70-130	
Dichlorodifluoromethane	ug/kg	2500	1500	60	38-108	
Ethylbenzene	ug/kg	2500	2290	92	82-122	
Isopropylbenzene (Cumene)	ug/kg	2500	2200	88	70-130	
m&p-Xylene	ug/kg	5000	4640	93	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2470	99	70-130	
Methylene Chloride	ug/kg	2500	2470	99	70-130	
o-Xylene	ug/kg	2500	2380	95	70-130	
Styrene	ug/kg	2500	2430	97	70-130	
Tetrachloroethene	ug/kg	2500	2270	91	70-130	
Toluene	ug/kg	2500	2440	97	80-121	
trans-1,2-Dichloroethene	ug/kg	2500	2410	97	70-130	
trans-1,3-Dichloropropene	ug/kg	2500	2170	87	70-130	
Trichloroethene	ug/kg	2500	2390	96	70-130	
Trichlorofluoromethane	ug/kg	2500	2490	100	81-141	
Vinyl chloride	ug/kg	2500	1970	79	68-121	
4-Bromofluorobenzene (S)	%			94	54-126	
Dibromofluoromethane (S)	%			99	57-146	
Toluene-d8 (S)	%			96	64-134	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2028482 2028483

Parameter	Units	40204699012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<25.0	1570	1570	1390	1470	88	94	64-132	6	20	
1,1,2,2-Tetrachloroethane	ug/kg	<25.0	1570	1570	1700	1750	108	111	70-132	3	20	
1,1,2-Trichloroethane	ug/kg	<25.0	1570	1570	1560	1640	99	104	70-130	5	20	
1,1-Dichloroethane	ug/kg	<25.0	1570	1570	1470	1550	94	98	70-130	5	20	
1,1-Dichloroethene	ug/kg	<25.0	1570	1570	1280	1410	81	90	65-126	10	21	
1,2,4-Trichlorobenzene	ug/kg	<41.7	1570	1570	1580	1660	100	105	66-139	5	20	
1,2-Dibromo-3-chloropropane	ug/kg	<237	1570	1570	1540	1590	98	101	47-146	3	23	
1,2-Dibromoethane (EDB)	ug/kg	<25.0	1570	1570	1530	1630	97	103	70-130	6	20	

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QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2028482 2028483

Parameter	Units	40204699012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichlorobenzene	ug/kg	<25.0	1570	1570	1680	1830	107	116	70-130	8	20	
1,2-Dichloroethane	ug/kg	<25.0	1570	1570	1500	1570	96	100	70-136	4	20	
1,2-Dichloropropane	ug/kg	<25.0	1570	1570	1430	1560	91	99	74-124	8	20	
1,3-Dichlorobenzene	ug/kg	<25.0	1570	1570	1570	1700	100	108	70-130	8	20	
1,4-Dichlorobenzene	ug/kg	<25.0	1570	1570	1660	1770	106	112	70-130	6	20	
Benzene	ug/kg	<25.0	1570	1570	1530	1580	97	100	70-130	3	20	
Bromodichloromethane	ug/kg	<25.0	1570	1570	1440	1500	92	95	70-130	4	20	
Bromoform	ug/kg	<25.0	1570	1570	1280	1410	81	90	47-129	10	20	
Bromomethane	ug/kg	<63.8	1570	1570	1460	1550	93	99	41-180	6	20	
Carbon tetrachloride	ug/kg	<25.0	1570	1570	1320	1430	84	91	58-133	8	20	
Chlorobenzene	ug/kg	<25.0	1570	1570	1450	1540	92	98	70-130	6	20	
Chloroethane	ug/kg	<46.4	1570	1570	1560	1740	99	111	28-197	11	20	
Chloroform	ug/kg	<47.5	1570	1570	1500	1600	96	102	80-131	6	20	
Chloromethane	ug/kg	<25.0	1570	1570	1360	1390	87	88	26-118	2	20	
cis-1,2-Dichloroethene	ug/kg	<25.0	1570	1570	1500	1530	95	97	70-130	2	20	
cis-1,3-Dichloropropene	ug/kg	<42.3	1570	1570	1450	1600	92	102	70-130	10	20	
Dibromochloromethane	ug/kg	<229	1570	1570	1480	1540	94	98	67-130	4	20	
Dichlorodifluoromethane	ug/kg	<25.0	1570	1570	1100	1250	70	79	12-108	13	29	
Ethylbenzene	ug/kg	<25.0	1570	1570	1320	1440	84	91	80-122	8	20	
Isopropylbenzene (Cumene)	ug/kg	<25.0	1570	1570	1270	1380	81	88	70-130	8	20	
m&p-Xylene	ug/kg	<50.0	3150	3150	2780	2980	88	95	70-130	7	20	
Methyl-tert-butyl ether	ug/kg	<25.0	1570	1570	1570	1650	100	105	70-130	5	20	
Methylene Chloride	ug/kg	<26.3	1570	1570	1510	1630	96	104	70-130	8	20	
o-Xylene	ug/kg	<25.0	1570	1570	1410	1550	90	99	70-130	10	20	
Styrene	ug/kg	<25.0	1570	1570	1450	1540	92	98	70-130	6	20	
Tetrachloroethene	ug/kg	<38.7	1570	1570	1220	1370	77	87	70-130	12	20	
Toluene	ug/kg	<25.0	1570	1570	1420	1550	90	99	80-121	9	20	
trans-1,2-Dichloroethene	ug/kg	<25.0	1570	1570	1450	1480	92	94	70-130	2	20	
trans-1,3-Dichloropropene	ug/kg	<25.0	1570	1570	1370	1440	87	92	70-130	5	20	
Trichloroethene	ug/kg	<25.0	1570	1570	1410	1470	90	94	70-130	4	20	
Trichlorofluoromethane	ug/kg	<25.0	1570	1570	1390	1500	88	96	60-141	8	26	
Vinyl chloride	ug/kg	<25.0	1570	1570	1200	1300	76	82	46-121	8	20	
4-Bromofluorobenzene (S)	%						90	92	54-126			
Dibromofluoromethane (S)	%						103	100	57-146			
Toluene-d8 (S)	%						97	97	64-134			

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QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

QC Batch: 350018 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV
Associated Lab Samples: 40204699002, 40204699003, 40204699004, 40204699005, 40204699006, 40204699007, 40204699008

METHOD BLANK: 2027970 Matrix: Water
Associated Lab Samples: 40204699002, 40204699003, 40204699004, 40204699005, 40204699006, 40204699007, 40204699008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	1.0	03/16/20 07:45	
1,1,1-Trichloroethane	ug/L	<0.24	1.0	03/16/20 07:45	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	1.0	03/16/20 07:45	
1,1,2-Trichloroethane	ug/L	<0.55	5.0	03/16/20 07:45	
1,1-Dichloroethane	ug/L	<0.27	1.0	03/16/20 07:45	
1,1-Dichloroethene	ug/L	<0.24	1.0	03/16/20 07:45	
1,1-Dichloropropene	ug/L	<0.54	1.8	03/16/20 07:45	
1,2,3-Trichlorobenzene	ug/L	<2.2	7.4	03/16/20 07:45	
1,2,3-Trichloropropane	ug/L	<0.59	5.0	03/16/20 07:45	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	03/16/20 07:45	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	03/16/20 07:45	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	03/16/20 07:45	
1,2-Dibromoethane (EDB)	ug/L	<0.83	2.8	03/16/20 07:45	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	03/16/20 07:45	
1,2-Dichloroethane	ug/L	<0.28	1.0	03/16/20 07:45	
1,2-Dichloropropane	ug/L	<0.28	1.0	03/16/20 07:45	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	03/16/20 07:45	
1,3-Dichlorobenzene	ug/L	<0.63	2.1	03/16/20 07:45	
1,3-Dichloropropane	ug/L	<0.83	2.8	03/16/20 07:45	
1,4-Dichlorobenzene	ug/L	<0.94	3.1	03/16/20 07:45	
2,2-Dichloropropane	ug/L	<2.3	7.6	03/16/20 07:45	
2-Chlorotoluene	ug/L	<0.93	5.0	03/16/20 07:45	
4-Chlorotoluene	ug/L	<0.76	2.5	03/16/20 07:45	
Benzene	ug/L	<0.25	1.0	03/16/20 07:45	
Bromobenzene	ug/L	<0.24	1.0	03/16/20 07:45	
Bromochloromethane	ug/L	<0.36	5.0	03/16/20 07:45	
Bromodichloromethane	ug/L	<0.36	1.2	03/16/20 07:45	
Bromoform	ug/L	<4.0	13.2	03/16/20 07:45	
Bromomethane	ug/L	<0.97	5.0	03/16/20 07:45	
Carbon tetrachloride	ug/L	<1.1	3.6	03/16/20 07:45	
Chlorobenzene	ug/L	<0.71	2.4	03/16/20 07:45	
Chloroethane	ug/L	<1.3	5.0	03/16/20 07:45	
Chloroform	ug/L	<1.3	5.0	03/16/20 07:45	
Chloromethane	ug/L	<2.2	7.3	03/16/20 07:45	
cis-1,2-Dichloroethene	ug/L	<0.27	1.0	03/16/20 07:45	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	03/16/20 07:45	
Dibromochloromethane	ug/L	<2.6	8.7	03/16/20 07:45	
Dibromomethane	ug/L	<0.94	3.1	03/16/20 07:45	
Dichlorodifluoromethane	ug/L	<0.50	5.0	03/16/20 07:45	
Diisopropyl ether	ug/L	<1.9	6.3	03/16/20 07:45	
Ethylbenzene	ug/L	<0.32	1.1	03/16/20 07:45	

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QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

METHOD BLANK: 2027970 Matrix: Water
Associated Lab Samples: 40204699002, 40204699003, 40204699004, 40204699005, 40204699006, 40204699007, 40204699008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<1.5	4.9	03/16/20 07:45	
Isopropylbenzene (Cumene)	ug/L	<1.7	5.6	03/16/20 07:45	
m&p-Xylene	ug/L	<0.47	2.0	03/16/20 07:45	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	03/16/20 07:45	
Methylene Chloride	ug/L	<0.58	5.0	03/16/20 07:45	
n-Butylbenzene	ug/L	<0.71	2.4	03/16/20 07:45	
n-Propylbenzene	ug/L	<0.81	5.0	03/16/20 07:45	
Naphthalene	ug/L	<1.2	5.0	03/16/20 07:45	
o-Xylene	ug/L	<0.26	1.0	03/16/20 07:45	
p-Isopropyltoluene	ug/L	<0.80	2.7	03/16/20 07:45	
sec-Butylbenzene	ug/L	<0.85	5.0	03/16/20 07:45	
Styrene	ug/L	<3.0	10.0	03/16/20 07:45	
tert-Butylbenzene	ug/L	<0.30	1.0	03/16/20 07:45	
Tetrachloroethene	ug/L	<0.33	1.1	03/16/20 07:45	
Toluene	ug/L	<0.27	0.90	03/16/20 07:45	
trans-1,2-Dichloroethene	ug/L	<1.1	3.6	03/16/20 07:45	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	03/16/20 07:45	
Trichloroethene	ug/L	<0.26	1.0	03/16/20 07:45	
Trichlorofluoromethane	ug/L	<0.21	1.0	03/16/20 07:45	
Vinyl chloride	ug/L	<0.17	1.0	03/16/20 07:45	
4-Bromofluorobenzene (S)	%	92	70-130	03/16/20 07:45	
Dibromofluoromethane (S)	%	104	70-130	03/16/20 07:45	
Toluene-d8 (S)	%	101	70-130	03/16/20 07:45	

LABORATORY CONTROL SAMPLE: 2027971

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	53.5	107	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	55.1	110	70-130	
1,1,2-Trichloroethane	ug/L	50	56.9	114	70-130	
1,1-Dichloroethane	ug/L	50	54.2	108	73-150	
1,1-Dichloroethene	ug/L	50	49.6	99	73-138	
1,2,4-Trichlorobenzene	ug/L	50	49.7	99	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	44.3	89	64-129	
1,2-Dibromoethane (EDB)	ug/L	50	52.0	104	70-130	
1,2-Dichlorobenzene	ug/L	50	53.3	107	70-130	
1,2-Dichloroethane	ug/L	50	56.6	113	75-140	
1,2-Dichloropropane	ug/L	50	57.9	116	73-135	
1,3-Dichlorobenzene	ug/L	50	53.0	106	70-130	
1,4-Dichlorobenzene	ug/L	50	54.2	108	70-130	
Benzene	ug/L	50	55.9	112	70-130	
Bromodichloromethane	ug/L	50	56.7	113	70-130	
Bromoform	ug/L	50	51.4	103	68-129	
Bromomethane	ug/L	50	41.0	82	18-159	

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QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

LABORATORY CONTROL SAMPLE: 2027971

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	50	58.2	116	70-130	
Chlorobenzene	ug/L	50	55.7	111	70-130	
Chloroethane	ug/L	50	43.9	88	53-147	
Chloroform	ug/L	50	55.3	111	74-136	
Chloromethane	ug/L	50	30.7	61	29-115	
cis-1,2-Dichloroethene	ug/L	50	53.3	107	70-130	
cis-1,3-Dichloropropene	ug/L	50	48.4	97	70-130	
Dibromochloromethane	ug/L	50	55.3	111	70-130	
Dichlorodifluoromethane	ug/L	50	31.9	64	10-130	
Ethylbenzene	ug/L	50	56.1	112	80-124	
Isopropylbenzene (Cumene)	ug/L	50	55.1	110	70-130	
m&p-Xylene	ug/L	100	112	112	70-130	
Methyl-tert-butyl ether	ug/L	50	42.7	85	54-137	
Methylene Chloride	ug/L	50	49.9	100	73-138	
o-Xylene	ug/L	50	53.4	107	70-130	
Styrene	ug/L	50	54.7	109	70-130	
Tetrachloroethene	ug/L	50	55.5	111	70-130	
Toluene	ug/L	50	56.1	112	80-126	
trans-1,2-Dichloroethene	ug/L	50	50.4	101	73-145	
trans-1,3-Dichloropropene	ug/L	50	47.0	94	70-130	
Trichloroethene	ug/L	50	56.4	113	70-130	
Trichlorofluoromethane	ug/L	50	59.9	120	76-147	
Vinyl chloride	ug/L	50	40.6	81	51-120	
4-Bromofluorobenzene (S)	%			100	70-130	
Dibromofluoromethane (S)	%			104	70-130	
Toluene-d8 (S)	%			102	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2028042 2028043

Parameter	Units	40204692001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	<0.24	50	50	51.1	50.9	102	102	70-130	0	20	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	50	50	51.1	51.5	102	103	70-130	1	20	
1,1,2-Trichloroethane	ug/L	<0.55	50	50	53.7	53.8	107	108	70-137	0	20	
1,1-Dichloroethane	ug/L	<0.27	50	50	50.9	51.4	102	103	73-153	1	20	
1,1-Dichloroethene	ug/L	<0.24	50	50	46.7	47.6	93	95	73-138	2	20	
1,2,4-Trichlorobenzene	ug/L	<0.95	50	50	47.6	47.9	95	96	70-130	1	20	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	50	50	42.2	43.4	84	87	58-129	3	20	
1,2-Dibromoethane (EDB)	ug/L	<0.83	50	50	49.4	49.9	99	100	70-130	1	20	
1,2-Dichlorobenzene	ug/L	<0.71	50	50	50.0	50.9	100	102	70-130	2	20	
1,2-Dichloroethane	ug/L	<0.28	50	50	53.0	53.5	106	107	75-140	1	20	
1,2-Dichloropropane	ug/L	<0.28	50	50	54.6	54.7	109	109	71-138	0	20	
1,3-Dichlorobenzene	ug/L	<0.63	50	50	49.5	49.5	99	99	70-130	0	20	
1,4-Dichlorobenzene	ug/L	<0.94	50	50	51.4	51.3	103	103	70-130	0	20	

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QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2028042 2028043

Parameter	Units	40204692001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Benzene	ug/L	<0.25	50	50	52.4	52.6	105	105	70-130	0	20	
Bromodichloromethane	ug/L	<0.36	50	50	53.5	53.5	107	107	70-130	0	20	
Bromoform	ug/L	<4.0	50	50	49.4	50.1	99	100	68-129	1	20	
Bromomethane	ug/L	<0.97	50	50	43.1	43.4	86	87	15-170	1	20	
Carbon tetrachloride	ug/L	<1.1	50	50	55.5	55.8	111	112	70-130	0	20	
Chlorobenzene	ug/L	<0.71	50	50	52.1	52.4	104	105	70-130	1	20	
Chloroethane	ug/L	<1.3	50	50	43.6	40.6	87	81	51-148	7	20	
Chloroform	ug/L	<1.3	50	50	51.4	52.1	103	104	74-136	1	20	
Chloromethane	ug/L	<2.2	50	50	28.8	29.2	58	58	23-115	1	20	
cis-1,2-Dichloroethene	ug/L	<0.27	50	50	49.7	50.6	99	101	70-131	2	20	
cis-1,3-Dichloropropene	ug/L	<3.6	50	50	45.7	46.3	91	93	70-130	1	20	
Dibromochloromethane	ug/L	<2.6	50	50	52.2	53.0	104	106	70-130	2	20	
Dichlorodifluoromethane	ug/L	<0.50	50	50	29.4	29.7	59	59	10-132	1	20	
Ethylbenzene	ug/L	<0.32	50	50	52.5	53.2	105	106	80-125	1	20	
Isopropylbenzene (Cumene)	ug/L	<1.7	50	50	51.8	52.2	104	104	70-130	1	20	
m&p-Xylene	ug/L	<0.47	100	100	104	105	104	105	70-130	1	20	
Methyl-tert-butyl ether	ug/L	<1.2	50	50	40.1	41.0	80	82	51-145	2	20	
Methylene Chloride	ug/L	<0.58	50	50	46.1	46.6	92	93	73-140	1	20	
o-Xylene	ug/L	<0.26	50	50	50.4	51.0	101	102	70-130	1	20	
Styrene	ug/L	<3.0	50	50	51.7	52.3	103	105	70-130	1	20	
Tetrachloroethene	ug/L	<0.33	50	50	53.2	53.2	106	106	70-130	0	20	
Toluene	ug/L	<0.27	50	50	52.7	53.2	105	106	80-131	1	20	
trans-1,2-Dichloroethene	ug/L	<1.1	50	50	47.2	48.0	94	96	73-148	2	20	
trans-1,3-Dichloropropene	ug/L	<4.4	50	50	44.2	45.1	88	90	70-130	2	20	
Trichloroethene	ug/L	<0.26	50	50	53.1	53.1	106	106	70-130	0	20	
Trichlorofluoromethane	ug/L	<0.21	50	50	56.6	57.0	113	114	74-147	1	20	
Vinyl chloride	ug/L	<0.17	50	50	38.9	38.5	78	77	41-129	1	20	
4-Bromofluorobenzene (S)	%						99	100	70-130			
Dibromofluoromethane (S)	%						103	104	70-130			
Toluene-d8 (S)	%						101	101	70-130			

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QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

QC Batch: 350022
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 40204699001

METHOD BLANK: 2027984
Matrix: Water
Associated Lab Samples: 40204699001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	1.0	03/16/20 08:19	
1,1,1-Trichloroethane	ug/L	<0.24	1.0	03/16/20 08:19	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	1.0	03/16/20 08:19	
1,1,2-Trichloroethane	ug/L	<0.55	5.0	03/16/20 08:19	
1,1-Dichloroethane	ug/L	<0.27	1.0	03/16/20 08:19	
1,1-Dichloroethene	ug/L	<0.24	1.0	03/16/20 08:19	
1,1-Dichloropropene	ug/L	<0.54	1.8	03/16/20 08:19	
1,2,3-Trichlorobenzene	ug/L	<2.2	7.4	03/16/20 08:19	
1,2,3-Trichloropropane	ug/L	<0.59	5.0	03/16/20 08:19	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	03/16/20 08:19	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	03/16/20 08:19	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	03/16/20 08:19	
1,2-Dibromoethane (EDB)	ug/L	<0.83	2.8	03/16/20 08:19	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	03/16/20 08:19	
1,2-Dichloroethane	ug/L	<0.28	1.0	03/16/20 08:19	
1,2-Dichloropropane	ug/L	<0.28	1.0	03/16/20 08:19	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	03/16/20 08:19	
1,3-Dichlorobenzene	ug/L	<0.63	2.1	03/16/20 08:19	
1,3-Dichloropropane	ug/L	<0.83	2.8	03/16/20 08:19	
1,4-Dichlorobenzene	ug/L	<0.94	3.1	03/16/20 08:19	
2,2-Dichloropropane	ug/L	<2.3	7.6	03/16/20 08:19	
2-Chlorotoluene	ug/L	<0.93	5.0	03/16/20 08:19	
4-Chlorotoluene	ug/L	<0.76	2.5	03/16/20 08:19	
Benzene	ug/L	<0.25	1.0	03/16/20 08:19	
Bromobenzene	ug/L	<0.24	1.0	03/16/20 08:19	
Bromochloromethane	ug/L	<0.36	5.0	03/16/20 08:19	
Bromodichloromethane	ug/L	<0.36	1.2	03/16/20 08:19	
Bromoform	ug/L	<4.0	13.2	03/16/20 08:19	
Bromomethane	ug/L	<0.97	5.0	03/16/20 08:19	
Carbon tetrachloride	ug/L	<1.1	3.6	03/16/20 08:19	
Chlorobenzene	ug/L	<0.71	2.4	03/16/20 08:19	
Chloroethane	ug/L	<1.3	5.0	03/16/20 08:19	
Chloroform	ug/L	<1.3	5.0	03/16/20 08:19	
Chloromethane	ug/L	<2.2	7.3	03/16/20 08:19	
cis-1,2-Dichloroethene	ug/L	<0.27	1.0	03/16/20 08:19	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	03/16/20 08:19	
Dibromochloromethane	ug/L	<2.6	8.7	03/16/20 08:19	
Dibromomethane	ug/L	<0.94	3.1	03/16/20 08:19	
Dichlorodifluoromethane	ug/L	<0.50	5.0	03/16/20 08:19	
Diisopropyl ether	ug/L	<1.9	6.3	03/16/20 08:19	
Ethylbenzene	ug/L	<0.32	1.1	03/16/20 08:19	

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QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

METHOD BLANK: 2027984 Matrix: Water
Associated Lab Samples: 40204699001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<1.5	4.9	03/16/20 08:19	
Isopropylbenzene (Cumene)	ug/L	<1.7	5.6	03/16/20 08:19	
m&p-Xylene	ug/L	<0.47	2.0	03/16/20 08:19	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	03/16/20 08:19	
Methylene Chloride	ug/L	<0.58	5.0	03/16/20 08:19	
n-Butylbenzene	ug/L	<0.71	2.4	03/16/20 08:19	
n-Propylbenzene	ug/L	<0.81	5.0	03/16/20 08:19	
Naphthalene	ug/L	<1.2	5.0	03/16/20 08:19	
o-Xylene	ug/L	<0.26	1.0	03/16/20 08:19	
p-Isopropyltoluene	ug/L	<0.80	2.7	03/16/20 08:19	
sec-Butylbenzene	ug/L	<0.85	5.0	03/16/20 08:19	
Styrene	ug/L	<3.0	10.0	03/16/20 08:19	
tert-Butylbenzene	ug/L	<0.30	1.0	03/16/20 08:19	
Tetrachloroethene	ug/L	<0.33	1.1	03/16/20 08:19	
Toluene	ug/L	<0.27	0.90	03/16/20 08:19	
trans-1,2-Dichloroethene	ug/L	<1.1	3.6	03/16/20 08:19	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	03/16/20 08:19	
Trichloroethene	ug/L	<0.26	1.0	03/16/20 08:19	
Trichlorofluoromethane	ug/L	<0.21	1.0	03/16/20 08:19	
Vinyl chloride	ug/L	<0.17	1.0	03/16/20 08:19	
4-Bromofluorobenzene (S)	%	90	70-130	03/16/20 08:19	
Dibromofluoromethane (S)	%	109	70-130	03/16/20 08:19	
Toluene-d8 (S)	%	103	70-130	03/16/20 08:19	

LABORATORY CONTROL SAMPLE: 2027985

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	55.9	112	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	53.3	107	70-130	
1,1,2-Trichloroethane	ug/L	50	55.2	110	70-130	
1,1-Dichloroethane	ug/L	50	54.1	108	73-150	
1,1-Dichloroethene	ug/L	50	50.8	102	73-138	
1,2,4-Trichlorobenzene	ug/L	50	34.2	68	70-130	L2
1,2-Dibromo-3-chloropropane	ug/L	50	44.0	88	64-129	
1,2-Dibromoethane (EDB)	ug/L	50	53.9	108	70-130	
1,2-Dichlorobenzene	ug/L	50	49.7	99	70-130	
1,2-Dichloroethane	ug/L	50	47.0	94	75-140	
1,2-Dichloropropane	ug/L	50	45.5	91	73-135	
1,3-Dichlorobenzene	ug/L	50	49.0	98	70-130	
1,4-Dichlorobenzene	ug/L	50	51.9	104	70-130	
Benzene	ug/L	50	58.0	116	70-130	
Bromodichloromethane	ug/L	50	49.7	99	70-130	
Bromoform	ug/L	50	62.1	124	68-129	
Bromomethane	ug/L	50	35.0	70	18-159	

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QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

LABORATORY CONTROL SAMPLE: 2027985

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	50	57.9	116	70-130	
Chlorobenzene	ug/L	50	55.0	110	70-130	
Chloroethane	ug/L	50	57.4	115	53-147	
Chloroform	ug/L	50	56.2	112	74-136	
Chloromethane	ug/L	50	23.8	48	29-115	
cis-1,2-Dichloroethene	ug/L	50	53.4	107	70-130	
cis-1,3-Dichloropropene	ug/L	50	47.3	95	70-130	
Dibromochloromethane	ug/L	50	56.2	112	70-130	
Dichlorodifluoromethane	ug/L	50	27.3	55	10-130	
Ethylbenzene	ug/L	50	57.5	115	80-124	
Isopropylbenzene (Cumene)	ug/L	50	57.7	115	70-130	
m&p-Xylene	ug/L	100	119	119	70-130	
Methyl-tert-butyl ether	ug/L	50	52.6	105	54-137	
Methylene Chloride	ug/L	50	57.5	115	73-138	
o-Xylene	ug/L	50	56.4	113	70-130	
Styrene	ug/L	50	59.0	118	70-130	
Tetrachloroethene	ug/L	50	55.4	111	70-130	
Toluene	ug/L	50	54.5	109	80-126	
trans-1,2-Dichloroethene	ug/L	50	53.8	108	73-145	
trans-1,3-Dichloropropene	ug/L	50	51.6	103	70-130	
Trichloroethene	ug/L	50	51.3	103	70-130	
Trichlorofluoromethane	ug/L	50	65.9	132	76-147	
Vinyl chloride	ug/L	50	36.0	72	51-120	
4-Bromofluorobenzene (S)	%			106	70-130	
Dibromofluoromethane (S)	%			96	70-130	
Toluene-d8 (S)	%			102	70-130	

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QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

QC Batch: 350159
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV
Associated Lab Samples: 40204699009

METHOD BLANK: 2028478
Matrix: Water
Associated Lab Samples: 40204699009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/L	<0.27	1.0	03/17/20 16:27	
1,1,1-Trichloroethane	ug/L	<0.24	1.0	03/17/20 16:27	
1,1,2,2-Tetrachloroethane	ug/L	<0.28	1.0	03/17/20 16:27	
1,1,2-Trichloroethane	ug/L	<0.55	5.0	03/17/20 16:27	
1,1-Dichloroethane	ug/L	<0.27	1.0	03/17/20 16:27	
1,1-Dichloroethene	ug/L	<0.24	1.0	03/17/20 16:27	
1,1-Dichloropropene	ug/L	<0.54	1.8	03/17/20 16:27	
1,2,3-Trichlorobenzene	ug/L	<2.2	7.4	03/17/20 16:27	
1,2,3-Trichloropropane	ug/L	<0.59	5.0	03/17/20 16:27	
1,2,4-Trichlorobenzene	ug/L	<0.95	5.0	03/17/20 16:27	
1,2,4-Trimethylbenzene	ug/L	<0.84	2.8	03/17/20 16:27	
1,2-Dibromo-3-chloropropane	ug/L	<1.8	5.9	03/17/20 16:27	
1,2-Dibromoethane (EDB)	ug/L	<0.83	2.8	03/17/20 16:27	
1,2-Dichlorobenzene	ug/L	<0.71	2.4	03/17/20 16:27	
1,2-Dichloroethane	ug/L	<0.28	1.0	03/17/20 16:27	
1,2-Dichloropropane	ug/L	<0.28	1.0	03/17/20 16:27	
1,3,5-Trimethylbenzene	ug/L	<0.87	2.9	03/17/20 16:27	
1,3-Dichlorobenzene	ug/L	<0.63	2.1	03/17/20 16:27	
1,3-Dichloropropane	ug/L	<0.83	2.8	03/17/20 16:27	
1,4-Dichlorobenzene	ug/L	<0.94	3.1	03/17/20 16:27	
2,2-Dichloropropane	ug/L	<2.3	7.6	03/17/20 16:27	
2-Chlorotoluene	ug/L	<0.93	5.0	03/17/20 16:27	
4-Chlorotoluene	ug/L	<0.76	2.5	03/17/20 16:27	
Benzene	ug/L	<0.25	1.0	03/17/20 16:27	
Bromobenzene	ug/L	<0.24	1.0	03/17/20 16:27	
Bromochloromethane	ug/L	<0.36	5.0	03/17/20 16:27	
Bromodichloromethane	ug/L	<0.36	1.2	03/17/20 16:27	
Bromoform	ug/L	<4.0	13.2	03/17/20 16:27	
Bromomethane	ug/L	<0.97	5.0	03/17/20 16:27	
Carbon tetrachloride	ug/L	<1.1	3.6	03/17/20 16:27	
Chlorobenzene	ug/L	<0.71	2.4	03/17/20 16:27	
Chloroethane	ug/L	<1.3	5.0	03/17/20 16:27	
Chloroform	ug/L	<1.3	5.0	03/17/20 16:27	
Chloromethane	ug/L	<2.2	7.3	03/17/20 16:27	
cis-1,2-Dichloroethene	ug/L	<0.27	1.0	03/17/20 16:27	
cis-1,3-Dichloropropene	ug/L	<3.6	12.1	03/17/20 16:27	
Dibromochloromethane	ug/L	<2.6	8.7	03/17/20 16:27	
Dibromomethane	ug/L	<0.94	3.1	03/17/20 16:27	
Dichlorodifluoromethane	ug/L	<0.50	5.0	03/17/20 16:27	
Diisopropyl ether	ug/L	<1.9	6.3	03/17/20 16:27	
Ethylbenzene	ug/L	<0.32	1.1	03/17/20 16:27	

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QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

METHOD BLANK: 2028478 Matrix: Water
Associated Lab Samples: 40204699009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Hexachloro-1,3-butadiene	ug/L	<1.5	4.9	03/17/20 16:27	
Isopropylbenzene (Cumene)	ug/L	<1.7	5.6	03/17/20 16:27	
m&p-Xylene	ug/L	<0.47	2.0	03/17/20 16:27	
Methyl-tert-butyl ether	ug/L	<1.2	4.2	03/17/20 16:27	
Methylene Chloride	ug/L	<0.58	5.0	03/17/20 16:27	
n-Butylbenzene	ug/L	<0.71	2.4	03/17/20 16:27	
n-Propylbenzene	ug/L	<0.81	5.0	03/17/20 16:27	
Naphthalene	ug/L	<1.2	5.0	03/17/20 16:27	
o-Xylene	ug/L	<0.26	1.0	03/17/20 16:27	
p-Isopropyltoluene	ug/L	<0.80	2.7	03/17/20 16:27	
sec-Butylbenzene	ug/L	<0.85	5.0	03/17/20 16:27	
Styrene	ug/L	<3.0	10.0	03/17/20 16:27	
tert-Butylbenzene	ug/L	<0.30	1.0	03/17/20 16:27	
Tetrachloroethene	ug/L	<0.33	1.1	03/17/20 16:27	
Toluene	ug/L	<0.27	0.90	03/17/20 16:27	
trans-1,2-Dichloroethene	ug/L	<1.1	3.6	03/17/20 16:27	
trans-1,3-Dichloropropene	ug/L	<4.4	14.6	03/17/20 16:27	
Trichloroethene	ug/L	<0.26	1.0	03/17/20 16:27	
Trichlorofluoromethane	ug/L	<0.21	1.0	03/17/20 16:27	
Vinyl chloride	ug/L	<0.17	1.0	03/17/20 16:27	
4-Bromofluorobenzene (S)	%	92	70-130	03/17/20 16:27	
Dibromofluoromethane (S)	%	101	70-130	03/17/20 16:27	
Toluene-d8 (S)	%	98	70-130	03/17/20 16:27	

LABORATORY CONTROL SAMPLE: 2028479

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	50	50.5	101	70-130	
1,1,2,2-Tetrachloroethane	ug/L	50	49.1	98	70-130	
1,1,2-Trichloroethane	ug/L	50	49.0	98	70-130	
1,1-Dichloroethane	ug/L	50	44.4	89	73-150	
1,1-Dichloroethene	ug/L	50	44.6	89	73-138	
1,2,4-Trichlorobenzene	ug/L	50	48.0	96	70-130	
1,2-Dibromo-3-chloropropane	ug/L	50	44.8	90	64-129	
1,2-Dibromoethane (EDB)	ug/L	50	49.2	98	70-130	
1,2-Dichlorobenzene	ug/L	50	48.6	97	70-130	
1,2-Dichloroethane	ug/L	50	49.7	99	75-140	
1,2-Dichloropropane	ug/L	50	53.3	107	73-135	
1,3-Dichlorobenzene	ug/L	50	45.8	92	70-130	
1,4-Dichlorobenzene	ug/L	50	47.1	94	70-130	
Benzene	ug/L	50	50.8	102	70-130	
Bromodichloromethane	ug/L	50	52.1	104	70-130	
Bromoform	ug/L	50	56.5	113	68-129	
Bromomethane	ug/L	50	39.0	78	18-159	

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QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

LABORATORY CONTROL SAMPLE: 2028479

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	50	50.0	100	70-130	
Chlorobenzene	ug/L	50	49.7	99	70-130	
Chloroethane	ug/L	50	46.6	93	53-147	
Chloroform	ug/L	50	50.1	100	74-136	
Chloromethane	ug/L	50	31.6	63	29-115	
cis-1,2-Dichloroethene	ug/L	50	47.1	94	70-130	
cis-1,3-Dichloropropene	ug/L	50	49.8	100	70-130	
Dibromochloromethane	ug/L	50	51.9	104	70-130	
Dichlorodifluoromethane	ug/L	50	22.3	45	10-130	
Ethylbenzene	ug/L	50	52.6	105	80-124	
Isopropylbenzene (Cumene)	ug/L	50	48.6	97	70-130	
m&p-Xylene	ug/L	100	105	105	70-130	
Methyl-tert-butyl ether	ug/L	50	41.9	84	54-137	
Methylene Chloride	ug/L	50	43.6	87	73-138	
o-Xylene	ug/L	50	51.7	103	70-130	
Styrene	ug/L	50	47.4	95	70-130	
Tetrachloroethene	ug/L	50	49.6	99	70-130	
Toluene	ug/L	50	49.3	99	80-126	
trans-1,2-Dichloroethene	ug/L	50	41.8	84	73-145	
trans-1,3-Dichloropropene	ug/L	50	46.6	93	70-130	
Trichloroethene	ug/L	50	53.0	106	70-130	
Trichlorofluoromethane	ug/L	50	51.6	103	76-147	
Vinyl chloride	ug/L	50	37.1	74	51-120	
4-Bromofluorobenzene (S)	%			104	70-130	
Dibromofluoromethane (S)	%			101	70-130	
Toluene-d8 (S)	%			100	70-130	

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QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

QC Batch: 350037 Analysis Method: WI MOD DRO
QC Batch Method: WI MOD DRO Analysis Description: WIDRO GCS
Associated Lab Samples: 40204699010, 40204699011, 40204699012, 40204699013, 40204699014, 40204699015, 40204699016, 40204699017, 40204699018, 40204699019

METHOD BLANK: 2028023 Matrix: Solid
Associated Lab Samples: 40204699010, 40204699011, 40204699012, 40204699013, 40204699014, 40204699015, 40204699016, 40204699017, 40204699018, 40204699019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics	mg/kg	<1.3	4.4	03/17/20 07:15	

LABORATORY CONTROL SAMPLE & LCSD: 2028024 2028025

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Range Organics	mg/kg	40	33.2	34.8	83	87	70-120	4	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.

REPORT OF LABORATORY ANALYSIS

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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

QC Batch: 350276 Analysis Method: WI MOD DRO
QC Batch Method: WI MOD DRO Analysis Description: WIDRO GCS
Associated Lab Samples: 40204699020, 40204699021, 40204699022, 40204699023, 40204699024, 40204699025, 40204699026, 40204699027

METHOD BLANK: 2029089 Matrix: Solid
Associated Lab Samples: 40204699020, 40204699021, 40204699022, 40204699023, 40204699024, 40204699025, 40204699026, 40204699027

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics	mg/kg	<1.3	4.4	03/19/20 06:36	

LABORATORY CONTROL SAMPLE & LCSD: 2029090 2029091

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Range Organics	mg/kg	40	31.9	36.1	80	90	70-120	13	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.

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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

QC Batch: 349995 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 40204699010, 40204699011, 40204699012, 40204699013, 40204699014, 40204699015, 40204699016, 40204699017, 40204699018, 40204699019, 40204699020, 40204699021

SAMPLE DUPLICATE: 2027887

Parameter	Units	40204681001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	19.6	18.2	8	10	

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.

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QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

QC Batch: 350086 Analysis Method: ASTM D2974-87
QC Batch Method: ASTM D2974-87 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 40204699022, 40204699023, 40204699024, 40204699025, 40204699026, 40204699027

SAMPLE DUPLICATE: 2028191

Parameter	Units	40204623001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	24.3	25.6	5	10	

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

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

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-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

DC	Chromatographic pattern inconsistent with typical Diesel Fuel.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results may be biased low.
W	Non-detect results are reported on a wet weight basis.
pH	Post-analysis pH measurement indicates insufficient VOA sample preservation.

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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40204699010	**P-1 (1')**	WI MOD DRO	350037	WI MOD DRO	350101
40204699011	**P-1 (24')**	WI MOD DRO	350037	WI MOD DRO	350101
40204699012	**P-2 (1')**	WI MOD DRO	350037	WI MOD DRO	350101
40204699013	**P-2 (24')**	WI MOD DRO	350037	WI MOD DRO	350101
40204699014	**P-3 (0.5')**	WI MOD DRO	350037	WI MOD DRO	350101
40204699015	**P-3 (23')**	WI MOD DRO	350037	WI MOD DRO	350101
40204699016	**P-4 (2')**	WI MOD DRO	350037	WI MOD DRO	350101
40204699017	**P-4 (24.5')**	WI MOD DRO	350037	WI MOD DRO	350101
40204699018	**P-5 (2.5')**	WI MOD DRO	350037	WI MOD DRO	350101
40204699019	**P-5 (23')**	WI MOD DRO	350037	WI MOD DRO	350101
40204699020	**P-6 (2.5')**	WI MOD DRO	350276	WI MOD DRO	350363
40204699021	**P-6 (25')**	WI MOD DRO	350276	WI MOD DRO	350363
40204699022	**P-7 (1')**	WI MOD DRO	350276	WI MOD DRO	350363
40204699023	**P-7 (25')**	WI MOD DRO	350276	WI MOD DRO	350363
40204699024	**P-8 (5')**	WI MOD DRO	350276	WI MOD DRO	350363
40204699025	**P-8 (24')**	WI MOD DRO	350276	WI MOD DRO	350363
40204699026	**P-9 (2')**	WI MOD DRO	350276	WI MOD DRO	350363
40204699027	**P-9 (23')**	WI MOD DRO	350276	WI MOD DRO	350363
40204699010	**P-1 (1')**	EPA 3050	350023	EPA 6010	350099
40204699011	**P-1 (24')**	EPA 3050	350023	EPA 6010	350099
40204699012	**P-2 (1')**	EPA 3050	350023	EPA 6010	350099
40204699013	**P-2 (24')**	EPA 3050	350023	EPA 6010	350099
40204699014	**P-3 (0.5')**	EPA 3050	350023	EPA 6010	350099
40204699015	**P-3 (23')**	EPA 3050	350023	EPA 6010	350099
40204699016	**P-4 (2')**	EPA 3050	350023	EPA 6010	350099
40204699017	**P-4 (24.5')**	EPA 3050	350023	EPA 6010	350099
40204699018	**P-5 (2.5')**	EPA 3050	350023	EPA 6010	350099
40204699019	**P-5 (23')**	EPA 3050	350023	EPA 6010	350099
40204699020	**P-6 (2.5')**	EPA 3050	350023	EPA 6010	350099
40204699021	**P-6 (25')**	EPA 3050	350023	EPA 6010	350099
40204699022	**P-7 (1')**	EPA 3050	350023	EPA 6010	350099
40204699023	**P-7 (25')**	EPA 3050	350023	EPA 6010	350099
40204699024	**P-8 (5')**	EPA 3050	350023	EPA 6010	350099
40204699025	**P-8 (24')**	EPA 3050	350023	EPA 6010	350099
40204699026	**P-9 (2')**	EPA 3050	350023	EPA 6010	350099
40204699027	**P-9 (23')**	EPA 3050	350023	EPA 6010	350099
40204699010	**P-1 (1')**	EPA 5035/5030B	350160	EPA 8260	350164
40204699011	**P-1 (24')**	EPA 5035/5030B	350160	EPA 8260	350164
40204699012	**P-2 (1')**	EPA 5035/5030B	350160	EPA 8260	350164
40204699013	**P-2 (24')**	EPA 5035/5030B	350160	EPA 8260	350164
40204699014	**P-3 (0.5')**	EPA 5035/5030B	350160	EPA 8260	350164
40204699015	**P-3 (23')**	EPA 5035/5030B	350160	EPA 8260	350164
40204699016	**P-4 (2')**	EPA 5035/5030B	350160	EPA 8260	350164
40204699017	**P-4 (24.5')**	EPA 5035/5030B	350160	EPA 8260	350164
40204699018	**P-5 (2.5')**	EPA 5035/5030B	350160	EPA 8260	350164
40204699019	**P-5 (23')**	EPA 5035/5030B	350160	EPA 8260	350164
40204699020	**P-6 (2.5')**	EPA 5035/5030B	350160	EPA 8260	350164

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40204699

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40204699021	P-6 (25')	EPA 5035/5030B	350160	EPA 8260	350164
40204699022	P-7 (1')	EPA 5035/5030B	350160	EPA 8260	350164
40204699023	P-7 (25')	EPA 5035/5030B	350160	EPA 8260	350164
40204699024	P-8 (5')	EPA 5035/5030B	350160	EPA 8260	350164
40204699025	P-8 (24')	EPA 5035/5030B	350160	EPA 8260	350164
40204699026	P-9 (2')	EPA 5035/5030B	350160	EPA 8260	350164
40204699027	P-9 (23')	EPA 5035/5030B	350160	EPA 8260	350164
40204699028	TRIP-SOIL	EPA 5035/5030B	350160	EPA 8260	350164
40204699001	P-1	EPA 8260	350022		
40204699002	P-2	EPA 8260	350018		
40204699003	P-3	EPA 8260	350018		
40204699004	P-4	EPA 8260	350018		
40204699005	P-5	EPA 8260	350018		
40204699006	P-6	EPA 8260	350018		
40204699007	P-7	EPA 8260	350018		
40204699008	P-8	EPA 8260	350018		
40204699009	P-9	EPA 8260	350159		
40204699010	P-1 (1')	ASTM D2974-87	349995		
40204699011	P-1 (24')	ASTM D2974-87	349995		
40204699012	P-2 (1')	ASTM D2974-87	349995		
40204699013	P-2 (24')	ASTM D2974-87	349995		
40204699014	P-3 (0.5')	ASTM D2974-87	349995		
40204699015	P-3 (23')	ASTM D2974-87	349995		
40204699016	P-4 (2')	ASTM D2974-87	349995		
40204699017	P-4 (24.5')	ASTM D2974-87	349995		
40204699018	P-5 (2.5')	ASTM D2974-87	349995		
40204699019	P-5 (23')	ASTM D2974-87	349995		
40204699020	P-6 (2.5')	ASTM D2974-87	349995		
40204699021	P-6 (25')	ASTM D2974-87	349995		
40204699022	P-7 (1')	ASTM D2974-87	350086		
40204699023	P-7 (25')	ASTM D2974-87	350086		
40204699024	P-8 (5')	ASTM D2974-87	350086		
40204699025	P-8 (24')	ASTM D2974-87	350086		
40204699026	P-9 (2')	ASTM D2974-87	350086		
40204699027	P-9 (23')	ASTM D2974-87	350086		

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MN: 612-607-1700 WI: 920-469-2436

Page 1 of 2

40260699

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CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	Terracon Consultants
Branch/Location:	Franklin
Project Contact:	Paul Lenaker
Phone:	414-209-7637
Project Number:	58197251
Project Name:	LaCrosse Milling Company
Project State:	Wisconsin
Sampled By (Print):	Krista Koeninger
Sampled By (Sign):	Krista Koeninger
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	
Mail To Company:	Terracon
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	Terracon
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
SI = Sludge	WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: VOCs	DRO	Metals (Lead) only	VOCs	PAH - on hold	CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #
					N	B		A	A	F	A			
001	P-1	3/11/20	1225	GW			3						GW	
002	P-2		1320				3							
003	P-3		1449				3							
004	P-4		1510				3							
005	P-5		1605				3							
006	P-6		1655				3							
007	P-7		1758				3							
008	P-8		1910				3							
009	P-9		1841				3							
010	P-1 (1')		1215	S				1	1	1	1			
011	P-1 (24')		1216					1	1	1	1			
012	P-2 (1')		1310					1	1	1	1			
013	P-2 (24')		1311					1	1	1	1			

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed: 5-day TAT

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Krista Koeninger	3/12/20 1320		
CSI Logistics	3/13/20 0820	Eric Nikl Pace	3/13/20 0820

PACE Project No.: 40260699

Receipt Temp = R °C

Sample Receipt pH: OK / Adjusted

Cooler Custody Seal: Present / Not Present
Intact / Not Intact

C019a(27Jun2006)

Version 6.0 06/14/06

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CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	Teracon Consultants
Branch/Location:	Franklin
Project Contact:	Paul Lenaker
Phone:	414-209-7637
Project Number:	58197251
Project Name:	LaCrosse Milling Company
Project State:	Wisconsin
Sampled By (Print):	Krista Kroeninger
Sampled By (Sign):	Krista Kroeninger
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	
Mail To Company:	Teracon
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	Teracon
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, SI = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	Analyses Requested: VOCs	DRO	Metals (lead only)	PAHs - on hold
	FILTERED? (YES/NO)				N	N	N	N
	PRESERVATION (CODE)*				F	A	A	A
014	P-3 (.5')	3/11/20	1425	S	1	1	1	1
015	P-3 (23')		1426		1	1	1	1
016	P-4 (2')		1500		1	1	1	1
017	P-4 (24.5')		1501		1	1	1	1
018	P-5 (2.5')		1545		1	1	1	1
019	P-5 (23')		1546		1	1	1	1
020	P-6 (2.5')		1640		1	1	1	1
021	P-6 (25')		1641		1	1	1	1
022	P-7 (1')		1745		1	1	1	1
023	P-7 (25')		1746		1	1	1	1
024	P-8 (5')		1901		1	1	1	1
025	P-8 (24')		1902		1	1	1	1
026	P-9 (2')		1823		1	1	1	1

CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed: 5-day TAT

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Krista Kroeninger	3/12/20 1320		
Relinquished By:	Date/Time:	Received By:	Date/Time:
CS Logistics	3/12/20 0800	Paul Neiki Pace	3/13/20 0800
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

PACE Project No.
4CROCK00[illegible]
Receipt Temp: R 0.1 °C
Sample Receipt pH OK / Adjusted
Cooler Custody Seal (Present / Not Present) (Intact / Not Intact)

C019a(27Jun2006)
Version 6.0 06/14/06
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CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	Teracon Consultants
Branch/Location:	Franklin
Project Contact:	Paul Lenaker
Phone:	414-209-7637
Project Number:	58197251
Project Name:	LaCrosse Milling Company
Project State:	Wisconsin
Sampled By (Print):	Krista Kroeninger
Sampled By (Sign):	Krista Kroeninger
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	
Mail To Company:	Teracon
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	Teracon
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes

A = Air	W = Water
B = Biota	DW = Drinking Water
C = Charcoal	GW = Ground Water
O = Oil	SW = Surface Water
S = Soil	WW = Waste Water
SI = Sludge	WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: VOCs	DRO	Metals (Lead only)	PAHs - on Hold
					N	F				
					N	A				
					N	A				
					N	A				
027	P-9(23')	3/11/20	1824	S			1	1	1	1
028	Trip - Soil	"	1915				1			

CLIENT COMMENTS | LAB COMMENTS (Lab Use Only) | Profile #

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed: 5 DAY TAT

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Krista Kroeninger	3/12/20 1300		
CS Logistics	3/13/20 0820	Erik Wickland Pace	3/13/20 0820

PACE Project No.: 40204109

Receipt Temp = 2.0 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal
~~Present~~ / Not Present
Intact / Not Intact

Version 6.0 06/14/06

C019a(27Jun2006)

ORIGINAL

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Sample Preservation Receipt Form

Client Name: Fenaco Project # 40204689

All containers needing preservation have been checked and noted below: □Yes □No ☑N/A Initial when completed: Date/ Time:

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

	Glass								Plastic					Vials						Jars				General							
Pace Lab #	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001																	3																2.5 / 5 / 10
002																	3																2.5 / 5 / 10
003																	3																2.5 / 5 / 10
004																	3																2.5 / 5 / 10
005																	3																2.5 / 5 / 10
006																	3																2.5 / 5 / 10
007																	3																2.5 / 5 / 10
008																	3																2.5 / 5 / 10
009																	3																2.5 / 5 / 10
010																		1		1		1	1										2.5 / 5 / 10
011																		1		1		1	1										2.5 / 5 / 10
012																		1		1		1	1										2.5 / 5 / 10
013																		1		1		1	1										2.5 / 5 / 10
014																		1		1		1	1										2.5 / 5 / 10
015																		1		1		1	1										2.5 / 5 / 10
016																		1		1		1	1										2.5 / 5 / 10
017																		1		1		1	1										2.5 / 5 / 10
018																		1		1		1	1										2.5 / 5 / 10
019																		1		1		1	1										2.5 / 5 / 10
020																		1		1		1	1										2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WIDRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : □Yes ☑No □N/A ***If yes look in headspace column**

AG1U	1 liter amber glass
BG1U	1 liter clear glass
AG1H	1 liter amber glass HCL
AG4S	125 mL amber glass H2SO4
AG4U	120 mL amber glass unpres
AG5U	100 mL amber glass unpres
AG2S	500 mL amber glass H2SO4
BG3U	250 mL clear glass unpres

BP1U	1 liter plastic unpres
BP3U	250 mL plastic unpres
BP3B	250 mL plastic NaOH
BP3N	250 mL plastic HNO3
BP3S	250 mL plastic H2SO4

VG9A	40 mL clear ascorbic
DG9T	40 mL amber Na Thio
VG9U	40 mL clear vial unpres
VG9H	40 mL clear vial HCL
VG9M	40 mL clear vial MeOH
VG9D	40 mL clear vial DI

JGFU	4 oz amber jar unpres
JG9U	9 oz amber jar unpres
WGFU	4 oz clear jar unpres
WPFU	4 oz plastic jar unpres
SP5T	120 mL plastic Na Thiosulfate
ZPLC	ziploc bag
GN	

Page 1 of 3
3/13/20
1 of 3

Pace Analytical ~~Services, LLC~~
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Sample Preservation Receipt Form

Client Name: Ferracon Project #: 40264009

Pace Lab #	Glass: AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	Plastic: BP1U	BP3U	BP3B	BP3N	BP3S	Vials: VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	Jars: JGFU	JG9U	WGFU	WPFU	General: SP5T	ZPLC	GN	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
021																		1		1		1	1										2.5 / 5 / 10
022																		1		1		1	1										2.5 / 5 / 10
023																		1		1		1	1										2.5 / 5 / 10
024																		1		1		1	1										2.5 / 5 / 10
025																		1		1		1	1										2.5 / 5 / 10
026																		1		1		1	1										2.5 / 5 / 10
027																		1		1		1	1										2.5 / 5 / 10
028																		1															2.5 / 5 / 10
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EW 3/13/20

Pace Analytical™ 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 25Apr2018
	Document No.: F-GB-C-031-Rev.07	Issuing Authority: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #: WO# : 40204699

Client Name: Terracon

Courier: ☑ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☐ Pace Other:

Tracking #: 735 031220

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Packing Material: ☑ Bubble Wrap ☐ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - NA **Type of Ice:** (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: ROI /Corr:

Temp Blank Present: ☐ yes ☑ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents: Date: 3/13/20 Initials: STMW

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C.

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☑Yes ☐No ☐N/A	2.
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD:	☐Yes ☑No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☑No ☐N/A	
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: S, W		
Trip Blank Present:	☐Yes ☐No ☑N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

Project Manager Review: HMR for DM **Date:** 3/16/20

EW 3/13/20 3 of 3

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

March 26, 2020

Paul Lenaker
Terracon, Inc. - Franklin
9856 S. 57th Street
Franklin, WI 53132

RE: Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40205030

Dear Paul Lenaker:
Enclosed are the analytical results for sample(s) received by the laboratory on March 13, 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,

Dan Milewsky
dan.milewsky@pacelabs.com
(920)469-2436
Project Manager

Enclosures

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40205030

Pace Analytical Services Green Bay
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

REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
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(920)469-2436

SAMPLE SUMMARY

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40205030

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40205030001	**P-9 (2')**	Solid	03/11/20 18:23	03/13/20 08:20

REPORT OF LABORATORY ANALYSIS

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(920)469-2436

SAMPLE ANALYTE COUNT

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40205030

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40205030001	**P-9 (2')**	EPA 6010	TXW	1	PASI-G
		ASTM D2974-87	MMX	1	PASI-G

REPORT OF LABORATORY ANALYSIS

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Green Bay, WI 54302
(920)469-2436

SUMMARY OF DETECTION

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40205030

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40205030001	**P-9 (2')**					
EPA 6010	Lead	279	mg/kg	2.2	03/23/20 09:23	
ASTM D2974-87	Percent Moisture	12.4	%	0.10	03/20/20 17:14	

REPORT OF LABORATORY ANALYSIS

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(920)469-2436

PROJECT NARRATIVE

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40205030

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Terracon, Inc. - Franklin
Date: March 26, 2020

General Information:
1 sample was analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 350617

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40205028001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2031300)
  - Lead
- MSD (Lab ID: 2031301)
  - Lead

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40205030

Sample: P-9 (2') **Lab ID: 40205030001** Collected: 03/11/20 18:23 Received: 03/13/20 08:20 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
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
Lead	**279**	mg/kg	2.2	0.67	1	03/22/20 23:25	03/23/20 09:23	7439-92-1	
Percent Moisture	Analytical Method: ASTM D2974-87								
Percent Moisture	**12.4**	%	0.10	0.10	1		03/20/20 17:14		

REPORT OF LABORATORY ANALYSIS

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(920)469-2436

QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40205030

QC Batch: 350617 Analysis Method: EPA 6010
QC Batch Method: EPA 3050 Analysis Description: 6010 MET
Associated Lab Samples: 40205030001

METHOD BLANK: 2031298 Matrix: Solid
Associated Lab Samples: 40205030001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/kg	<0.60	2.0	03/23/20 08:30	

LABORATORY CONTROL SAMPLE: 2031299

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	50	49.5	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2031300 2031301

Parameter	Units	40205028001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	mg/kg	44.2	60.8	60.5	70.5	72.2	43	46	75-125	2	20	M0

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.

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QUALITY CONTROL DATA

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40205030

QC Batch: 350609
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 40205030001

SAMPLE DUPLICATE: 2031019

Parameter	Units	40204875003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	11.2	11.9	6	10	

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

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Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40205030

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-G	Pace Analytical Services - Green Bay

ANALYTE QUALIFIERS

M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 58197251 LACROSSE MILLING CO.
Pace Project No.: 40205030

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40205030001	**P-9 (2')**	EPA 3050	350617	EPA 6010	350637
40205030001	**P-9 (2')**	ASTM D2974-87	350609		

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WO#: 40205030

40205030

40205030

CHAIN OF CUSTODY

Pace Analytical
www.pacelabs.com

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

BR

Page 1 of 2 3

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

(Please Print Clearly)	
Company Name:	Terracon Consultants
Branch/Location:	Franklin
Project Contact:	Paul Lenacker
Phone:	414-209-7637
Project Number:	58197251
Project Name:	LaCrosse Milling Company
Project State:	Wisconsin
Sampled By (Print):	Krista Kroeninger
Sampled By (Sign):	Krista Kroeninger
PO #:	Regulatory Program:

Quote #:	
Mail To Contact:	
Mail To Company:	Terracon
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	Terracon
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, SI = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX
014	P-3 (+5')	3/11/20	1425	S
015	P-3 (23')		1426	
016	P-4 (2')		1500	
017	P-4 (24.5')		1501	
018	P-5 (2.5')		1545	
019	P-5 (23')		1546	
020	P-6 (2.5')		1640	
021	P-6 (25')		1641	
022	P-7 (1')		1745	
023	P-7 (25')		1746	
024	P-8 (5')		1901	
025	P-8 (24')		1902	
026	P-9 (2')		1823	

Analyses Requested								
Y/N	N	N	N	N				
Preservation	F	A	A	A				
	5-STEP	Dry	Grain Size (ASTM D422)	Moisture - SM2540G			Total Lead	Pace Pull by 3/20/20
							✓	

CLIENT COMMENTS | LAB COMMENTS (Lab Use Only) | Profile #

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed: 5-day TAT

Transmit Prelim Rush Results by (complete what you want):
Email #1:
Email #2:
Telephone:
Fax:

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Krista Kroeninger	3/12/20 1320		
CS Logistics	3/12/20 1800	Paul Weiskopf Pace	3/13/20 0852

PACE Project No.: 40205030

Receipt Temp: 2.0 °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal (Present / Not Present) (Intact / Not Intact)

C019a(27Jun2008)

Version 6.0 06/14/06

ORIGINAL

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

May 15, 2020

Paul Lenaker
Terracon, Inc. - Franklin
9856 S. 57th Street
Franklin, WI 53132

RE: Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Dear Paul Lenaker:

Enclosed are the analytical results for sample(s) received by the laboratory on May 13, 2020. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

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

Sincerely,

Dan Milewsky
dan.milewsky@pacelabs.com
(920)469-2436
Project Manager

Enclosures

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Pace Analytical Services Green Bay
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

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40207643001	**P-9 (4')**	Solid	05/11/20 14:51	05/13/20 08:55
40207643002	**P-9 (6')**	Solid	05/11/20 14:52	05/13/20 08:55
40207643003	**P-10 (2')**	Solid	05/11/20 15:01	05/13/20 08:55
40207643004	**P-10 (4')**	Solid	05/11/20 15:02	05/13/20 08:55
40207643005	**P-11 (2')**	Solid	05/11/20 15:15	05/13/20 08:55
40207643006	**P-11 (4')**	Solid	05/11/20 15:16	05/13/20 08:55
40207643007	**P-12 (2')**	Solid	05/11/20 15:25	05/13/20 08:55
40207643008	**P-12 (4')**	Solid	05/11/20 15:26	05/13/20 08:55
40207643009	**P-13 (2')**	Solid	05/11/20 15:35	05/13/20 08:55
40207643010	**P-13 (4')**	Solid	05/11/20 15:36	05/13/20 08:55

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Green Bay, WI 54302
(920)469-2436

SAMPLE ANALYTE COUNT

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40207643001	**P-9 (4')**	EPA 6010	TXW	1	PASI-G
		EPA 8270 by SIM	JJB	20	PASI-G
		ASTM D2974-87	MLR	1	PASI-G
40207643002	**P-9 (6')**	EPA 6010	TXW	1	PASI-G
		EPA 8270 by SIM	JJB	20	PASI-G
		ASTM D2974-87	MLR	1	PASI-G
40207643003	**P-10 (2')**	EPA 6010	TXW	1	PASI-G
		EPA 8270 by SIM	JJB	20	PASI-G
		ASTM D2974-87	MLR	1	PASI-G
40207643004	**P-10 (4')**	EPA 6010	TXW	1	PASI-G
		EPA 8270 by SIM	JJB	20	PASI-G
		ASTM D2974-87	MLR	1	PASI-G
40207643005	**P-11 (2')**	EPA 6010	TXW	1	PASI-G
		EPA 8270 by SIM	JJB	20	PASI-G
		ASTM D2974-87	MLR	1	PASI-G
40207643006	**P-11 (4')**	EPA 6010	TXW	1	PASI-G
		EPA 8270 by SIM	JJB	20	PASI-G
		ASTM D2974-87	MLR	1	PASI-G
40207643007	**P-12 (2')**	EPA 6010	TXW	1	PASI-G
		EPA 8270 by SIM	JJB	20	PASI-G
		ASTM D2974-87	MLR	1	PASI-G
40207643008	**P-12 (4')**	EPA 6010	TXW	1	PASI-G
		EPA 8270 by SIM	JJB	20	PASI-G
		ASTM D2974-87	MLR	1	PASI-G
40207643009	**P-13 (2')**	EPA 6010	TXW	1	PASI-G
		EPA 8270 by SIM	JJB	20	PASI-G
		ASTM D2974-87	MLR	1	PASI-G
40207643010	**P-13 (4')**	EPA 6010	TXW	1	PASI-G
		EPA 8270 by SIM	JJB	20	PASI-G
		ASTM D2974-87	MLR	1	PASI-G

PASI-G = Pace Analytical Services - Green Bay

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SUMMARY OF DETECTION

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40207643001	**P-9 (4')**					
EPA 6010	Lead	389	mg/kg	11.8	05/15/20 03:06	P6
EPA 8270 by SIM	Acenaphthene	12.3J	ug/kg	39.3	05/14/20 18:46	
EPA 8270 by SIM	Acenaphthylene	81.4	ug/kg	39.3	05/14/20 18:46	
EPA 8270 by SIM	Anthracene	178	ug/kg	39.3	05/14/20 18:46	
EPA 8270 by SIM	Benzo(a)anthracene	205	ug/kg	39.3	05/14/20 18:46	
EPA 8270 by SIM	Benzo(a)pyrene	321	ug/kg	39.3	05/14/20 18:46	
EPA 8270 by SIM	Benzo(b)fluoranthene	582	ug/kg	39.3	05/14/20 18:46	
EPA 8270 by SIM	Benzo(g,h,i)perylene	268	ug/kg	39.3	05/14/20 18:46	
EPA 8270 by SIM	Benzo(k)fluoranthene	219	ug/kg	39.3	05/14/20 18:46	
EPA 8270 by SIM	Chrysene	407	ug/kg	39.3	05/14/20 18:46	
EPA 8270 by SIM	Dibenz(a,h)anthracene	83.8	ug/kg	39.3	05/14/20 18:46	
EPA 8270 by SIM	Fluoranthene	355	ug/kg	39.3	05/14/20 18:46	
EPA 8270 by SIM	Fluorene	16.4J	ug/kg	39.3	05/14/20 18:46	
EPA 8270 by SIM	Indeno(1,2,3-cd)pyrene	217	ug/kg	39.3	05/14/20 18:46	
EPA 8270 by SIM	1-Methylnaphthalene	124	ug/kg	39.3	05/14/20 18:46	
EPA 8270 by SIM	2-Methylnaphthalene	162	ug/kg	39.3	05/14/20 18:46	
EPA 8270 by SIM	Naphthalene	206	ug/kg	39.3	05/14/20 18:46	
EPA 8270 by SIM	Phenanthrene	330	ug/kg	39.3	05/14/20 18:46	
EPA 8270 by SIM	Pyrene	292	ug/kg	39.3	05/14/20 18:46	
ASTM D2974-87	Percent Moisture	15.1	%	0.10	05/13/20 16:41	
40207643002	**P-9 (6')**					
EPA 6010	Lead	8.1	mg/kg	2.1	05/15/20 02:36	
EPA 8270 by SIM	Acenaphthene	3.9J	ug/kg	18.6	05/14/20 11:52	
EPA 8270 by SIM	Anthracene	4.7J	ug/kg	18.6	05/14/20 11:52	
EPA 8270 by SIM	Benzo(a)anthracene	5.8J	ug/kg	18.6	05/14/20 11:52	
EPA 8270 by SIM	Benzo(a)pyrene	3.5J	ug/kg	18.6	05/14/20 11:52	
EPA 8270 by SIM	Benzo(b)fluoranthene	5.2J	ug/kg	18.6	05/14/20 11:52	
EPA 8270 by SIM	Chrysene	13.6J	ug/kg	18.6	05/14/20 11:52	
EPA 8270 by SIM	Fluoranthene	19.2	ug/kg	18.6	05/14/20 11:52	
EPA 8270 by SIM	1-Methylnaphthalene	14.1J	ug/kg	18.6	05/14/20 11:52	
EPA 8270 by SIM	2-Methylnaphthalene	17.2J	ug/kg	18.6	05/14/20 11:52	
EPA 8270 by SIM	Naphthalene	39.9	ug/kg	18.6	05/14/20 11:52	
EPA 8270 by SIM	Phenanthrene	49.6	ug/kg	18.6	05/14/20 11:52	
EPA 8270 by SIM	Pyrene	7.9J	ug/kg	18.6	05/14/20 11:52	
ASTM D2974-87	Percent Moisture	10.1	%	0.10	05/13/20 16:42	
40207643003	**P-10 (2')**					
EPA 6010	Lead	19.7	mg/kg	2.2	05/15/20 02:38	
EPA 8270 by SIM	Acenaphthene	7.9J	ug/kg	18.8	05/14/20 19:55	
EPA 8270 by SIM	Acenaphthylene	10.6J	ug/kg	18.8	05/14/20 19:55	
EPA 8270 by SIM	Anthracene	28.6	ug/kg	18.8	05/14/20 19:55	
EPA 8270 by SIM	Benzo(a)anthracene	26.3	ug/kg	18.8	05/14/20 19:55	
EPA 8270 by SIM	Benzo(a)pyrene	28.0	ug/kg	18.8	05/14/20 19:55	
EPA 8270 by SIM	Benzo(b)fluoranthene	67.2	ug/kg	18.8	05/14/20 19:55	
EPA 8270 by SIM	Benzo(g,h,i)perylene	34.6	ug/kg	18.8	05/14/20 19:55	
EPA 8270 by SIM	Benzo(k)fluoranthene	17.7J	ug/kg	18.8	05/14/20 19:55	
EPA 8270 by SIM	Chrysene	56.2	ug/kg	18.8	05/14/20 19:55	

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(920)469-2436

SUMMARY OF DETECTION

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40207643003	**P-10 (2')**					
EPA 8270 by SIM	Dibenz(a,h)anthracene	6.7J	ug/kg	18.8	05/14/20 19:55	
EPA 8270 by SIM	Fluoranthene	75.1	ug/kg	18.8	05/14/20 19:55	
EPA 8270 by SIM	Fluorene	3.5J	ug/kg	18.8	05/14/20 19:55	
EPA 8270 by SIM	Indeno(1,2,3-cd)pyrene	19.5	ug/kg	18.8	05/14/20 19:55	
EPA 8270 by SIM	1-Methylnaphthalene	134	ug/kg	18.8	05/14/20 19:55	
EPA 8270 by SIM	2-Methylnaphthalene	185	ug/kg	18.8	05/14/20 19:55	
EPA 8270 by SIM	Naphthalene	136	ug/kg	18.8	05/14/20 19:55	
EPA 8270 by SIM	Phenanthrene	118	ug/kg	18.8	05/14/20 19:55	
EPA 8270 by SIM	Pyrene	51.4	ug/kg	18.8	05/14/20 19:55	
ASTM D2974-87	Percent Moisture	11.2	%	0.10	05/13/20 16:42	
40207643004	**P-10 (4')**					
EPA 6010	Lead	10.3	mg/kg	2.1	05/15/20 02:41	
EPA 8270 by SIM	Acenaphthylene	5.2J	ug/kg	18.5	05/14/20 20:12	
EPA 8270 by SIM	Anthracene	10.9J	ug/kg	18.5	05/14/20 20:12	
EPA 8270 by SIM	Benzo(a)anthracene	18.4J	ug/kg	18.5	05/14/20 20:12	
EPA 8270 by SIM	Benzo(a)pyrene	27.0	ug/kg	18.5	05/14/20 20:12	
EPA 8270 by SIM	Benzo(b)fluoranthene	42.6	ug/kg	18.5	05/14/20 20:12	
EPA 8270 by SIM	Benzo(g,h,i)perylene	26.3	ug/kg	18.5	05/14/20 20:12	
EPA 8270 by SIM	Benzo(k)fluoranthene	15.5J	ug/kg	18.5	05/14/20 20:12	
EPA 8270 by SIM	Chrysene	28.3	ug/kg	18.5	05/14/20 20:12	
EPA 8270 by SIM	Dibenz(a,h)anthracene	5.6J	ug/kg	18.5	05/14/20 20:12	
EPA 8270 by SIM	Fluoranthene	28.2	ug/kg	18.5	05/14/20 20:12	
EPA 8270 by SIM	Indeno(1,2,3-cd)pyrene	16.3J	ug/kg	18.5	05/14/20 20:12	
EPA 8270 by SIM	1-Methylnaphthalene	20.4	ug/kg	18.5	05/14/20 20:12	
EPA 8270 by SIM	2-Methylnaphthalene	29.1	ug/kg	18.5	05/14/20 20:12	
EPA 8270 by SIM	Naphthalene	21.8	ug/kg	18.5	05/14/20 20:12	
EPA 8270 by SIM	Phenanthrene	27.6	ug/kg	18.5	05/14/20 20:12	
EPA 8270 by SIM	Pyrene	23.8	ug/kg	18.5	05/14/20 20:12	
ASTM D2974-87	Percent Moisture	9.7	%	0.10	05/13/20 16:42	
40207643005	**P-11 (2')**					
EPA 6010	Lead	1.8J	mg/kg	2.1	05/15/20 02:43	
ASTM D2974-87	Percent Moisture	3.4	%	0.10	05/13/20 16:42	
40207643006	**P-11 (4')**					
EPA 6010	Lead	2.0	mg/kg	2.0	05/15/20 02:45	
EPA 8270 by SIM	Benzo(a)anthracene	2.4J	ug/kg	17.6	05/14/20 12:27	
EPA 8270 by SIM	Benzo(b)fluoranthene	2.6J	ug/kg	17.6	05/14/20 12:27	
EPA 8270 by SIM	Fluoranthene	2.6J	ug/kg	17.6	05/14/20 12:27	
EPA 8270 by SIM	Naphthalene	7.3J	ug/kg	17.6	05/14/20 12:27	
EPA 8270 by SIM	Phenanthrene	2.1J	ug/kg	17.6	05/14/20 12:27	
ASTM D2974-87	Percent Moisture	5.0	%	0.10	05/13/20 16:42	
40207643007	**P-12 (2')**					
EPA 6010	Lead	153	mg/kg	2.1	05/15/20 02:53	
EPA 8270 by SIM	Acenaphthylene	1040	ug/kg	366	05/14/20 15:54	
EPA 8270 by SIM	Anthracene	1450	ug/kg	366	05/14/20 15:54	
EPA 8270 by SIM	Benzo(a)anthracene	2890	ug/kg	366	05/14/20 15:54	

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(920)469-2436

SUMMARY OF DETECTION

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40207643007	**P-12 (2')**					
EPA 8270 by SIM	Benzo(a)pyrene	2920	ug/kg	366	05/14/20 15:54	
EPA 8270 by SIM	Benzo(b)fluoranthene	4120	ug/kg	366	05/14/20 15:54	
EPA 8270 by SIM	Benzo(g,h,i)perylene	2070	ug/kg	366	05/14/20 15:54	
EPA 8270 by SIM	Benzo(k)fluoranthene	2140	ug/kg	366	05/14/20 15:54	
EPA 8270 by SIM	Chrysene	3230	ug/kg	366	05/14/20 15:54	
EPA 8270 by SIM	Dibenz(a,h)anthracene	707	ug/kg	366	05/14/20 15:54	
EPA 8270 by SIM	Fluoranthene	3630	ug/kg	366	05/14/20 15:54	
EPA 8270 by SIM	Fluorene	57.4J	ug/kg	366	05/14/20 15:54	
EPA 8270 by SIM	Indeno(1,2,3-cd)pyrene	1770	ug/kg	366	05/14/20 15:54	
EPA 8270 by SIM	1-Methylnaphthalene	56.7J	ug/kg	366	05/14/20 15:54	
EPA 8270 by SIM	2-Methylnaphthalene	69.7J	ug/kg	366	05/14/20 15:54	
EPA 8270 by SIM	Naphthalene	90.4J	ug/kg	366	05/14/20 15:54	
EPA 8270 by SIM	Phenanthrene	305J	ug/kg	366	05/14/20 15:54	
EPA 8270 by SIM	Pyrene	3370	ug/kg	366	05/14/20 15:54	
ASTM D2974-87	Percent Moisture	8.8	%	0.10	05/13/20 16:42	
40207643008	**P-12 (4')**					
EPA 6010	Lead	63.1	mg/kg	2.3	05/15/20 02:55	
EPA 8270 by SIM	Acenaphthylene	2.6J	ug/kg	20.0	05/14/20 12:44	
EPA 8270 by SIM	Anthracene	4.6J	ug/kg	20.0	05/14/20 12:44	
EPA 8270 by SIM	Benzo(a)anthracene	7.9J	ug/kg	20.0	05/14/20 12:44	
EPA 8270 by SIM	Benzo(a)pyrene	7.6J	ug/kg	20.0	05/14/20 12:44	
EPA 8270 by SIM	Benzo(b)fluoranthene	11.6J	ug/kg	20.0	05/14/20 12:44	
EPA 8270 by SIM	Benzo(g,h,i)perylene	6.0J	ug/kg	20.0	05/14/20 12:44	
EPA 8270 by SIM	Benzo(k)fluoranthene	5.5J	ug/kg	20.0	05/14/20 12:44	
EPA 8270 by SIM	Chrysene	9.8J	ug/kg	20.0	05/14/20 12:44	
EPA 8270 by SIM	Fluoranthene	13.3J	ug/kg	20.0	05/14/20 12:44	
EPA 8270 by SIM	Indeno(1,2,3-cd)pyrene	4.7J	ug/kg	20.0	05/14/20 12:44	
EPA 8270 by SIM	Naphthalene	5.1J	ug/kg	20.0	05/14/20 12:44	
EPA 8270 by SIM	Phenanthrene	5.0J	ug/kg	20.0	05/14/20 12:44	
EPA 8270 by SIM	Pyrene	10.8J	ug/kg	20.0	05/14/20 12:44	
ASTM D2974-87	Percent Moisture	16.7	%	0.10	05/13/20 16:43	
40207643009	**P-13 (2')**					
EPA 6010	Lead	101	mg/kg	2.2	05/15/20 02:57	
EPA 8270 by SIM	Acenaphthylene	258	ug/kg	198	05/14/20 19:03	
EPA 8270 by SIM	Anthracene	620	ug/kg	198	05/14/20 19:03	
EPA 8270 by SIM	Benzo(a)anthracene	589	ug/kg	198	05/14/20 19:03	
EPA 8270 by SIM	Benzo(a)pyrene	898	ug/kg	198	05/14/20 19:03	
EPA 8270 by SIM	Benzo(b)fluoranthene	2430	ug/kg	198	05/14/20 19:03	
EPA 8270 by SIM	Benzo(g,h,i)perylene	902	ug/kg	198	05/14/20 19:03	
EPA 8270 by SIM	Benzo(k)fluoranthene	784	ug/kg	198	05/14/20 19:03	
EPA 8270 by SIM	Chrysene	1480	ug/kg	198	05/14/20 19:03	
EPA 8270 by SIM	Dibenz(a,h)anthracene	209	ug/kg	198	05/14/20 19:03	
EPA 8270 by SIM	Fluoranthene	1050	ug/kg	198	05/14/20 19:03	
EPA 8270 by SIM	Fluorene	46.8J	ug/kg	198	05/14/20 19:03	
EPA 8270 by SIM	Indeno(1,2,3-cd)pyrene	702	ug/kg	198	05/14/20 19:03	
EPA 8270 by SIM	1-Methylnaphthalene	470	ug/kg	198	05/14/20 19:03	

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SUMMARY OF DETECTION

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40207643009	**P-13 (2')**					
EPA 8270 by SIM	2-Methylnaphthalene	707	ug/kg	198	05/14/20 19:03	
EPA 8270 by SIM	Naphthalene	740	ug/kg	198	05/14/20 19:03	
EPA 8270 by SIM	Phenanthrene	1030	ug/kg	198	05/14/20 19:03	
EPA 8270 by SIM	Pyrene	751	ug/kg	198	05/14/20 19:03	
ASTM D2974-87	Percent Moisture	15.6	%	0.10	05/13/20 16:43	
40207643010	**P-13 (4')**					
EPA 6010	Lead	11.9	mg/kg	2.5	05/15/20 03:00	
EPA 8270 by SIM	Naphthalene	4.7J	ug/kg	22.5	05/14/20 13:01	
ASTM D2974-87	Percent Moisture	25.6	%	0.10	05/13/20 16:43	

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PROJECT NARRATIVE

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Terracon, Inc. - Franklin
Date: May 15, 2020

General Information:
10 samples were analyzed for EPA 6010 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3050 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Method: **EPA 8270 by SIM**
Description: 8270 MSSV PAH by SIM
Client: Terracon, Inc. - Franklin
Date: May 15, 2020

General Information:
10 samples were analyzed for EPA 8270 by SIM by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

QC Batch: 354912

S4: Surrogate recovery not evaluated against control limits due to sample dilution.

- P-12 (2') (Lab ID: 40207643007)
  - 2-Fluorobiphenyl (S)
  - Terphenyl-d14 (S)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Sample: P-9 (4') **Lab ID: 40207643001** Collected: 05/11/20 14:51 Received: 05/13/20 08:55 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
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
	Pace Analytical Services - Green Bay								
Lead	**389**	mg/kg	11.8	3.5	5	05/14/20 20:40	05/15/20 03:06	7439-92-1	P6
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
Acenaphthene	**12.3J**	ug/kg	39.3	5.1	2	05/14/20 08:17	05/14/20 18:46	83-32-9	
Acenaphthylene	**81.4**	ug/kg	39.3	5.0	2	05/14/20 08:17	05/14/20 18:46	208-96-8	
Anthracene	**178**	ug/kg	39.3	4.9	2	05/14/20 08:17	05/14/20 18:46	120-12-7	
Benzo(a)anthracene	**205**	ug/kg	39.3	5.1	2	05/14/20 08:17	05/14/20 18:46	56-55-3	
Benzo(a)pyrene	**321**	ug/kg	39.3	4.5	2	05/14/20 08:17	05/14/20 18:46	50-32-8	
Benzo(b)fluoranthene	**582**	ug/kg	39.3	5.5	2	05/14/20 08:17	05/14/20 18:46	205-99-2	
Benzo(g,h,i)perylene	**268**	ug/kg	39.3	6.9	2	05/14/20 08:17	05/14/20 18:46	191-24-2	
Benzo(k)fluoranthene	**219**	ug/kg	39.3	5.0	2	05/14/20 08:17	05/14/20 18:46	207-08-9	
Chrysene	**407**	ug/kg	39.3	7.4	2	05/14/20 08:17	05/14/20 18:46	218-01-9	
Dibenz(a,h)anthracene	**83.8**	ug/kg	39.3	5.4	2	05/14/20 08:17	05/14/20 18:46	53-70-3	
Fluoranthene	**355**	ug/kg	39.3	4.7	2	05/14/20 08:17	05/14/20 18:46	206-44-0	
Fluorene	**16.4J**	ug/kg	39.3	4.7	2	05/14/20 08:17	05/14/20 18:46	86-73-7	
Indeno(1,2,3-cd)pyrene	**217**	ug/kg	39.3	8.2	2	05/14/20 08:17	05/14/20 18:46	193-39-5	
1-Methylnaphthalene	**124**	ug/kg	39.3	5.7	2	05/14/20 08:17	05/14/20 18:46	90-12-0	
2-Methylnaphthalene	**162**	ug/kg	39.3	5.7	2	05/14/20 08:17	05/14/20 18:46	91-57-6	
Naphthalene	**206**	ug/kg	39.3	3.8	2	05/14/20 08:17	05/14/20 18:46	91-20-3	
Phenanthrene	**330**	ug/kg	39.3	4.5	2	05/14/20 08:17	05/14/20 18:46	85-01-8	
Pyrene	**292**	ug/kg	39.3	5.8	2	05/14/20 08:17	05/14/20 18:46	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	72	%	17-100		2	05/14/20 08:17	05/14/20 18:46	321-60-8	
Terphenyl-d14 (S)	55	%	17-98		2	05/14/20 08:17	05/14/20 18:46	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974-87								
	Pace Analytical Services - Green Bay								
Percent Moisture	**15.1**	%	0.10	0.10	1		05/13/20 16:41		

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ANALYTICAL RESULTS

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Sample: P-9 (6') **Lab ID: 40207643002** Collected: 05/11/20 14:52 Received: 05/13/20 08:55 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
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Green Bay								
Lead	**8.1**	mg/kg	2.1	0.63	1	05/14/20 20:40	05/15/20 02:36	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**3.9J**	ug/kg	18.6	2.4	1	05/14/20 08:17	05/14/20 11:52	83-32-9	
Acenaphthylene	**<2.3**	ug/kg	18.6	2.3	1	05/14/20 08:17	05/14/20 11:52	208-96-8	
Anthracene	**4.7J**	ug/kg	18.6	2.3	1	05/14/20 08:17	05/14/20 11:52	120-12-7	
Benzo(a)anthracene	**5.8J**	ug/kg	18.6	2.4	1	05/14/20 08:17	05/14/20 11:52	56-55-3	
Benzo(a)pyrene	**3.5J**	ug/kg	18.6	2.1	1	05/14/20 08:17	05/14/20 11:52	50-32-8	
Benzo(b)fluoranthene	**5.2J**	ug/kg	18.6	2.6	1	05/14/20 08:17	05/14/20 11:52	205-99-2	
Benzo(g,h,i)perylene	**<3.3**	ug/kg	18.6	3.3	1	05/14/20 08:17	05/14/20 11:52	191-24-2	
Benzo(k)fluoranthene	**<2.4**	ug/kg	18.6	2.4	1	05/14/20 08:17	05/14/20 11:52	207-08-9	
Chrysene	**13.6J**	ug/kg	18.6	3.5	1	05/14/20 08:17	05/14/20 11:52	218-01-9	
Dibenz(a,h)anthracene	**<2.6**	ug/kg	18.6	2.6	1	05/14/20 08:17	05/14/20 11:52	53-70-3	
Fluoranthene	**19.2**	ug/kg	18.6	2.2	1	05/14/20 08:17	05/14/20 11:52	206-44-0	
Fluorene	**<2.2**	ug/kg	18.6	2.2	1	05/14/20 08:17	05/14/20 11:52	86-73-7	
Indeno(1,2,3-cd)pyrene	**<3.9**	ug/kg	18.6	3.9	1	05/14/20 08:17	05/14/20 11:52	193-39-5	
1-Methylnaphthalene	**14.1J**	ug/kg	18.6	2.7	1	05/14/20 08:17	05/14/20 11:52	90-12-0	
2-Methylnaphthalene	**17.2J**	ug/kg	18.6	2.7	1	05/14/20 08:17	05/14/20 11:52	91-57-6	
Naphthalene	**39.9**	ug/kg	18.6	1.8	1	05/14/20 08:17	05/14/20 11:52	91-20-3	
Phenanthrene	**49.6**	ug/kg	18.6	2.1	1	05/14/20 08:17	05/14/20 11:52	85-01-8	
Pyrene	**7.9J**	ug/kg	18.6	2.7	1	05/14/20 08:17	05/14/20 11:52	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	74	%	17-100		1	05/14/20 08:17	05/14/20 11:52	321-60-8	
Terphenyl-d14 (S)	68	%	17-98		1	05/14/20 08:17	05/14/20 11:52	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**10.1**	%	0.10	0.10	1		05/13/20 16:42		

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ANALYTICAL RESULTS

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Sample: P-10 (2') **Lab ID: 40207643003** Collected: 05/11/20 15:01 Received: 05/13/20 08:55 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
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Green Bay								
Lead	**19.7**	mg/kg	2.2	0.65	1	05/14/20 20:40	05/15/20 02:38	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**7.9J**	ug/kg	18.8	2.4	1	05/14/20 08:17	05/14/20 19:55	83-32-9	
Acenaphthylene	**10.6J**	ug/kg	18.8	2.4	1	05/14/20 08:17	05/14/20 19:55	208-96-8	
Anthracene	**28.6**	ug/kg	18.8	2.3	1	05/14/20 08:17	05/14/20 19:55	120-12-7	
Benzo(a)anthracene	**26.3**	ug/kg	18.8	2.4	1	05/14/20 08:17	05/14/20 19:55	56-55-3	
Benzo(a)pyrene	**28.0**	ug/kg	18.8	2.1	1	05/14/20 08:17	05/14/20 19:55	50-32-8	
Benzo(b)fluoranthene	**67.2**	ug/kg	18.8	2.6	1	05/14/20 08:17	05/14/20 19:55	205-99-2	
Benzo(g,h,i)perylene	**34.6**	ug/kg	18.8	3.3	1	05/14/20 08:17	05/14/20 19:55	191-24-2	
Benzo(k)fluoranthene	**17.7J**	ug/kg	18.8	2.4	1	05/14/20 08:17	05/14/20 19:55	207-08-9	
Chrysene	**56.2**	ug/kg	18.8	3.5	1	05/14/20 08:17	05/14/20 19:55	218-01-9	
Dibenz(a,h)anthracene	**6.7J**	ug/kg	18.8	2.6	1	05/14/20 08:17	05/14/20 19:55	53-70-3	
Fluoranthene	**75.1**	ug/kg	18.8	2.2	1	05/14/20 08:17	05/14/20 19:55	206-44-0	
Fluorene	**3.5J**	ug/kg	18.8	2.3	1	05/14/20 08:17	05/14/20 19:55	86-73-7	
Indeno(1,2,3-cd)pyrene	**19.5**	ug/kg	18.8	3.9	1	05/14/20 08:17	05/14/20 19:55	193-39-5	
1-Methylnaphthalene	**134**	ug/kg	18.8	2.7	1	05/14/20 08:17	05/14/20 19:55	90-12-0	
2-Methylnaphthalene	**185**	ug/kg	18.8	2.8	1	05/14/20 08:17	05/14/20 19:55	91-57-6	
Naphthalene	**136**	ug/kg	18.8	1.8	1	05/14/20 08:17	05/14/20 19:55	91-20-3	
Phenanthrene	**118**	ug/kg	18.8	2.2	1	05/14/20 08:17	05/14/20 19:55	85-01-8	
Pyrene	**51.4**	ug/kg	18.8	2.8	1	05/14/20 08:17	05/14/20 19:55	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	78	%	17-100		1	05/14/20 08:17	05/14/20 19:55	321-60-8	
Terphenyl-d14 (S)	67	%	17-98		1	05/14/20 08:17	05/14/20 19:55	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**11.2**	%	0.10	0.10	1		05/13/20 16:42		

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ANALYTICAL RESULTS

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Sample: P-10 (4') **Lab ID: 40207643004** Collected: 05/11/20 15:02 Received: 05/13/20 08:55 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
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
	Pace Analytical Services - Green Bay								
Lead	**10.3**	mg/kg	2.1	0.62	1	05/14/20 20:40	05/15/20 02:41	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
Acenaphthene	**<2.4**	ug/kg	18.5	2.4	1	05/14/20 08:17	05/14/20 20:12	83-32-9	
Acenaphthylene	**5.2J**	ug/kg	18.5	2.3	1	05/14/20 08:17	05/14/20 20:12	208-96-8	
Anthracene	**10.9J**	ug/kg	18.5	2.3	1	05/14/20 08:17	05/14/20 20:12	120-12-7	
Benzo(a)anthracene	**18.4J**	ug/kg	18.5	2.4	1	05/14/20 08:17	05/14/20 20:12	56-55-3	
Benzo(a)pyrene	**27.0**	ug/kg	18.5	2.1	1	05/14/20 08:17	05/14/20 20:12	50-32-8	
Benzo(b)fluoranthene	**42.6**	ug/kg	18.5	2.6	1	05/14/20 08:17	05/14/20 20:12	205-99-2	
Benzo(g,h,i)perylene	**26.3**	ug/kg	18.5	3.2	1	05/14/20 08:17	05/14/20 20:12	191-24-2	
Benzo(k)fluoranthene	**15.5J**	ug/kg	18.5	2.4	1	05/14/20 08:17	05/14/20 20:12	207-08-9	
Chrysene	**28.3**	ug/kg	18.5	3.5	1	05/14/20 08:17	05/14/20 20:12	218-01-9	
Dibenz(a,h)anthracene	**5.6J**	ug/kg	18.5	2.6	1	05/14/20 08:17	05/14/20 20:12	53-70-3	
Fluoranthene	**28.2**	ug/kg	18.5	2.2	1	05/14/20 08:17	05/14/20 20:12	206-44-0	
Fluorene	**<2.2**	ug/kg	18.5	2.2	1	05/14/20 08:17	05/14/20 20:12	86-73-7	
Indeno(1,2,3-cd)pyrene	**16.3J**	ug/kg	18.5	3.9	1	05/14/20 08:17	05/14/20 20:12	193-39-5	
1-Methylnaphthalene	**20.4**	ug/kg	18.5	2.7	1	05/14/20 08:17	05/14/20 20:12	90-12-0	
2-Methylnaphthalene	**29.1**	ug/kg	18.5	2.7	1	05/14/20 08:17	05/14/20 20:12	91-57-6	
Naphthalene	**21.8**	ug/kg	18.5	1.8	1	05/14/20 08:17	05/14/20 20:12	91-20-3	
Phenanthrene	**27.6**	ug/kg	18.5	2.1	1	05/14/20 08:17	05/14/20 20:12	85-01-8	
Pyrene	**23.8**	ug/kg	18.5	2.7	1	05/14/20 08:17	05/14/20 20:12	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	84	%	17-100		1	05/14/20 08:17	05/14/20 20:12	321-60-8	
Terphenyl-d14 (S)	70	%	17-98		1	05/14/20 08:17	05/14/20 20:12	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974-87								
	Pace Analytical Services - Green Bay								
Percent Moisture	**9.7**	%	0.10	0.10	1		05/13/20 16:42		

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ANALYTICAL RESULTS

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Sample: P-11 (2') **Lab ID: 40207643005** Collected: 05/11/20 15:15 Received: 05/13/20 08:55 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
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Green Bay								
Lead	**1.8J**	mg/kg	2.1	0.62	1	05/14/20 20:40	05/15/20 02:43	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**<2.2**	ug/kg	17.3	2.2	1	05/14/20 08:17	05/14/20 12:10	83-32-9	
Acenaphthylene	**<2.2**	ug/kg	17.3	2.2	1	05/14/20 08:17	05/14/20 12:10	208-96-8	
Anthracene	**<2.1**	ug/kg	17.3	2.1	1	05/14/20 08:17	05/14/20 12:10	120-12-7	
Benzo(a)anthracene	**<2.2**	ug/kg	17.3	2.2	1	05/14/20 08:17	05/14/20 12:10	56-55-3	
Benzo(a)pyrene	**<2.0**	ug/kg	17.3	2.0	1	05/14/20 08:17	05/14/20 12:10	50-32-8	
Benzo(b)fluoranthene	**<2.4**	ug/kg	17.3	2.4	1	05/14/20 08:17	05/14/20 12:10	205-99-2	
Benzo(g,h,i)perylene	**<3.0**	ug/kg	17.3	3.0	1	05/14/20 08:17	05/14/20 12:10	191-24-2	
Benzo(k)fluoranthene	**<2.2**	ug/kg	17.3	2.2	1	05/14/20 08:17	05/14/20 12:10	207-08-9	
Chrysene	**<3.3**	ug/kg	17.3	3.3	1	05/14/20 08:17	05/14/20 12:10	218-01-9	
Dibenz(a,h)anthracene	**<2.4**	ug/kg	17.3	2.4	1	05/14/20 08:17	05/14/20 12:10	53-70-3	
Fluoranthene	**<2.0**	ug/kg	17.3	2.0	1	05/14/20 08:17	05/14/20 12:10	206-44-0	
Fluorene	**<2.1**	ug/kg	17.3	2.1	1	05/14/20 08:17	05/14/20 12:10	86-73-7	
Indeno(1,2,3-cd)pyrene	**<3.6**	ug/kg	17.3	3.6	1	05/14/20 08:17	05/14/20 12:10	193-39-5	
1-Methylnaphthalene	**<2.5**	ug/kg	17.3	2.5	1	05/14/20 08:17	05/14/20 12:10	90-12-0	
2-Methylnaphthalene	**<2.5**	ug/kg	17.3	2.5	1	05/14/20 08:17	05/14/20 12:10	91-57-6	
Naphthalene	**<1.7**	ug/kg	17.3	1.7	1	05/14/20 08:17	05/14/20 12:10	91-20-3	
Phenanthrene	**<2.0**	ug/kg	17.3	2.0	1	05/14/20 08:17	05/14/20 12:10	85-01-8	
Pyrene	**<2.5**	ug/kg	17.3	2.5	1	05/14/20 08:17	05/14/20 12:10	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	76	%	17-100		1	05/14/20 08:17	05/14/20 12:10	321-60-8	
Terphenyl-d14 (S)	69	%	17-98		1	05/14/20 08:17	05/14/20 12:10	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**3.4**	%	0.10	0.10	1		05/13/20 16:42		

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ANALYTICAL RESULTS

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Sample: P-11 (4') **Lab ID: 40207643006** Collected: 05/11/20 15:16 Received: 05/13/20 08:55 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
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
	Pace Analytical Services - Green Bay								
Lead	**2.0**	mg/kg	2.0	0.59	1	05/14/20 20:40	05/15/20 02:45	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
Acenaphthene	**<2.3**	ug/kg	17.6	2.3	1	05/14/20 08:17	05/14/20 12:27	83-32-9	
Acenaphthylene	**<2.2**	ug/kg	17.6	2.2	1	05/14/20 08:17	05/14/20 12:27	208-96-8	
Anthracene	**<2.2**	ug/kg	17.6	2.2	1	05/14/20 08:17	05/14/20 12:27	120-12-7	
Benzo(a)anthracene	**2.4J**	ug/kg	17.6	2.3	1	05/14/20 08:17	05/14/20 12:27	56-55-3	
Benzo(a)pyrene	**<2.0**	ug/kg	17.6	2.0	1	05/14/20 08:17	05/14/20 12:27	50-32-8	
Benzo(b)fluoranthene	**2.6J**	ug/kg	17.6	2.4	1	05/14/20 08:17	05/14/20 12:27	205-99-2	
Benzo(g,h,i)perylene	**<3.1**	ug/kg	17.6	3.1	1	05/14/20 08:17	05/14/20 12:27	191-24-2	
Benzo(k)fluoranthene	**<2.2**	ug/kg	17.6	2.2	1	05/14/20 08:17	05/14/20 12:27	207-08-9	
Chrysene	**<3.3**	ug/kg	17.6	3.3	1	05/14/20 08:17	05/14/20 12:27	218-01-9	
Dibenz(a,h)anthracene	**<2.4**	ug/kg	17.6	2.4	1	05/14/20 08:17	05/14/20 12:27	53-70-3	
Fluoranthene	**2.6J**	ug/kg	17.6	2.1	1	05/14/20 08:17	05/14/20 12:27	206-44-0	
Fluorene	**<2.1**	ug/kg	17.6	2.1	1	05/14/20 08:17	05/14/20 12:27	86-73-7	
Indeno(1,2,3-cd)pyrene	**<3.7**	ug/kg	17.6	3.7	1	05/14/20 08:17	05/14/20 12:27	193-39-5	
1-Methylnaphthalene	**<2.6**	ug/kg	17.6	2.6	1	05/14/20 08:17	05/14/20 12:27	90-12-0	
2-Methylnaphthalene	**<2.6**	ug/kg	17.6	2.6	1	05/14/20 08:17	05/14/20 12:27	91-57-6	
Naphthalene	**7.3J**	ug/kg	17.6	1.7	1	05/14/20 08:17	05/14/20 12:27	91-20-3	
Phenanthrene	**2.1J**	ug/kg	17.6	2.0	1	05/14/20 08:17	05/14/20 12:27	85-01-8	
Pyrene	**<2.6**	ug/kg	17.6	2.6	1	05/14/20 08:17	05/14/20 12:27	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	78	%	17-100		1	05/14/20 08:17	05/14/20 12:27	321-60-8	
Terphenyl-d14 (S)	68	%	17-98		1	05/14/20 08:17	05/14/20 12:27	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974-87								
	Pace Analytical Services - Green Bay								
Percent Moisture	**5.0**	%	0.10	0.10	1		05/13/20 16:42		

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ANALYTICAL RESULTS

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Sample: P-12 (2') **Lab ID: 40207643007** Collected: 05/11/20 15:25 Received: 05/13/20 08:55 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
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
	Pace Analytical Services - Green Bay								
Lead	**153**	mg/kg	2.1	0.63	1	05/14/20 20:40	05/15/20 02:53	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
Acenaphthene	**<47.4**	ug/kg	366	47.4	20	05/14/20 08:17	05/14/20 15:54	83-32-9	
Acenaphthylene	**1040**	ug/kg	366	46.1	20	05/14/20 08:17	05/14/20 15:54	208-96-8	
Anthracene	**1450**	ug/kg	366	45.4	20	05/14/20 08:17	05/14/20 15:54	120-12-7	
Benzo(a)anthracene	**2890**	ug/kg	366	47.3	20	05/14/20 08:17	05/14/20 15:54	56-55-3	
Benzo(a)pyrene	**2920**	ug/kg	366	41.6	20	05/14/20 08:17	05/14/20 15:54	50-32-8	
Benzo(b)fluoranthene	**4120**	ug/kg	366	50.8	20	05/14/20 08:17	05/14/20 15:54	205-99-2	
Benzo(g,h,i)perylene	**2070**	ug/kg	366	64.2	20	05/14/20 08:17	05/14/20 15:54	191-24-2	
Benzo(k)fluoranthene	**2140**	ug/kg	366	46.7	20	05/14/20 08:17	05/14/20 15:54	207-08-9	
Chrysene	**3230**	ug/kg	366	69.0	20	05/14/20 08:17	05/14/20 15:54	218-01-9	
Dibenz(a,h)anthracene	**707**	ug/kg	366	50.6	20	05/14/20 08:17	05/14/20 15:54	53-70-3	
Fluoranthene	**3630**	ug/kg	366	43.3	20	05/14/20 08:17	05/14/20 15:54	206-44-0	
Fluorene	**57.4J**	ug/kg	366	43.9	20	05/14/20 08:17	05/14/20 15:54	86-73-7	
Indeno(1,2,3-cd)pyrene	**1770**	ug/kg	366	76.2	20	05/14/20 08:17	05/14/20 15:54	193-39-5	
1-Methylnaphthalene	**56.7J**	ug/kg	366	53.4	20	05/14/20 08:17	05/14/20 15:54	90-12-0	
2-Methylnaphthalene	**69.7J**	ug/kg	366	53.5	20	05/14/20 08:17	05/14/20 15:54	91-57-6	
Naphthalene	**90.4J**	ug/kg	366	35.6	20	05/14/20 08:17	05/14/20 15:54	91-20-3	
Phenanthrene	**305J**	ug/kg	366	41.9	20	05/14/20 08:17	05/14/20 15:54	85-01-8	
Pyrene	**3370**	ug/kg	366	53.8	20	05/14/20 08:17	05/14/20 15:54	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	0	%	17-100		20	05/14/20 08:17	05/14/20 15:54	321-60-8	S4
Terphenyl-d14 (S)	0	%	17-98		20	05/14/20 08:17	05/14/20 15:54	1718-51-0	S4
Percent Moisture	Analytical Method: ASTM D2974-87								
	Pace Analytical Services - Green Bay								
Percent Moisture	**8.8**	%	0.10	0.10	1		05/13/20 16:42		

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(920)469-2436

ANALYTICAL RESULTS

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Sample: P-12 (4') **Lab ID: 40207643008** Collected: 05/11/20 15:26 Received: 05/13/20 08:55 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
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
	Pace Analytical Services - Green Bay								
Lead	**63.1**	mg/kg	2.3	0.70	1	05/14/20 20:40	05/15/20 02:55	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
Acenaphthene	**<2.6**	ug/kg	20.0	2.6	1	05/14/20 08:17	05/14/20 12:44	83-32-9	
Acenaphthylene	**2.6J**	ug/kg	20.0	2.5	1	05/14/20 08:17	05/14/20 12:44	208-96-8	
Anthracene	**4.6J**	ug/kg	20.0	2.5	1	05/14/20 08:17	05/14/20 12:44	120-12-7	
Benzo(a)anthracene	**7.9J**	ug/kg	20.0	2.6	1	05/14/20 08:17	05/14/20 12:44	56-55-3	
Benzo(a)pyrene	**7.6J**	ug/kg	20.0	2.3	1	05/14/20 08:17	05/14/20 12:44	50-32-8	
Benzo(b)fluoranthene	**11.6J**	ug/kg	20.0	2.8	1	05/14/20 08:17	05/14/20 12:44	205-99-2	
Benzo(g,h,i)perylene	**6.0J**	ug/kg	20.0	3.5	1	05/14/20 08:17	05/14/20 12:44	191-24-2	
Benzo(k)fluoranthene	**5.5J**	ug/kg	20.0	2.6	1	05/14/20 08:17	05/14/20 12:44	207-08-9	
Chrysene	**9.8J**	ug/kg	20.0	3.8	1	05/14/20 08:17	05/14/20 12:44	218-01-9	
Dibenz(a,h)anthracene	**<2.8**	ug/kg	20.0	2.8	1	05/14/20 08:17	05/14/20 12:44	53-70-3	
Fluoranthene	**13.3J**	ug/kg	20.0	2.4	1	05/14/20 08:17	05/14/20 12:44	206-44-0	
Fluorene	**<2.4**	ug/kg	20.0	2.4	1	05/14/20 08:17	05/14/20 12:44	86-73-7	
Indeno(1,2,3-cd)pyrene	**4.7J**	ug/kg	20.0	4.2	1	05/14/20 08:17	05/14/20 12:44	193-39-5	
1-Methylnaphthalene	**<2.9**	ug/kg	20.0	2.9	1	05/14/20 08:17	05/14/20 12:44	90-12-0	
2-Methylnaphthalene	**<2.9**	ug/kg	20.0	2.9	1	05/14/20 08:17	05/14/20 12:44	91-57-6	
Naphthalene	**5.1J**	ug/kg	20.0	2.0	1	05/14/20 08:17	05/14/20 12:44	91-20-3	
Phenanthrene	**5.0J**	ug/kg	20.0	2.3	1	05/14/20 08:17	05/14/20 12:44	85-01-8	
Pyrene	**10.8J**	ug/kg	20.0	2.9	1	05/14/20 08:17	05/14/20 12:44	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	59	%	17-100		1	05/14/20 08:17	05/14/20 12:44	321-60-8	
Terphenyl-d14 (S)	49	%	17-98		1	05/14/20 08:17	05/14/20 12:44	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974-87								
	Pace Analytical Services - Green Bay								
Percent Moisture	**16.7**	%	0.10	0.10	1		05/13/20 16:43		

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ANALYTICAL RESULTS

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Sample: P-13 (2') **Lab ID: 40207643009** Collected: 05/11/20 15:35 Received: 05/13/20 08:55 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
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050 Pace Analytical Services - Green Bay								
Lead	**101**	mg/kg	2.2	0.65	1	05/14/20 20:40	05/15/20 02:57	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**<25.7**	ug/kg	198	25.7	10	05/14/20 08:17	05/14/20 19:03	83-32-9	
Acenaphthylene	**258**	ug/kg	198	25.0	10	05/14/20 08:17	05/14/20 19:03	208-96-8	
Anthracene	**620**	ug/kg	198	24.6	10	05/14/20 08:17	05/14/20 19:03	120-12-7	
Benzo(a)anthracene	**589**	ug/kg	198	25.6	10	05/14/20 08:17	05/14/20 19:03	56-55-3	
Benzo(a)pyrene	**898**	ug/kg	198	22.5	10	05/14/20 08:17	05/14/20 19:03	50-32-8	
Benzo(b)fluoranthene	**2430**	ug/kg	198	27.5	10	05/14/20 08:17	05/14/20 19:03	205-99-2	
Benzo(g,h,i)perylene	**902**	ug/kg	198	34.8	10	05/14/20 08:17	05/14/20 19:03	191-24-2	
Benzo(k)fluoranthene	**784**	ug/kg	198	25.3	10	05/14/20 08:17	05/14/20 19:03	207-08-9	
Chrysene	**1480**	ug/kg	198	37.4	10	05/14/20 08:17	05/14/20 19:03	218-01-9	
Dibenz(a,h)anthracene	**209**	ug/kg	198	27.4	10	05/14/20 08:17	05/14/20 19:03	53-70-3	
Fluoranthene	**1050**	ug/kg	198	23.5	10	05/14/20 08:17	05/14/20 19:03	206-44-0	
Fluorene	**46.8J**	ug/kg	198	23.8	10	05/14/20 08:17	05/14/20 19:03	86-73-7	
Indeno(1,2,3-cd)pyrene	**702**	ug/kg	198	41.3	10	05/14/20 08:17	05/14/20 19:03	193-39-5	
1-Methylnaphthalene	**470**	ug/kg	198	29.0	10	05/14/20 08:17	05/14/20 19:03	90-12-0	
2-Methylnaphthalene	**707**	ug/kg	198	29.0	10	05/14/20 08:17	05/14/20 19:03	91-57-6	
Naphthalene	**740**	ug/kg	198	19.3	10	05/14/20 08:17	05/14/20 19:03	91-20-3	
Phenanthrene	**1030**	ug/kg	198	22.7	10	05/14/20 08:17	05/14/20 19:03	85-01-8	
Pyrene	**751**	ug/kg	198	29.1	10	05/14/20 08:17	05/14/20 19:03	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	59	%	17-100		10	05/14/20 08:17	05/14/20 19:03	321-60-8	
Terphenyl-d14 (S)	52	%	17-98		10	05/14/20 08:17	05/14/20 19:03	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**15.6**	%	0.10	0.10	1		05/13/20 16:43		

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ANALYTICAL RESULTS

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Sample: P-13 (4') **Lab ID: 40207643010** Collected: 05/11/20 15:36 Received: 05/13/20 08:55 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
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3050								
	Pace Analytical Services - Green Bay								
Lead	**11.9**	mg/kg	2.5	0.75	1	05/14/20 20:40	05/15/20 03:00	7439-92-1	
8270 MSSV PAH by SIM	Analytical Method: EPA 8270 by SIM Preparation Method: EPA 3546								
	Pace Analytical Services - Green Bay								
Acenaphthene	**<2.9**	ug/kg	22.5	2.9	1	05/14/20 08:17	05/14/20 13:01	83-32-9	
Acenaphthylene	**<2.8**	ug/kg	22.5	2.8	1	05/14/20 08:17	05/14/20 13:01	208-96-8	
Anthracene	**<2.8**	ug/kg	22.5	2.8	1	05/14/20 08:17	05/14/20 13:01	120-12-7	
Benzo(a)anthracene	**<2.9**	ug/kg	22.5	2.9	1	05/14/20 08:17	05/14/20 13:01	56-55-3	
Benzo(a)pyrene	**<2.6**	ug/kg	22.5	2.6	1	05/14/20 08:17	05/14/20 13:01	50-32-8	
Benzo(b)fluoranthene	**<3.1**	ug/kg	22.5	3.1	1	05/14/20 08:17	05/14/20 13:01	205-99-2	
Benzo(g,h,i)perylene	**<3.9**	ug/kg	22.5	3.9	1	05/14/20 08:17	05/14/20 13:01	191-24-2	
Benzo(k)fluoranthene	**<2.9**	ug/kg	22.5	2.9	1	05/14/20 08:17	05/14/20 13:01	207-08-9	
Chrysene	**<4.2**	ug/kg	22.5	4.2	1	05/14/20 08:17	05/14/20 13:01	218-01-9	
Dibenz(a,h)anthracene	**<3.1**	ug/kg	22.5	3.1	1	05/14/20 08:17	05/14/20 13:01	53-70-3	
Fluoranthene	**<2.7**	ug/kg	22.5	2.7	1	05/14/20 08:17	05/14/20 13:01	206-44-0	
Fluorene	**<2.7**	ug/kg	22.5	2.7	1	05/14/20 08:17	05/14/20 13:01	86-73-7	
Indeno(1,2,3-cd)pyrene	**<4.7**	ug/kg	22.5	4.7	1	05/14/20 08:17	05/14/20 13:01	193-39-5	
1-Methylnaphthalene	**<3.3**	ug/kg	22.5	3.3	1	05/14/20 08:17	05/14/20 13:01	90-12-0	
2-Methylnaphthalene	**<3.3**	ug/kg	22.5	3.3	1	05/14/20 08:17	05/14/20 13:01	91-57-6	
Naphthalene	**4.7J**	ug/kg	22.5	2.2	1	05/14/20 08:17	05/14/20 13:01	91-20-3	
Phenanthrene	**<2.6**	ug/kg	22.5	2.6	1	05/14/20 08:17	05/14/20 13:01	85-01-8	
Pyrene	**<3.3**	ug/kg	22.5	3.3	1	05/14/20 08:17	05/14/20 13:01	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	77	%	17-100		1	05/14/20 08:17	05/14/20 13:01	321-60-8	
Terphenyl-d14 (S)	67	%	17-98		1	05/14/20 08:17	05/14/20 13:01	1718-51-0	
Percent Moisture	Analytical Method: ASTM D2974-87								
	Pace Analytical Services - Green Bay								
Percent Moisture	**25.6**	%	0.10	0.10	1		05/13/20 16:43		

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QUALITY CONTROL DATA

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

QC Batch: 355004
QC Batch Method: EPA 3050
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40207643001, 40207643002, 40207643003, 40207643004, 40207643005, 40207643006, 40207643007, 40207643008, 40207643009, 40207643010

METHOD BLANK: 2054056 Matrix: Solid
Associated Lab Samples: 40207643001, 40207643002, 40207643003, 40207643004, 40207643005, 40207643006, 40207643007, 40207643008, 40207643009, 40207643010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Lead	mg/kg	<0.60	2.0	05/15/20 02:24	

LABORATORY CONTROL SAMPLE: 2054057

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Lead	mg/kg	50	51.9	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2054058 2054059

Parameter	Units	40207643001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Lead	mg/kg	389	58.9	58.4	605	501	367	191	75-125	19	20	P6

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.

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QUALITY CONTROL DATA

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

QC Batch: 354912
QC Batch Method: EPA 3546
Analysis Method: EPA 8270 by SIM
Analysis Description: 8270/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40207643001, 40207643002, 40207643003, 40207643004, 40207643005, 40207643006, 40207643007, 40207643008, 40207643009, 40207643010

METHOD BLANK: 2053451 Matrix: Solid
Associated Lab Samples: 40207643001, 40207643002, 40207643003, 40207643004, 40207643005, 40207643006, 40207643007, 40207643008, 40207643009, 40207643010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	<2.4	16.7	05/14/20 11:18	
2-Methylnaphthalene	ug/kg	<2.4	16.7	05/14/20 11:18	
Acenaphthene	ug/kg	<2.2	16.7	05/14/20 11:18	
Acenaphthylene	ug/kg	<2.1	16.7	05/14/20 11:18	
Anthracene	ug/kg	<2.1	16.7	05/14/20 11:18	
Benzo(a)anthracene	ug/kg	<2.2	16.7	05/14/20 11:18	
Benzo(a)pyrene	ug/kg	<1.9	16.7	05/14/20 11:18	
Benzo(b)fluoranthene	ug/kg	<2.3	16.7	05/14/20 11:18	
Benzo(g,h,i)perylene	ug/kg	<2.9	16.7	05/14/20 11:18	
Benzo(k)fluoranthene	ug/kg	<2.1	16.7	05/14/20 11:18	
Chrysene	ug/kg	<3.1	16.7	05/14/20 11:18	
Dibenz(a,h)anthracene	ug/kg	<2.3	16.7	05/14/20 11:18	
Fluoranthene	ug/kg	<2.0	16.7	05/14/20 11:18	
Fluorene	ug/kg	<2.0	16.7	05/14/20 11:18	
Indeno(1,2,3-cd)pyrene	ug/kg	<3.5	16.7	05/14/20 11:18	
Naphthalene	ug/kg	<1.6	16.7	05/14/20 11:18	
Phenanthrene	ug/kg	<1.9	16.7	05/14/20 11:18	
Pyrene	ug/kg	<2.5	16.7	05/14/20 11:18	
2-Fluorobiphenyl (S)	%	80	17-100	05/14/20 11:18	
Terphenyl-d14 (S)	%	75	17-98	05/14/20 11:18	

LABORATORY CONTROL SAMPLE: 2053452

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	333	267	80	58-101	
2-Methylnaphthalene	ug/kg	333	258	78	59-101	
Acenaphthene	ug/kg	333	290	87	62-97	
Acenaphthylene	ug/kg	333	295	88	67-102	
Anthracene	ug/kg	333	334	100	69-120	
Benzo(a)anthracene	ug/kg	333	260	78	59-101	
Benzo(a)pyrene	ug/kg	333	331	99	70-110	
Benzo(b)fluoranthene	ug/kg	333	286	86	66-111	
Benzo(g,h,i)perylene	ug/kg	333	292	88	64-106	
Benzo(k)fluoranthene	ug/kg	333	343	103	65-108	
Chrysene	ug/kg	333	297	89	61-102	
Dibenz(a,h)anthracene	ug/kg	333	293	88	64-120	
Fluoranthene	ug/kg	333	363	109	69-120	

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QUALITY CONTROL DATA

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

LABORATORY CONTROL SAMPLE: 2053452

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Fluorene	ug/kg	333	297	89	70-99	
Indeno(1,2,3-cd)pyrene	ug/kg	333	295	89	66-120	
Naphthalene	ug/kg	333	267	80	60-95	
Phenanthrene	ug/kg	333	303	91	66-98	
Pyrene	ug/kg	333	259	78	63-120	
2-Fluorobiphenyl (S)	%			81	17-100	
Terphenyl-d14 (S)	%			78	17-98	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2053453 2053454

Parameter	Units	40207480017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	ug/kg	22.7J	2430	2390	2000	1970	82	81	48-101	2	25	
2-Methylnaphthalene	ug/kg	32.3J	2430	2390	1970	1910	80	79	46-101	3	21	
Acenaphthene	ug/kg	44.3J	2430	2390	2260	2220	91	91	52-97	2	20	
Acenaphthylene	ug/kg	115J	2430	2390	2270	2300	89	91	51-102	1	20	
Anthracene	ug/kg	77.3J	2430	2390	2500	2440	100	99	54-120	2	20	
Benzo(a)anthracene	ug/kg	280	2430	2390	2190	2070	79	75	34-101	6	22	
Benzo(a)pyrene	ug/kg	391	2430	2390	2650	2520	93	89	46-110	5	25	
Benzo(b)fluoranthene	ug/kg	434	2430	2390	2590	2380	89	81	40-111	9	23	
Benzo(g,h,i)perylene	ug/kg	267	2430	2390	2360	2230	86	82	40-120	6	24	
Benzo(k)fluoranthene	ug/kg	196	2430	2390	2590	2550	99	98	47-108	2	24	
Chrysene	ug/kg	317	2430	2390	2410	2310	87	83	35-115	5	20	
Dibenz(a,h)anthracene	ug/kg	60.7J	2430	2390	2160	2160	86	88	46-120	0	21	
Fluoranthene	ug/kg	581	2430	2390	3110	2930	104	98	52-120	6	23	
Fluorene	ug/kg	27.5J	2430	2390	2190	2270	89	94	54-99	3	20	
Indeno(1,2,3-cd)pyrene	ug/kg	216	2430	2390	2310	2280	87	86	46-120	1	22	
Naphthalene	ug/kg	84.1J	2430	2390	2020	2060	80	83	46-95	2	23	
Phenanthrene	ug/kg	168	2430	2390	2420	2340	93	91	51-98	4	20	
Pyrene	ug/kg	410	2430	2390	2420	2250	83	77	46-120	7	24	
2-Fluorobiphenyl (S)	%						89	84	17-100			
Terphenyl-d14 (S)	%						75	78	17-98			

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

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

QC Batch: 354861
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40207643001, 40207643002, 40207643003, 40207643004, 40207643005, 40207643006, 40207643007, 40207643008, 40207643009, 40207643010

SAMPLE DUPLICATE: 2053280

Parameter	Units	40207612001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	6.8	7.1	4	10	

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

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Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

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.

ANALYTE QUALIFIERS

P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.
S4	Surrogate recovery not evaluated against control limits due to sample dilution.

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 58197251 LA CROSSE MILLING
Pace Project No.: 40207693

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40207643001	**P-9 (4')**	EPA 3050	355004	EPA 6010	355006
40207643002	**P-9 (6')**	EPA 3050	355004	EPA 6010	355006
40207643003	**P-10 (2')**	EPA 3050	355004	EPA 6010	355006
40207643004	**P-10 (4')**	EPA 3050	355004	EPA 6010	355006
40207643005	**P-11 (2')**	EPA 3050	355004	EPA 6010	355006
40207643006	**P-11 (4')**	EPA 3050	355004	EPA 6010	355006
40207643007	**P-12 (2')**	EPA 3050	355004	EPA 6010	355006
40207643008	**P-12 (4')**	EPA 3050	355004	EPA 6010	355006
40207643009	**P-13 (2')**	EPA 3050	355004	EPA 6010	355006
40207643010	**P-13 (4')**	EPA 3050	355004	EPA 6010	355006
40207643001	**P-9 (4')**	EPA 3546	354912	EPA 8270 by SIM	354928
40207643002	**P-9 (6')**	EPA 3546	354912	EPA 8270 by SIM	354928
40207643003	**P-10 (2')**	EPA 3546	354912	EPA 8270 by SIM	354928
40207643004	**P-10 (4')**	EPA 3546	354912	EPA 8270 by SIM	354928
40207643005	**P-11 (2')**	EPA 3546	354912	EPA 8270 by SIM	354928
40207643006	**P-11 (4')**	EPA 3546	354912	EPA 8270 by SIM	354928
40207643007	**P-12 (2')**	EPA 3546	354912	EPA 8270 by SIM	354928
40207643008	**P-12 (4')**	EPA 3546	354912	EPA 8270 by SIM	354928
40207643009	**P-13 (2')**	EPA 3546	354912	EPA 8270 by SIM	354928
40207643010	**P-13 (4')**	EPA 3546	354912	EPA 8270 by SIM	354928
40207643001	**P-9 (4')**	ASTM D2974-87	354861		
40207643002	**P-9 (6')**	ASTM D2974-87	354861		
40207643003	**P-10 (2')**	ASTM D2974-87	354861		
40207643004	**P-10 (4')**	ASTM D2974-87	354861		
40207643005	**P-11 (2')**	ASTM D2974-87	354861		
40207643006	**P-11 (4')**	ASTM D2974-87	354861		
40207643007	**P-12 (2')**	ASTM D2974-87	354861		
40207643008	**P-12 (4')**	ASTM D2974-87	354861		
40207643009	**P-13 (2')**	ASTM D2974-87	354861		
40207643010	**P-13 (4')**	ASTM D2974-87	354861		

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(Please Print Clearly)	
Company Name:	Teracon Consultants
Branch/Location:	Franklin, WI
Project Contact:	Paul Lenaker
Phone:	414-423-0255
Project Number:	58197251
Project Name:	La Crosse Milling
Project State:	Wisconsin
Sampled By (Print):	Krista Kroeninger
Sampled By (Sign):	Krista Kroeninger
PO #:	Regulatory Program:

Pace Analytical®
www.pacelabs.com

UPPER MIDWEST REGION
MN: 612-607-1700 WI: 920-469-2436

Page 1 of 5

40207643

CHAIN OF CUSTODY

*Preservation Codes
A=None B=HCL C=H2SO4 D=HNO3 E=DI Water F=Methanol G=NaOH
H=Sodium Bisulfate Solution I=Sodium Thiosulfate J=Other

Quote #:	
Mail To Contact:	
Mail To Company:	Teracon
Mail To Address:	
Invoice To Contact:	
Invoice To Company:	Teracon
Invoice To Address:	
Invoice To Phone:	

Data Package Options (billable)
☐ EPA Level III
☐ EPA Level IV

MS/MSD
☐ On your sample (billable)
☐ NOT needed on your sample

Matrix Codes
A = Air, B = Biota, C = Charcoal, O = Oil, S = Soil, SI = Sludge, W = Water, DW = Drinking Water, GW = Ground Water, SW = Surface Water, WW = Waste Water, WP = Wipe

PACE LAB #	CLIENT FIELD ID	COLLECTION DATE	COLLECTION TIME	MATRIX	FILTERED? (YES/NO) Y/N	PRESERVATION (CODE)* Pick Letter	Analyses Requested: PAHs	Analyses Requested: Metals (Lead only)
001	P-9 (4')	5/11/20	1451	S	N	A	1	1
002	P-9 (6')		1452				1	1
003	P-10 (2')		1501				1	1
004	P-10 (4')		1502				1	1
005	P-11 (2')		1515				1	1
006	P-11 (4')		1516				1	1
007	P-12 (2')		1525				1	1
008	P-12 (4')		1526				1	1
009	P-13 (2')		1535				1	1
010	P-13 (4')		1536				1	1

CLIENT COMMENTS	LAB COMMENTS (Lab Use Only)	Profile #

Rush Turnaround Time Requested - Prelims
(Rush TAT subject to approval/surcharge)
Date Needed: 2-Day TAT

Transmit Prelim Rush Results by (complete what you want):

Email #1:	
Email #2:	
Telephone:	
Fax:	

Samples on HOLD are subject to special pricing and release of liability

Relinquished By:	Date/Time:	Received By:	Date/Time:
Krista Kroeninger	5/12/20 1600		
Relinquished By:	Date/Time:	Received By:	Date/Time:
CS Logistics	5-13-20 0855	Madelin Z Pale Face	5-13-20 0855
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By:	Date/Time:

PACE Project No. 40207643

Receipt Temp = RCI °C

Sample Receipt pH OK / Adjusted

Cooler Custody Seal Present / Not Present
Intact / Not Intact

C019a(27Jun2006)

Version 6.0 06/14/06

ORIGINAL

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

Sample Preservation Receipt Form

Client Name: Terracon Consultants Project # 40207643

All containers needing preservation have been checked and noted below: □Yes □No ☒N/A

Initial when completed: Date/ Time:

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

Pace Lab #	Glass								Plastic					Vials						Jars				General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN						
001																																2.5 / 5 / 10
002																																2.5 / 5 / 10
003																																2.5 / 5 / 10
004																																2.5 / 5 / 10
005																																2.5 / 5 / 10
006																																2.5 / 5 / 10
007																																2.5 / 5 / 10
008																																2.5 / 5 / 10
009																																2.5 / 5 / 10
010																																2.5 / 5 / 10
011																																2.5 / 5 / 10
012																																2.5 / 5 / 10
013																																2.5 / 5 / 10
014																																2.5 / 5 / 10
015																																2.5 / 5 / 10
016																																2.5 / 5 / 10
017																																2.5 / 5 / 10
018																																2.5 / 5 / 10
019																																2.5 / 5 / 10
020																																2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other:_____ Headspace in VOA Vials (>6mm) : □Yes □No ☒N/A ***If yes look in headspace column**

AG1U	1 liter amber glass
BG1U	1 liter clear glass
AG1H	1 liter amber glass HCL
AG4S	125 mL amber glass H2SO4
AG4U	120 mL amber glass unpres
AG5U	100 mL amber glass unpres
AG2S	500 mL amber glass H2SO4
BG3U	250 mL clear glass unpres

BP1U	1 liter plastic unpres
BP3U	250 mL plastic unpres
BP3B	250 mL plastic NaOH
BP3N	250 mL plastic HNO3
BP3S	250 mL plastic H2SO4

VG9A	40 mL clear ascorbic
DG9T	40 mL amber Na Thio
VG9U	40 mL clear vial unpres
VG9H	40 mL clear vial HCL
VG9M	40 mL clear vial MeOH
VG9D	40 mL clear vial DI

JGFU	4 oz amber jar unpres
JG9U	9 oz amber jar unpres
WGFU	4 oz clear jar unpres
WPFU	4 oz plastic jar unpres
SP5T	120 mL plastic Na Thiosulfate
ZPLC	ziploc bag
GN	

Pace Analytical® 1241 Bellevue Street, Green Bay, WI 54302	Document Name: **Sample Condition Upon Receipt (SCUR)**	Document Revised: 26Mar2020
	Document No.: **ENV-FRM-GBAY-0014-Rev.00**	Author: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40207643

40207643

Client Name: Terracon Consultants

Courier: ☒ CS Logistics ☐ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☐ Pace Other:

Tracking #: 1870.051270

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☒ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - n/a **Type of Ice:** (Wet) Blue Dry None ☒ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: ROI /Corr: ROI

Temp Blank Present: ☐ yes ☒ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Person examining contents:
Date: 5-13-20 /Initials: MLR
Labeled By Initials: BJL

Chain of Custody Present:	☒Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☐Yes ☒No ☐N/A	2. PO #; mail + invoice info: only Company
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3. no date/time 4m pg MLR 5-13-20 MLR 5-13-20
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☒No	6.
Rush Turn Around Time Requested:	☒Yes ☐No	7.
Sufficient Volume: For Analysis: ☒Yes ☐No MS/MSD: ☐Yes ☒No ☐N/A		8.
Correct Containers Used:	☒Yes ☐No	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☒N/A	
Containers Intact:	☒Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11. JGFU MLR 5-13-20 JGFU MLR 5-13-20
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: S	☐Yes ☒No ☐N/A	12. C38A time 1618 C39A time 1617, C60 time 1704, C5C WPFU ID "P-18 (20')" MLR 5-13-20
Trip Blank Present:	☐Yes ☐No ☒N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logir

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION
Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
58197251 LaCrosse Milling Company		P-9

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dusty Harvey Terracon Consultants Inc	3/11/2020	3/11/2020	Direct Push

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
1/4 of 1/4 of Section , T N, R
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Buffalo	6	Cochrane

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	60		0.0	Sandy Gravel, tan to brown, some silt, some clay, poorly sorted, dry	GP			<1						
			2.5	Silty Clay, dark brown, some gravel, some sand, crumbly, dry	CL-ML			<1						* Sample Submitted
2	60		5.0	Sandy Gravel, dark brown, crumbly, dry	GP			<1						
			7.5	Silty Clay, brown, crumbly, well sorted, dry	CL-ML			<1						
3	60		10.0	Sand, brown, medium grained, well sorted, loose, dry	SP			<1						
			12.5					<1						
4	60		15.0					<1						
			17.5	Sand, fine grained, tan, laminated, damp	SP			<1						
5	60		20.0	Sand, tan, medium grained, well sorted, damp				<1						
			22.5					<1						* Sample Submitted
6	60		25.0	...wet	SP			<1						
			27.5					<1						
			30.0	End of boring @ 30'										

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

Signature	Firm	
Kurtis Kunzinger	Terracon Consultants, Inc. 9856 South 57th Street / Franklin, Wisconsin 53132	Tel: 414-423-0255 Fax: 414-423-0566

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

State of Wisconsin
Department of Natural Resources

SOIL BORING LOG INFORMATION

Form 4400-122 Rev. 7-98

Route To: Watershed/Wastewater ☐ Waste Management ☐
Remediation/Redevelopment ☐ Other ☐

Facility/Project Name	License/Permit/Monitoring Number	Boring Number
58197251 LaCrosse Milling Company		P-12

Boring Drilled By: Name of crew chief (first, last) and Firm	Date Drilling Started	Date Drilling Completed	Drilling Method
Dusty Harvey Terracon Consultants Inc	5/11/2020	5/11/2020	Direct Push

WI Unique Well No.	DNR Well ID No.	Common Well Name	Final Static Water Level	Surface Elevation	Borehole Diameter
			Feet MSL	Feet MSL	2.0 inches

Local Grid Origin ☐ (estimated: ☐) or Boring Location ☐
State Plane N, E S/C/N
1/4 of 1/4 of Section , T N, R
Lat ° ' "
Long ° ' "
Local Grid Location ☐ N ☐ E Feet ☐ S Feet ☐ W

Facility ID	County	County Code	Civil Town/City/ or Village
	Buffalo	6	Cochrane

Sample Number and Type	Length Att. & Recovered (in)	Blow Counts	Depth In Feet	Soil/Rock Description And Geologic Origin For Each Major Unit	USCS	Graphic Log	Well Diagram	PID/FID	Soil Properties: Compressive Strength	Moisture Content	Liquid Limit	Plasticity Index	P 200	RQD/ Comments
1	60 36		0	Sand, light brown, medium to coarse grained, well graded, some gravel, dry	SP			<1						
			1	Sand, dark brown, medium to coarse grained, well graded, some gravel, dry	SP									
			2					<1						* Sample Submitted
			3	Silty Clay, brown, plastic, soft, moist										
			4		CL-ML			<1						* Sample Submitted
2	60 28		5											
			6	Sand, brown to tan, medium grained, poorly graded, damp				<1						
			7											
			8		SP			<1						
			9											
			10	End of Boring @ 10'										

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

Signature	Firm	
Kurt Kunziger	Terracon Consultants, Inc. 9856 South 57th Street / Franklin, Wisconsin 53132	Tel: 414-423-0255 Fax: 414-423-0566

This form is authorized by Chapters 281, 283, 289, 291, 292, 293, 295, and 299, Wis. Stats. Completion of this form is mandatory. Failure to file this form may result in forfeiture of between $10 and $25,000, or imprisonment for up to one year, depending on the program and conduct involved. Personally identifiable information on this form is not intended to be be used for any other purpose. NOTE: See instructions for more information, including where the completed form should be sent.

Safety Data Sheet

Material Name: Coal Slag

Click to View
Spanish Translation.

* * *Section 1 - IDENTIFICATION* * *

Material Name:
Coal Slag
Trade Name:
Black Magnum™, Black Diamond
Recommended Use:
Abrasives, Roofing Granules and other aggregate uses.
Restrictions on Use:
None known.

Manufacturer Information

US Minerals, Inc.
18635 West Creek Drive
Tinley Park, IL 60477

Phone: (708) 623-1935
Fax: 219-864-4675
Emergency # (800) 803-2803; (800) 424-9300 (ChemTrec)

* * *Section 2 - HAZARDS IDENTIFICATION* * *

OSHA (29 CFR 1910.1200) Classification of Coal Slag (CAS # 68476-96-0):

Hazard Symbol	Hazard Classification	Signal Word	Hazard Statement
	Single Target Organ Toxicity (STOT) Repeated Exposure Category 2 (Respiratory System)	Warning	May cause damage to lungs (pulmonary fibrosis) through prolonged or repeated exposure.

Precautionary Statements		
Prevention	**Response**	**Disposal**
Do not breathe dusts.	Get medical advice/attention if you feel unwell.	Dispose of contents in accordance with federal, state/provincial and local regulations

Hazards not Otherwise Classified: None Known.

Unknown Acute Toxicity Statement (Mixture): None Known.

* * *Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS* * *

CAS Number	Components of Coal Slag	Percent %
60676-86-0	Amorphous Fused Silicon Dioxide	40-50
1344-28-1	Aluminum oxide	18-22
1309-37-1	Iron oxide	5-12
1305-78-8	Calcium Oxide	15-22
12136-45-7	Potassium Oxide	0-1
13463-67-7	Titanium Oxide	1-2
1309-48-4	Magnesium Oxide	3-5
1313-59-3	Sodium Oxide	0-1
14808-60-7	Crystalline Silica as Quartz	0-0.6
14464-46-1	Crystalline Silica as Cristobalite	<0.01
7440-41-7	Beryllium	0-0.00005

* * *Section 4 - FIRST AID MEASURES* * *

Description of Necessary Measures

Inhalation

Remove to fresh air. Get medical attention if you feel unwell.

Skin

Product is not a skin sensitizer. Wash skin thoroughly with water and soap. Remove contaminated clothing. Get medical advice/attention if symptoms occur.

Eyes:

Immediately flush eyes with water for at least several minutes. Remove contact lenses, if present and easy to do. Do not rub eyes. Continue rinsing. If irritation persists, get medical attention.

Ingestion

If a large amount is swallowed, rinse out mouth. Give water to drink. Do not induce vomiting. Get medical attention if symptoms occur.

Most Important Symptoms/Effects, Acute and Delayed (Chronic)

Acute Effects

Inhalation: Excessive exposure to high concentrations of dust may cause irritation to the mucous membranes of the upper respiratory tract.
Eye: Excessive exposure to high concentrations of dust may cause irritation to the eyes.
Skin: Skin contact with dusts may cause irritation or dermatitis.
Ingestion: Ingestion of dust may cause nausea and/or vomiting.

Chronic Effects

Prolonged and repeated inhalation exposure to excessive concentrations of dusts may cause pulmonary fibrosis.

Immediate Medical Attention and Special Treatment: Treat symptomatically.

* * *Section 5 - FIRE FIGHTING MEASURES* * *

Suitable (and Unsuitable) Extinguishing Media

Use extinguishing agents appropriate for surrounding fire.

Specific Hazards Arising from the Chemical

Not applicable for solid product.

Hazardous Combustion Products

None known

Special Protective Equipment and Precautions for Firefighters

Wear full protective firefighting gear including self-contained breathing apparatus (SCBA) for protection against possible exposure to fumes and/or smoke from the fire. Do not release runoff from fire control methods to sewers or waterways.

* * *Section 6 - ACCIDENTAL RELEASE MEASURES* * *

Personal Precautions, Protective Equipment and Emergency Procedures

For spills involving finely divided particles, clean-up personnel should be protected against contact with eyes and skin. If material is in a dry state, avoid inhalation of dust. Fine, dry material should be removed by vacuuming or wet weeping methods to prevent spreading of dust. Avoid use compressed air to air sweep surfaces. Do not release into sewers or waterways.

Methods and Materials for Containment and Cleaning Up

Collect spilled material in appropriate, labeled container for recovery or disposal in accordance with federal, state/provincial, and local regulations.

* * *Section 7 - HANDLING AND STORAGE* * *

Precautions for Safe Handling

Do not breathe dust. Wear protective gloves / protective clothing / eye protection, as applicable. Emergency safety shower and eye wash stations should be present.

Conditions for Safe Storage, including any Incompatibilities

Store away from incompatibles such as strong acids and bases.

* * *Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION* * *

Component Exposure Limits

Iron oxide (CAS # 1309-37-1)

ACGIH: 5 mg/m^3 TWA (respirable fraction)
NIOSH: 5 mg/m^3 TWA (as Fe, dust and fume)
OSHA: 10 mg/m^3 TWA (fume); 15 mg/m^3 TWA (total dust); 5 mg/m^3 TWA (respirable fraction)
Mexico: 5 mg/m^3 TWA LMPE-PPT
10 mg/m^3 STEL [LMPE-CT] (as Fe)

Amorphous Fused Silicon Dioxide (CAS # 60676-86-0)

NIOSH: 6 mg/m^3 TWA
OSHA: 80 mg/m^3 / % SiO_2 TWA

Calcium oxide (CAS # 1305-78-8)

ACGIH: 2 mg/m^3 TWA
NIOSH: 2 mg/m^3 TWA
25 mg/m3 IDLH
OSHA: 5 mg/m^3 TWA
Mexico: 2 mg/m^3 TWA LMPE-PPT

Aluminum oxide (CAS # 1344-28-1)

OSHA: 15 mg/m^3 TWA (total dust); 5 mg/m^3 TWA (respirable fraction)
Mexico: 10 mg/m^3 TWA LMPE-PPT

Appropriate Engineering Controls

Local exhaust ventilation should be used to control the emissions of air contaminants below recommended exposure limits. General dilution ventilation may assist with the reduction of air contaminant concentrations. Emergency eye wash stations and deluge safety showers should be available in the work area.

Individual Protection Measures:

Respiratory Protection:

Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, use only a NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen. Concentration in air of the various contaminants determines the extent of respiratory protection needed.

Half-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 10 times the exposure limit. Full-face, negative-pressure, air-purifying respirator equipped with P100 filter is acceptable for concentrations up to 50 times the exposure limit. Protection by air-purifying negative-pressure and powered air respirators is limited. Use a positive-pressure-demand, full-face, supplied air respirator or self-contained breathing apparatus (SCBA) for concentrations above 50 times the exposure limit. If exposure is above the IDLH (immediately dangerous to life or health) for any of the constituents, or there is a possibility of an uncontrolled release or exposure levels are unknown, then use a positive-demand, full-face, supplied air respirator with escape bottle or SCBA.

Warning! Air-purifying respirators both negative-pressure, and powered-air do not protect workers in oxygen-deficient atmospheres.

Eyes:

Wear eye protection/face protection. Chemical goggles, face shields or glasses should be worn to prevent eye contact. Contact lenses should not be worn where particulate exposure to this material is likely.

Skin:

Persons handling this product should wear appropriate clothing to prevent skin contact. Take off contaminated clothing and wash before reuse. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves.

* * *Section 9 - PHYSICAL AND CHEMICAL PROPERTIES* * *

Physical State:	Coarse Solid	**Appearance:**	Black, granular shiny solid
Color:	Black	**Physical Form:**	Solid
Odor:	No characteristic odor	**Odor Threshold:**	Not available
pH:	Not available	**Melting Point:**	Not available
Boiling Point:	Not applicable	**Flash Point:**	Not applicable
Decomposition:	Not available	**Evaporation Rate:**	Not available
Vapor Density (air = 1):	Not applicable	**Upper/Lower Flammability or Explosive Limits**	Not applicable
Specific Gravity (water = 1):	Not available	**Vapor Pressure:**	Not applicable
Log KOW:	Not available	**Density:**	Not available
Viscosity	Not available	**Water Solubility:**	Marginal

* * *Section 10 - STABILITY AND REACTIVITY* * *

Reactivity

No reactivity hazard is expected.

Chemical Stability

Coal slag is stable at normal temperature and pressure.

Possibility of Hazardous Reactions

None Known.

Conditions to Avoid

None known.

Incompatible Materials

Strong acids or bases

Hazardous Decomposition Products

None known.

* * * Section 11 - TOXICOLOGICAL INFORMATION * * *

Acute Toxicity Values:

Coal Slag	Oral LD50 Rat	>2,000 mg/kg
	Dermal LD50 Rabbit	>2,000 mg/kg
Iron Oxide	Oral LD50 Rat	>10,000 mg/kg
Amorphous Silicon Dioxide	Oral LD50 Rat	>5,000 mg/kg
	Dermal LD50 Rabbit	>2,000 mg/kg
Aluminum Oxide	Oral LD50 Rat	>5,000 mg/kg
Calcium Oxide	Oral LD50 Rat	>2,000 mg/kg

No **Skin (Dermal) Irritation** data has been determined for Coal Slag as a mixture. The following is available for components:

Calcium Oxide and Iron Oxide: Moderately irritating.

No **Eye Irritation** data has been determined for Coal Slag as a mixture or its individual components.

No **Skin (Dermal)/Respiratory Sensitization** data has been determined for Coal Slag as a mixture or its individual components.

No **Aspiration Hazard** data has been determined for Coal Slag as a mixture or its individual components.

No **Germ Cell Mutagenicity** data has been determined for Coal Slag as a mixture or its individual components.

Carcinogenicity: Coal Slag **is not** listed as a carcinogen by IARC, NTP, NIOSH, and OSHA. The following information was identified for the components:

Iron Oxide: ACGIH A4 – Not Classifiable as a Human Carcinogen.
Beryllium: NTP and IARC – Known to be a Human Carcinogen.
Crystalline Silica: NTP and IARC – Known to be a Human Carcinogen.

No **Toxic Reproductive** data has been determined for Coal Slag as a mixture or its individual components.

No **Specific Target Organ Toxicity (STOT) following Single Exposure** data has been determined for Coal Slag as a mixture. The following information was identified for the components:

Calcium Oxide: Can cause respiratory tract irritation, skin and eye irritation.

Specific Target Organ Toxicity (STOT) following Prolonged or Repeated Exposure data has been determined for Coal Slag as a mixture and for its individual components. The following information was identified for the components:

Coal Slag: Repeated or prolonged inhalation exposure to excessive concentrations of coal slag can cause lung fibrosis.
Iron Oxide: Repeated or prolonged inhalation exposure of excessive concentrations of iron oxide dust can cause a benign lung disease, called Siderosis.

* * *Section 12 - ECOLOGICAL INFORMATION* * *

Ecotoxicity (aquatic and terrestrial)

Coal slag is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment

Persistence and Degradability

No data available for coal slag.

Bioaccumulative Potential

No data available for coal slag.

Mobility

No data available for coal slag.

* * *Section 13 - DISPOSAL CONSIDERATIONS* * *

Disposal Methods

Dispose in accordance with all applicable regulations. Observe safe handling procedures.

* * *Section 14 - TRANSPORT INFORMATION* * *

Coal Slag does not have a Transport Dangerous Goods (TDG) classification.

U.S. Department of Transportation, DOT (49 CFR 172.101):

Shipping Name: Coal Slag is Not Regulated.

International Maritime Dangerous Goods (IMDG):

Shipping Name: Coal Slag is Not Regulated.

* * *Section 15 - REGULATORY INFORMATION* * *

Component Analysis

U.S. Federal Regulations

Coal Slag contains one or more of the following chemicals required to be identified under SARA Section 302 (40 CFR 355 Appendix A), SARA Section 311/312 (40 CFR 370.21), SARA Section 313 (40 CFR 372.65), CERCLA (40 CFR 302.4), and TSCA 12(b).

Aluminum oxide (1344-28-1)

SARA 313: 1.0 % de minimis concentration (fibrous forms)

SARA 311/312 Hazardous Categories

Acute Health: Yes **Chronic Health:** Yes **Fire:** No **Pressure:** No **Reactive:** No

U.S. State Regulations

The following components appear on one or more of the following state hazardous substances lists:

Component	CAS	CA	MA	MN	NJ	PA
Iron oxide	1309-37-1	Yes	Yes	Yes	Yes	Yes
Amorphous Silicon Dioxide	60676-86-0	Yes	Yes	Yes	Yes	Yes
Calcium oxide	1305-78-8	Yes	Yes	Yes	Yes	Yes
Aluminum oxide	1344-28-1	Yes	Yes	Yes	Yes	Yes
Titanium oxide	13463-67-7	Yes	Yes	No	Yes	Yes
Potassium oxide	12136-45-7	Yes	Yes	No	Yes	Yes
Magnesium oxide	1309-48-4	Yes	Yes	No	Yes	Yes
Sodium oxide	1313-59-3	Yes	Yes	Yes	Yes	Yes

Component Analysis - Inventory

Component	CAS	US	CA	EU	AU	PH	JP	KR	CN	NZ
Iron oxide	1309-37-1	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes
Amorphous Silicon Dioxide	60676-86-0	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes
Calcium oxide	1305-78-8	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes
Aluminum oxide	1344-28-1	Yes	DSL	EIN	Yes	Yes	Yes	Yes	Yes	Yes
Titanium oxide	13463-67-7	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes
Potassium oxide	12136-45-7	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes
Magnesium oxide	1309-48-4	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes
Sodium oxide	1313-59-3	Yes	DSL	EIN	Yes	Yes	No	Yes	Yes	Yes

* * *Section 16 - OTHER INFORMATION* * *

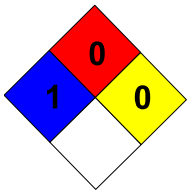
Web Sites with information about health effects from occupational exposure to the chemical substances contained in this product and associated engineering controls and personal protective equipment:

OSHA Website: http://www.osha.gov
NIOSH Website: http://www.cdc.gov.niosh
ACGIH Website: http://www.acgih.org
ATSDR Website: http://www.astdr.cdc.gov/toxprofiles

NFPA Ratings:

Health: 1 **Fire:** 0 **Reactivity:** 0

Hazard Scale: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Severe



Key / Legend

ACGIH - American Conference of Governmental Industrial Hygienists; ADR - European Road Transport; AU - Australia; BOD - Biochemical Oxygen Demand; C - Celsius; CA - Canada; CAS - Chemical Abstracts Service; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CN - China; CPR - Controlled Products Regulations; DFG - Deutsche Forschungsgemeinschaft; DOT - Department of Transportation; DSL - Domestic Substances List; EEC - European Economic Community; EINECS - European Inventory of Existing Commercial Chemical Substances; EPA - Environmental Protection Agency; EU - European Union; F - Fahrenheit; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; ICAO - International Civil Aviation Organization; IDL - Ingredient Disclosure List; IDLH - Immediately Dangerous to Life and Health; IMDG - International Maritime Dangerous Goods; JP - Japan; Kow - Octanol/water partition coefficient; KR - Korea; LEL - Lower Explosive Limit; LOLI - List Of LIsts™ - ChemADVISOR's Regulatory Database; MAK - Maximum Concentration Value in the Workplace; MEL - Maximum Exposure Limits; NFPA - National Fire Protection Agency; NIOSH - National Institute for Occupational Safety and Health; NJTSR - New Jersey Trade Secret Registry; NTP - National Toxicology Program; NZ - New Zealand; OSHA - Occupational Safety and Health Administration; PH - Philippines; RCRA - Resource Conservation and Recovery Act; RID - European Rail Transport; RTECS - Registry of Toxic Effects of Chemical Substances®; SARA - Superfund Amendments and Reauthorization Act; STEL - Short-term Exposure Limit; TDG - Transportation of Dangerous Goods; TSCA - Toxic Substances Control Act; TWA - Time Weighted Average; UEL - Upper Explosive Limit; US - United States

Other Information

Disclaimer: Supplier gives no warranty whatsoever, including the warranties of merchantability or of fitness for a particular purpose. Any product purchased is sold on the assumption the purchaser shall determine the quality and suitability of the product. Supplier expressly disclaims any and all liability for incidental, consequential or any other damages arising out of the use or misuse of this product. No information provided shall be deemed to be a recommendation to use any product in conflict with any existing patent rights.

User's Responsibility

The OSHA Hazard Communication Standard 29 CFR 1910.1200 requires that this Safety Data Sheet is available to your employees who handle or may be exposed to this product. Educate and train your employees regarding applicable precautions. Instruct your employees to handle this product properly.

La Crosse County Landfill
Application for Special Waste Disposal

PART A: WASTE GENERATOR INFORMATION

1. Generator Name Midwest Metal Products, Inc
2. Generator Mailing Address 1175 E. Broadway St Winona MN 55987
3. Facility Address (site of waste generation) 1175 E. Broadway St
4. Generator City Winona
5. Generator State/Zip MN / 55987
6. General Contact Person Joe Plunger
   Phone # and email 507-452-7231 joe@midwestmetalproducts.com
7. Technical Contact Person Joe Plunger
   Phone # and email 507-452-7231 joe@midwestmetalproducts.com

---

1. Name of Waste Foundry Sand with small amount of slag and dust
2. Process Generating Waste Molding and Pouring of steel and iron castings.
3. Waste Color Gray to Black
4. Waste Odor none None _____ Mild _____ Strong
5. Physical State _____ None _____ Liquid _____ Semi-Solid Other Solid
6. Free Liquids _____ Yes _____ % _____ No
7. pH____ <2____ 2-4.0____ 4.1-7.0____ 7.1-10.0____ 10.1-12.5____ >12.5____ N/A X
8. Flash Point (cc) none None _____ <140F _____ 140-199F _____ >200
9. a. Waste Composition:

	Range
Sand	94 to 97 %
Some dust - fines from collection	2.5 to 4 %
Some slag and refractory from metal handling equipment	1 to 2 %
	_____ to _____ %
	_____ to _____ %

b. Does Waste Contain

	Yes	No	Do Not Know
PCBS	____	X	
Cyanide	____	X	
Sulfide	____	X	
Phenol	____	X	below limit of detection
Chlorinated Solvents	____	X	
Aromatic Solvents	____	X	

10. Analytical Laboratory Davy Laboratories , Lacrosse WI
11. Date of Analysis 2-6-24

PART B: CAR WASH CATCH BASIS SLUDGE INFORMATION

Industrial discharge n/a Yes _____ No
Tank interiors n/a Yes _____ No
Vehicle types n/a

PART C: TRANSPORTATION INFORMATION

1. Method of delivery _____ Drum _____ Paper Truck X Dump Truck
_____ Roll-off _____ Other _____

2. Waste Quantity/Units 65 tons

☐ One-time Disposal
☑ On-going Disposal

Frequency Per Month Average

3. Hauler Name and Address Pozanc Trucking
157 Mankato Ave
Winona MN 55987

4. Bill to Name and Address Midwest Metal Products, Inc
1175 E. Broadway St
Winona MN 55987

To be Completed by La Crosse County Solid Waste

Waste Acceptance/Rejection		
1) Does waste meet requirements of the current Plan of Operations?	☒ Yes	☐ No
2) Is waste acceptable upon approval by WDNR?	☐ Yes	☐ No
3) Plan of Operations Approval Required? (Attach copy if yes)	☐ Yes	☐ No
4) Waste accepted for disposal?	☒ Yes	☐ No
5) Signature/Title Bryce Gerke / Department Technician		

PART D: GENERATOR CERTIFICATION

By signing this application, the generator certifies:

1. This waste is not "Hazardous Waste" as defined by USEPA and/or state regulations.

2. This waste ☐ does ☑ does not contain regulated radioactive materials and ☐ does ☑ does not contain regulated concentrations of PCBs (polychlorinated biphenyls). If "does" is checked, specify level here _____.

3. This waste does not contain regulated infectious waste as defined by NR526.05 Wisconsin Administrative Code.

4. The waste does not contain regulated concentrations of the following pesticides and herbicides: Chlordane, Endrin, Heptachlor (and its epoxide), Lindane, Methoxychlor, Toxaphene, 2, 4, 5-TP (Silvex).

5. The waste does not contain halogenated compounds such as: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, ortho-dichlorobenzene, dichlorodifluoromethane, 1,1,2-trichloro-1, 2,2-trifluoroethane, trichlorofluoromethane, 1,1-dichloroethylene, and 1,2-dichlorethylene at greater than 1% (10,000 ppm) total solvent concentration. This listing includes any combination of the above named halogenated compounds where the total concentration or the sum of the concentration of the individual compounds exceed 1% or 10,000 ppm on a weights to weight basis.

6. This sheet and the attachments contain true and accurate description of the waste material. All relevant information regarding known or suspected hazards in the possession of the Generator has been disclosed.

7. The analytical data presented herein or attached hereto were derived from testing a representative sample taken in accordance with 40 CFR 261.20 © or equivalent rules.

8. If any changes occur in the character of the waste, the Generator shall notify the County prior to providing the waste to the County.

9. Signature Joseph Plunger

10. Title President

11. Name (Type or print) Joe Plunger

12. Date 2-8-24

DAVY LABORATORIES
A Division of Davy Engineering Co., Inc.
115 6th Street South
La Crosse, WI 54601
(608) 782-3130
www.davyinc.com

Division of Davy Engineering Co.

LABORATORY ANALYSIS REPORT

Midwest Metal Products, Inc
Attn: Joe Plunger
1175 E. Broadway
Winona, MN 55987

Date: February 06, 2024
Client No: 10876

Sample No: 24A0382-01
Sample Site: Plant Refuse Sand

Sample Collected: 16-Jan-24 08:10

Sample Received: 16-Jan-24 15:38

Parameter	Protocal 1	Result	Units	LOD	LOQ/RL	Dilution	Prepared	Analyzed	Method	Qualifier
Subcontracted										
Mercury, Total	< 0.2	<0.00200 ✓	mg/L	0.002	0.002	1	31-Jan-24 00:00	01-Feb-24 00:00	EPA 1311/EPA 7470A	A-01
Arsenic, Total	< 5	<0.100 ✓	mg/L	0.0300	0.1000	1	24-Jan-24 00:00	30-Jan-24 00:00	EPA 6010D 2014	A-01
Barium, Total	< 100	<0.200 ✓	mg/L	0.0400	0.2000	1	24-Jan-24 00:00	30-Jan-24 00:00	EPA 6010D 2014	A-01
Cadmium, Total	< 5	<0.0200 ✓	mg/L	0.0039	0.0200	1	24-Jan-24 00:00	30-Jan-24 00:00	EPA 6010D 2014	A-01
Chromium, Total	< 5	0.0282 ✓	mg/L	0.006	0.0200	1	24-Jan-24 00:00	30-Jan-24 00:00	EPA 6010D 2014	A-01
Lead, Total	< 5	<0.100 ✓	mg/L	0.0260	0.1000	1	24-Jan-24 00:00	30-Jan-24 00:00	EPA 6010D 2014	A-01
Selenium, Total	< 1	<0.100 ✓	mg/L	0.0290	0.1000	1	24-Jan-24 00:00	30-Jan-24 00:00	EPA 6010D 2014	A-01
Silver, Total	< 5	<0.0500 ✓	mg/L	0.0140	0.0500	1	24-Jan-24 00:00	30-Jan-24 00:00	EPA 6010D 2014	A-01

All results under Protocal levels.

Submitted by:
Davy Laboratories

Jennifer M. Buchholz
Jennifer M. Buchholz, Laboratory Director

The laboratory analyses reported were determined in accordance with methods from approved authoritative sources. Approved authoritative sources are defined and listed within the respective state certification codes. The results are representative of the samples only; conditions can be expected to vary at different times and under different sampling conditions. This report may not be reproduced, except in full, without the written approval of the laboratory.
WI Certification 632021390 and WI DATCP 105-216, MN NELAC Certification 055-999-151, IA Certification 304. Revision #3 - 7/29/2019

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LABORATORY ANALYSIS REPORT

Midwest Metal Products, Inc
Attn: Joe Plunger
1175 E. Broadway
Winona, MN 55987

Date: February 06, 2024
Client No: 10876

Notes and Definitions

Z-01d	<0.200
Z-01c	<0.100
Z-01b	<0.0500
Z-01a	<0.0200
Z-01	<0.00200
A-01	Subcontract Lab # 019-999-319
LOD	Limit of Detection, adjusted for the dilution factor
LOQ/RL	Limit of Quantitation/Reporting Limit, adjusted for the dilution factor

Total metals are equivalent to total recoverable metals.

Cooler Information

Temperature °C	
Received on Ice	No
Required COC Information completed	Yes
Sample labels match COC	Yes
All samples received in the appropriate Containers	Yes
All samples received with sufficient volume	Yes
All samples received with sufficient holding time	Yes
All sample bottles received with H2SO4 were pH <2	No
All sample bottles received with HNO3 were pH <2	No
All sample bottles received with HCl were pH <2	No
All sample bottles received with NaOH were pH >12	No
All sample bottles for cyanide confirmed Sulfide absent	No
All sample bottles for cyanide confirmed Residual Cl absent	No

Case Narrative

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DAVY LABORATORIES
Division of Davy Engineering Co.

LABORATORY ANALYSIS REPORT

Midwest Metal Products, Inc
Attn: Joe Plunger
1175 E. Broadway
Winona, MN 55987

Date: February 06, 2024
Client No: 10876

Preservation of VOC samples checked by the analyst. Preservation of FOG samples checked by the analyst. Residual Chlorine absent checked by the analyst unless noted above.	

MIDWEST METAL PRODUCTS, INC.
1175 EAST BROADWAY, P.O. BOX 64
WINONA, MN 55987
PHONE (507) 452- 7231
FAX (507) 452-7318
joe@midwestmetalproducts.com
www.midwestmetalproducts.com

Midwest Metal Products Waste Characterization

1-18-24

P200 Particle Size Sieve Analysis:

A 6.3 lb grab sample was taken from the waste stream.

After cutting the sample a .54 lb sample was screened through a #10 and a #200 screen.

Results:

.42 lb stayed on the #10 screen	77.77%
.12 lb stayed on the # 200 screen	22.22%
Approximately .001 lb passed to pan	0.18%

Joe

Joe Plunger
Midwest Metal Products, Inc

La Crosse County Landfill
Application for Special Waste Disposal

PART A: WASTE GENERATOR INFORMATION

1. Generator Name Omaha Track
2. Generator Mailing Address 12930 I street, omaha, NE 68137
3. Facility Address (site of waste generation) 505 Bainbridge st
4. Generator City La Crosse
5. Generator State/Zip WI 54601
6. General Contact Person Lisa Roberts
   Phone # and email 402-677-7913 lisa@omahatrack.com
7. Technical Contact Person Nate Kelemen
   Phone # and email 608 792-2274 lacrosse@omahatrack.com

---

1. Name of Waste Tailings
2. Process Generating Waste Railroad screened material
3. Waste Color Brown / black
4. Waste Odor ____None ____X____Mild ____Strong
5. Physical State ____None ____Liquid ____Semi-Solid Other____
6. Free Liquids N/A Yes ____% ____X____No
7. pH N/A <2____ 2-4.0____ 4.1-7.0____ 7.1-10.0____ 10.1-12.5____ >12.5____ N/A____
8. Flash Point (cc) ____None ____<140F ____140-199F ____>200
9. a. Waste Composition:

	Range
Soil	____to____%
Rock	____to____%
Sand	____to____%
	____to____%
	____to____%

b. Does Waste Contain

	Yes	No	Do Not Know
PCBS	____	____	N/A
Cyanide	____	____	____
Sulfide	____	____	____
Phenol	____	____	____
Chlorinated Solvents	____	____	____
Aromatic Solvents	____	____	____

See per ANALYSIS attached

10. Analytical Laboratory Pace Analytical
11. Date of Analysis 6/8/22

PART B: CAR WASH CATCH BASIS SLUDGE INFORMATION

Industrial discharge N/A Yes _____ No
Tank interiors N/A Yes _____ No
Vehicle types N/A

PART C: TRANSPORTATION INFORMATION

1. Method of delivery _____ Drum _____ Paper Truck X Dump Truck
   _____ Roll-off _____ Other _____

2. Waste Quantity/Units _____

   ☐ One-time Disposal
   ☒ On-going Disposal

   Frequency _____

3. Hauler Name and Address Omaha Trash
   12930 Z Street
   Omaha, NE 68137

4. Bill to Name and Address SAME

To be Completed by La Crosse County Solid Waste

Waste Acceptance/Rejection	
1) Does waste meet requirements of the current Plan of Operations?	☐ Yes ☐ No
2) Is waste acceptable upon approval by WDNR?	☐ Yes ☐ No
3) Plan of Operations Approval Required? (Attach copy if yes)	☐ Yes ☐ No
4) Waste accepted for disposal?	☐ Yes ☐ No
5) Signature/Title	_____ / _____

PART D: GENERATOR CERTIFICATION

By signing this application, the generator certifies:

1. This waste is not "Hazardous Waste" as defined by USEPA and/or state regulations.
2. This waste [ ] does [X] does not contain regulated radioactive materials and [ ] does [X] does not contain regulated concentrations of PCBs (polychlorinated biphenyls). If "does" is checked, specify level here _____.
3. This waste does not contain regulated infectious waste as defined by NR526.05 Wisconsin Administrative Code.
4. The waste does not contain regulated concentrations of the following pesticides and herbicides: Chlordane, Endrin, Heptachlor (and its epoxide), Lindane, Methoxychlor, Toxaphene, 2, 4, 5-TP (Silvex).
5. The waste does not contain halogenated compounds such as: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, ortho-dichlorobenzene, dichlorodifluoromethane, 1,1,2-trichloro-1, 2,2-trifluoroethane, trichlorofluoromethane, 1,1-dichloroethylene, and 1,2-dichlorethylene at greater than 1% (10,000 ppm) total solvent concentration. This listing includes any combination of the above named halogenated compounds where the total concentration or the sum of the concentration of the individual compounds exceed 1% or 10,000 ppm on a weights to weight basis.
6. This sheet and the attachments contain true and accurate description of the waste material. All relevant information regarding known or suspected hazards in the possession of the Generator has been disclosed.
7. The analytical data presented herein or attached hereto were derived from testing a representative sample taken in accordance with 40 CFR 261.20 © or equivalent rules.
8. If any changes occur in the character of the waste, the Generator shall notify the County prior to providing the waste to the County.
9. Signature _____
10. Title Manager
11. Name (Type or print) Nate Kelzer
12. Date 7/29/22

GRAIN SIZE DISTRIBUTION TEST DATA

6/9/2022

Client: WALK IN PAID
Project: CAR DEBRIS
Project Number: 40245952
Location: 1-YELLOW, 2-RED, 1-BAG, 2-BAG
Sample Number: 40245952-001
Material Description: manual description: moist, silt, many woodchips, metal, gasoline odor
geosystems description: silty sand with gravel
Sample Date: 6/2/22
Date Received: 6/3/22 **PL:** NP **LL:** NV **PI:** NP
USCS Classification: SM **AASHTO Classification:** A-1-b
Grain Size Test Method: D7928 mod - With Hydrometer
Testing Remarks: Batch 46533, HBN 417438; test completed by GRR, MMJ, MLR, and GEE; coarse sieved 6/6/22, fine sieved 6/8/22; ethanol (#281100) added to sample to dissipate foam during hydrometer test; lab sieved coarse portion both with and without its woodchips due to high amount of woodchips that remained after washing step (woodchips typically rinse away during washing). This report includes woodchips in the coarse material.
Tested By: Madeline Rohde **Test Date:** 6/6/22
Checked By: Brandy Mahoney **Title:** Scientist

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
585.60	349.09	3"	0.00	0.00	100.0
		2"	0.00	0.00	100.0
		1.5"	0.00	0.00	100.0
		1"	0.00	0.00	100.0
		0.75"	0.00	0.00	100.0
		0.375"	5.82	0.00	97.5
		#4	31.17	0.00	84.4
		#10	37.20	0.00	68.6
74.52	0.00	#20	12.11	0.00	57.5
		#40	19.06	0.00	39.9
		#60	12.81	0.00	28.1
		#100	8.29	0.00	20.5
		#140	3.23	0.00	17.5
		#200	1.87	0.00	15.8

Hydrometer Test Data

Hydrometer test uses material passing #10

Percent passing #10 based upon complete sample = 68.6

Weight of hydrometer sample =74.52

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -5

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation: L = 16.294964 - 0.164 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	21.0	19.0	14.2	0.0135	19.0	13.2	0.0489	13.1
2.00	21.0	14.0	9.2	0.0135	14.0	14.0	0.0357	8.5
4.00	21.0	13.0	8.2	0.0135	13.0	14.2	0.0254	7.5
15.00	21.0	11.0	6.2	0.0135	11.0	14.5	0.0132	5.7
30.00	21.0	11.0	6.2	0.0135	11.0	14.5	0.0094	5.7
60.00	21.0	10.0	5.2	0.0135	10.0	14.7	0.0067	4.8
240.00	21.5	9.0	4.3	0.0134	9.0	14.8	0.0033	4.0
1440.00	21.0	8.0	3.2	0.0135	8.0	15.0	0.0014	2.9

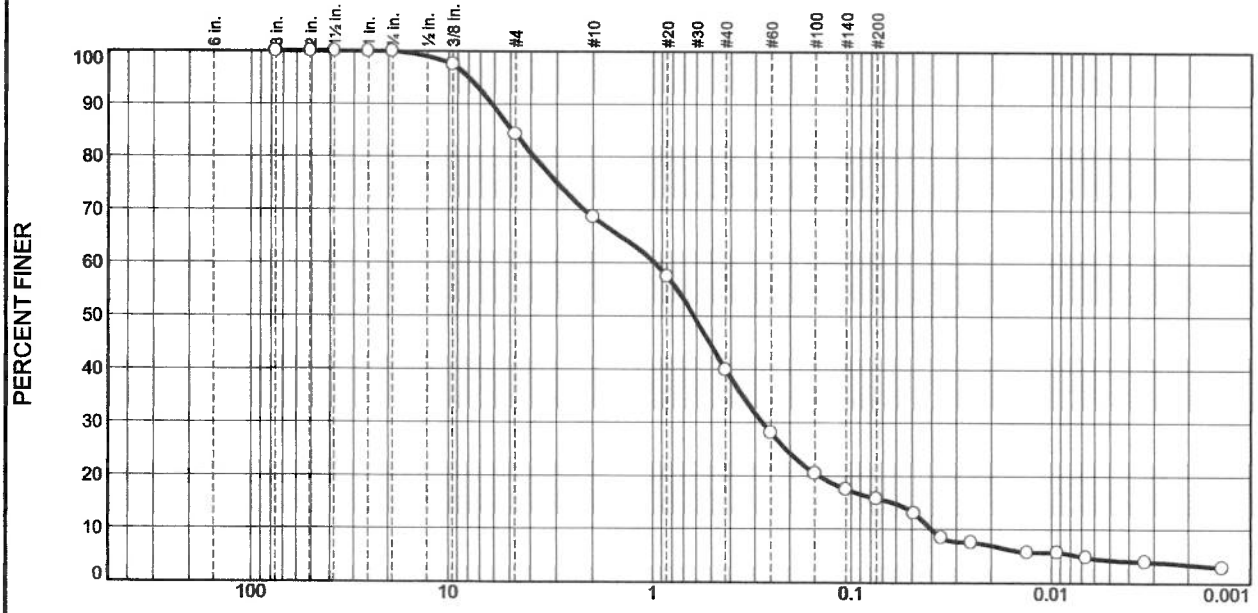
Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	15.6	15.6	15.8	28.7	24.1	68.6	11.6	4.2	15.8

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0072	0.0402	0.0615	0.1432	0.2755	0.4262	0.6187	0.9805	3.8687	4.8908	6.1496	7.9689

Fineness Modulus	C_u	C_c
2.83	24.41	1.93

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	15.6	15.8	28.7	24.1	11.6	4.2

TEST RESULTS (D7928 mod - With Hydrometer)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.75"	100.0		
0.375"	97.5		
#4	84.4		
#10	68.6		
#20	57.5		
#40	39.9		
#60	28.1		
#100	20.5		
#140	17.5		
#200	15.8		
0.0489 mm.	13.1		
0.0357 mm.	8.5		
0.0254 mm.	7.5		
0.0132 mm.	5.7		
0.0094 mm.	5.7		
0.0067 mm.	4.8		
0.0033 mm.	4.0		
0.0014 mm.	2.9		

* (no specification provided)

Material Description

manual description: moist, silt, many woodchips, metal, gasoline odor

geosystems description: silty sand with gravel

Atterberg Limits (ASTM D 4318)

PL= NP LL= NV PI= NP

Classification

USCS (D 2487)= SM AASHTO (M 145)= A-1-b

Coefficients

D_{90}= 6.1496 D_{85}= 4.8908 D_{60}= 0.9805
D_{50}= 0.6187 D_{30}= 0.2755 D_{15}= 0.0615
D_{10}= 0.0402 C_u= 24.41 C_c= 1.93

Remarks

Batch 46533, HBN 417438; test completed by GRR, MMJ, MLR, and GEE; coarse sieved 6/6/22, fine sieved 6/8/22; ethanol (#281100) added to sample to dissipate foam during hydrometer

Date Received: 6/3/22 **Date Tested:** 6/6/22

Tested By: Madeline Rohde

Checked By: Brandy Mahoney

Title: Scientist

Location: 1-YELLOW, 2-RED, 1-BAG, 2-BAG
Sample Number: 40245952-001

Date Sampled: 6/2/22

Pace Analytical Services, Inc.

Green Bay, WI

Client: WALK IN PAID
Project: CAR DEBRIS

Project No: 40245952

Figure

GRAIN SIZE DISTRIBUTION TEST DATA

6/9/2022

Client: WALK IN PAID
Project: CAR DEBRIS
Project Number: 40245952
Location: 1-YELLOW, 2-RED, 1-BAG, 2-BAG (w/o coarse woodchips)
Sample Number: 40245952-001 no wcs
Material Description: manual description: moist, silt, many woodchips (coarse woodchips removed for coarse sieve), metal, gasoline odor
geosystems description: silty sand
Sample Date: 6/2/22
Date Received: 6/3/22 **PL:** NP **LL:** NV **PI:** NP
USCS Classification: SM **AASHTO Classification:** A-2-4(0)
Grain Size Test Method: D7928 mod - With Hydrometer
Testing Remarks: Batch 46533, HBN 417438; test completed by GRR, MMJ, MLR, and GEE; coarse sieved 6/6/22, fine sieved 6/8/22; ethanol (#281100) added to sample to dissipate foam during hydrometer test; lab sieved coarse portion both with and without its woodchips due to high amount of woodchips that remained after washing step (woodchips typically rinse away during washing). This report is also of 40245952-001 and does not include woodchips in the coarse material.
Tested By: Madeline Rohde **Test Date:** 6/6/22
Checked By: Brandy Mahoney **Title:** Scientist

Sieve Test Data

Dry Sample and Tare (grams)	Tare (grams)	Sieve Opening Size	Weight Retained (grams)	Sieve Weight (grams)	Percent Finer
585.60	349.09	3"	0.00	0.00	100.0
		2"	0.00	0.00	100.0
		1.5"	0.00	0.00	100.0
		1"	0.00	0.00	100.0
		0.75"	0.00	0.00	100.0
		0.375"	5.70	0.00	97.6
		#4	9.03	0.00	93.8
		#10	8.79	0.00	90.1
74.52	0.00	#20	12.11	0.00	75.4
		#40	19.06	0.00	52.4
		#60	12.81	0.00	36.9
		#100	8.29	0.00	26.9
		#140	3.23	0.00	23.0
		#200	1.87	0.00	20.7

Hydrometer Test Data

Hydrometer test uses material passing #10

Percent passing #10 based upon complete sample = 90.1

Weight of hydrometer sample =74.52

Automatic temperature correction

Composite correction (fluid density and meniscus height) at 20 deg. C = -5

Meniscus correction only = 0.0

Specific gravity of solids = 2.65

Hydrometer type = 152H

Hydrometer effective depth equation: L = 16.294964 - 0.164 **x Rm**

Elapsed Time (min.)	Temp. (deg. C.)	Actual Reading	Corrected Reading	K	Rm	Eff. Depth	Diameter (mm.)	Percent Finer
1.00	21.0	19.0	14.2	0.0135	19.0	13.2	0.0489	17.1
2.00	21.0	14.0	9.2	0.0135	14.0	14.0	0.0357	11.1
4.00	21.0	13.0	8.2	0.0135	13.0	14.2	0.0254	9.9
15.00	21.0	11.0	6.2	0.0135	11.0	14.5	0.0132	7.5
30.00	21.0	11.0	6.2	0.0135	11.0	14.5	0.0094	7.5
60.00	21.0	10.0	5.2	0.0135	10.0	14.7	0.0067	6.3
240.00	21.5	9.0	4.3	0.0134	9.0	14.8	0.0033	5.2
1440.00	21.0	8.0	3.2	0.0135	8.0	15.0	0.0014	3.8

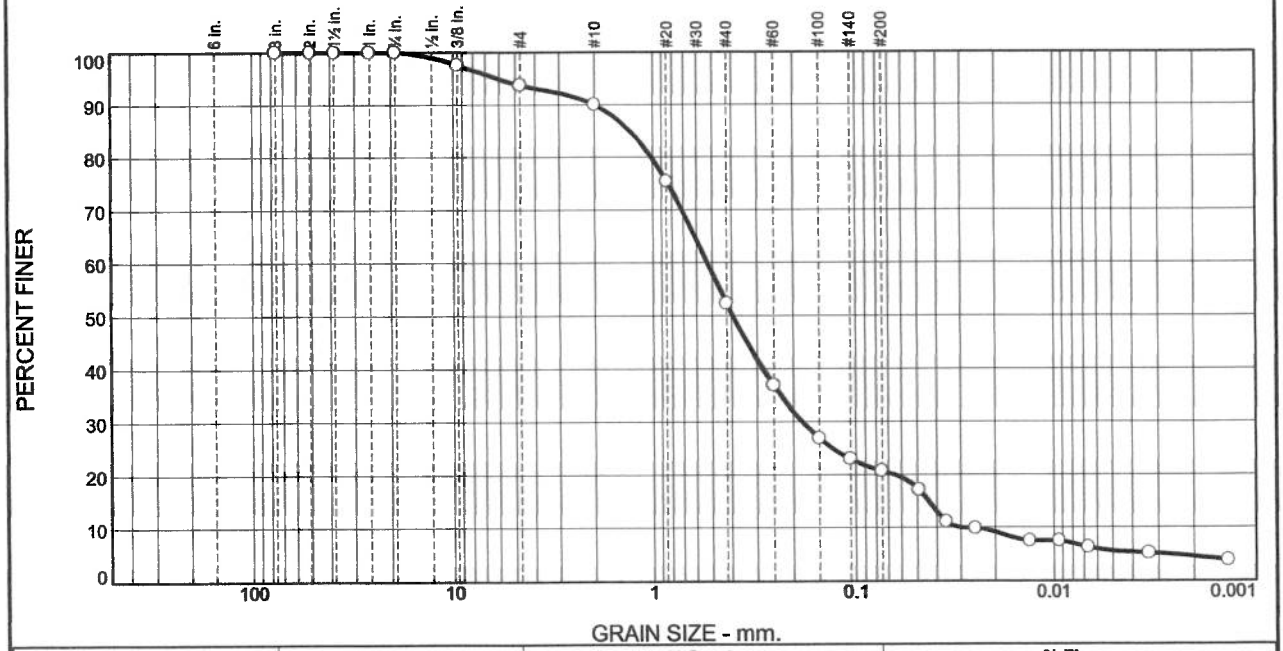
Fractional Components

Cobbles	Gravel			Sand				Fines		
	Coarse	Fine	Total	Coarse	Medium	Fine	Total	Silt	Clay	Total
0.0	0.0	6.2	6.2	3.7	37.7	31.7	73.1	15.1	5.6	20.7

D_5	D_{10}	D_{15}	D_{20}	D_{30}	D_{40}	D_{50}	D_{60}	D_{80}	D_{85}	D_{90}	D_{95}
0.0028	0.0303	0.0439	0.0647	0.1813	0.2820	0.3952	0.5302	1.0179	1.3138	1.9864	6.0951

Fineness Modulus	C_u	C_c
2.01	17.50	2.05

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	0.0	6.2	3.7	37.7	31.7	15.1	5.6

TEST RESULTS (D7928 mod - With Hydrometer)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
3"	100.0		
2"	100.0		
1.5"	100.0		
1"	100.0		
0.75"	100.0		
0.375"	97.6		
#4	93.8		
#10	90.1		
#20	75.4		
#40	52.4		
#60	36.9		
#100	26.9		
#140	23.0		
#200	20.7		
0.0489 mm.	17.1		
0.0357 mm.	11.1		
0.0254 mm.	9.9		
0.0132 mm.	7.5		
0.0094 mm.	7.5		
0.0067 mm.	6.3		
0.0033 mm.	5.2		
0.0014 mm.	3.8		

* (no specification provided)

Material Description

manual description: moist, silt, many woodchips (coarse woodchips removed for coarse sieve), metal, gasoline odor

geosystems description: silty sand

Atterberg Limits (ASTM D 4318)

PL= NP LL= NV PI= NP

Classification

USCS (D 2487)= SM AASHTO (M 145)= A-2-4(0)

Coefficients

D_{90}= 1.9864 D_{85}= 1.3138 D_{60}= 0.5302
D_{50}= 0.3952 D_{30}= 0.1813 D_{15}= 0.0439
D_{10}= 0.0303 C_u= 17.50 C_c= 2.05

Remarks

Batch 46533, HBN 417438; test completed by GRR, MMJ, MLR, and GEE; coarse sieved 6/6/22, fine sieved 6/8/22; ethanol (#281100) added to sample to dissipate foam during hydrometer

Date Received: 6/3/22 **Date Tested:** 6/6/22

Tested By: Madeline Rohde

Checked By: Brandy Mahoney

Title: Scientist

Location: 1-YELLOW, 2-RED, 1-BAG, 2-BAG (w/o coarse woodchips) **Date Sampled:** 6/2/22

Sample Number: 40245952-001 no wcs

Pace Analytical Services, Inc.

Green Bay, WI

Client: WALK IN PAID

Project: CAR DEBRIS

Project No: 40245952 **Figure**

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

June 15, 2022

Walk-In
PACE Analytical Services, LLC.
1241 Bellevue St
Suite 9
Green Bay, WI 54302

RE: Project: CAR DEBRIS
Pace Project No.: 40245952

Dear Walk-In:

Enclosed are the analytical results for sample(s) received by the laboratory on June 03, 2022. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

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

Sincerely,

Steven Mleczko
steve.mleczko@pacelabs.com
(920)469-2436
Project Manager

Enclosures

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: CAR DEBRIS
Pace Project No.: 40245952

Pace Analytical Services Green Bay
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

REPORT OF LABORATORY ANALYSIS

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Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: CAR DEBRIS
Pace Project No.: 40245952

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40245952001	1-YELLOW, 2-RED, 1-BAG, 2-BAG	Solid	06/02/22 10:00	06/03/22 10:20

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(920)469-2436

SAMPLE ANALYTE COUNT

Project: CAR DEBRIS
Pace Project No.: 40245952

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40245952001	**1-YELLOW, 2-RED, 1-BAG, 2-BAG**	EPA 6010D	TXW	7	PASI-G
		EPA 7470	AJT	1	PASI-G
		ASTM D2974-87	MYH	1	PASI-G
		EPA 9095	HNT	1	PASI-G
		ASTM D6913/D7928	MLR	22	PASI-G

PASI-G = Pace Analytical Services - Green Bay

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Green Bay, WI 54302
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ANALYTICAL RESULTS

Project: CAR DEBRIS
Pace Project No.: 40245952

Sample: 1-YELLOW, 2-RED, 1-BAG, 2-BAG **Lab ID: 40245952001** Collected: 06/02/22 10:00 Received: 06/03/22 10:20 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, TCLP	Analytical Method: EPA 6010D Preparation Method: EPA 3015A Leachate Method/Date: EPA 1311; 06/13/22 13:54 Pace Analytical Services - Green Bay								
Arsenic	**<0.0083**	mg/L	0.025	0.0083	1	06/15/22 07:31	06/15/22 13:11	7440-38-2	
Barium	**0.094**	mg/L	0.0050	0.0015	1	06/15/22 07:31	06/15/22 13:11	7440-39-3	
Cadmium	**<0.0013**	mg/L	0.0050	0.0013	1	06/15/22 07:31	06/15/22 13:11	7440-43-9	
Chromium	**<0.0025**	mg/L	0.010	0.0025	1	06/15/22 07:31	06/15/22 13:11	7440-47-3	
Lead	**<0.0059**	mg/L	0.020	0.0059	1	06/15/22 07:31	06/15/22 13:11	7439-92-1	
Selenium	**<0.012**	mg/L	0.040	0.012	1	06/15/22 07:31	06/15/22 13:11	7782-49-2	
Silver	**<0.0032**	mg/L	0.010	0.0032	1	06/15/22 07:31	06/15/22 13:11	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 06/13/22 13:54 Pace Analytical Services - Green Bay								
Mercury	**<0.000066**	mg/L	0.00020	0.000066	1	06/14/22 12:10	06/15/22 08:59	7439-97-6	1q
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**36.0**	%	0.10	0.10	1		06/07/22 15:22		
9095 Paint Filter Liquid Test	Analytical Method: EPA 9095 Pace Analytical Services - Green Bay								
Free Liquids	**Pass**	no units			1		06/08/22 13:14		
ASTM D6913D7928 GrainsizeHydro	Analytical Method: ASTM D6913/D7928 Pace Analytical Services - Green Bay								
Sieve 3.0"	**100.0**	%			1		06/03/22 21:58		
Sieve 2.0"	**100.0**	%			1		06/03/22 21:58		
Sieve 1.5"	**100.0**	%			1		06/03/22 21:58		
Sieve 1.0"	**100.0**	%			1		06/03/22 21:58		
Sieve 0.75"	**100.0**	%			1		06/03/22 21:58		
Sieve 0.375"	**97.5**	%			1		06/03/22 21:58		
Sieve #4	**84.4**	%			1		06/03/22 21:58		
Sieve #10	**68.6**	%			1		06/03/22 21:58		
Sieve #20	**57.5**	%			1		06/03/22 21:58		
Sieve #40	**39.9**	%			1		06/03/22 21:58		
Sieve #60	**28.1**	%			1		06/03/22 21:58		
Sieve #100	**20.5**	%			1		06/03/22 21:58		
Sieve #140	**17.5**	%			1		06/03/22 21:58		
Sieve #200	**15.8**	%			1		06/03/22 21:58		
Hydrometer 1 Passing	**13.1**	%			1		06/03/22 21:58		
Hydrometer 2 Passing	**8.5**	%			1		06/03/22 21:58		
Hydrometer 3 Passing	**7.5**	%			1		06/03/22 21:58		
Hydrometer 4 Passing	**5.7**	%			1		06/03/22 21:58		
Hydrometer 5 Passing	**5.7**	%			1		06/03/22 21:58		

REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: CAR DEBRIS
Pace Project No.: 40245952

Sample: 1-YELLOW, 2-RED, 1-BAG, 2-BAG **Lab ID: 40245952001** Collected: 06/02/22 10:00 Received: 06/03/22 10:20 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
ASTM D6913D7928 GrainsizeHydro	Analytical Method: ASTM D6913/D7928 Pace Analytical Services - Green Bay								
Hydrometer 6 Passing	**4.8**	%			1		06/03/22 21:58		
Hydrometer 7 Passing	**4.0**	%			1		06/03/22 21:58		
Hydrometer 8 Passing	**2.9**	%			1		06/03/22 21:58		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: CAR DEBRIS
Pace Project No.: 40245952

QC Batch: 418255
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury TCLP
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40245952001

METHOD BLANK: 2408714 Matrix: Water
Associated Lab Samples: 40245952001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	<0.000066	0.00020	06/15/22 08:38	

METHOD BLANK: 2408180 Matrix: Water
Associated Lab Samples: 40245952001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	<0.000066	0.00020	06/15/22 09:24	

METHOD BLANK: 2408181 Matrix: Water
Associated Lab Samples: 40245952001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	<0.000066	0.00020	06/15/22 09:52	

LABORATORY CONTROL SAMPLE: 2408715

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.005	0.0050	100	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2408716 2408717

Parameter	Units	40246277001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	<0.066 ug/L	0.005	0.005	0.0042	0.0042	84	85	85-115	1	20	M0

MATRIX SPIKE SAMPLE: 2408718

Parameter	Units	40245899001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	<0.000066	0.005	0.0050	100	85-115	

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

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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: CAR DEBRIS
Pace Project No.: 40245952

MATRIX SPIKE SAMPLE: 2408719

Parameter	Units	40245952001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	<0.000066	0.005	0.0049	97	85-115	

MATRIX SPIKE SAMPLE: 2408720

Parameter	Units	40246130001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	<0.000066	0.005	0.0047	93	85-115	

MATRIX SPIKE SAMPLE: 2408721

Parameter	Units	40246300001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	0.00019J	0.005	0.0054	105	85-115	

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REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: CAR DEBRIS
Pace Project No.: 40245952

QC Batch: 418274
QC Batch Method: EPA 3015A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET TCLP
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40245952001

METHOD BLANK: 2408826 Matrix: Water
Associated Lab Samples: 40245952001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	<0.0083	0.025	06/15/22 12:27	
Barium	mg/L	<0.0015	0.0050	06/15/22 12:27	
Cadmium	mg/L	<0.0013	0.0050	06/15/22 12:27	
Chromium	mg/L	<0.0025	0.010	06/15/22 12:27	
Lead	mg/L	<0.0059	0.020	06/15/22 12:27	
Selenium	mg/L	<0.012	0.040	06/15/22 12:27	
Silver	mg/L	<0.0032	0.010	06/15/22 12:27	

METHOD BLANK: 2408136 Matrix: Solid
Associated Lab Samples: 40245952001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	<0.0083	0.025	06/15/22 13:56	
Barium	mg/L	0.0056	0.0050	06/15/22 13:56	
Cadmium	mg/L	<0.0013	0.0050	06/15/22 13:56	
Chromium	mg/L	0.0026J	0.010	06/15/22 13:56	
Lead	mg/L	<0.0059	0.020	06/15/22 13:56	
Selenium	mg/L	0.014J	0.040	06/15/22 13:56	
Silver	mg/L	<0.0032	0.010	06/15/22 13:56	

METHOD BLANK: 2408137 Matrix: Solid
Associated Lab Samples: 40245952001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	<0.0083	0.025	06/15/22 13:23	
Barium	mg/L	0.0030J	0.0050	06/15/22 13:23	
Cadmium	mg/L	<0.0013	0.0050	06/15/22 13:23	
Chromium	mg/L	<0.0025	0.010	06/15/22 13:23	
Lead	mg/L	<0.0059	0.020	06/15/22 13:23	
Selenium	mg/L	<0.012	0.040	06/15/22 13:23	
Silver	mg/L	<0.0032	0.010	06/15/22 13:23	

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REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: CAR DEBRIS
Pace Project No.: 40245952

LABORATORY CONTROL SAMPLE: 2408827

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.28	0.28	100	80-120	
Barium	mg/L	0.28	0.29	103	80-120	
Cadmium	mg/L	0.28	0.29	104	80-120	
Chromium	mg/L	0.28	0.28	103	80-120	
Lead	mg/L	0.28	0.29	106	80-120	
Selenium	mg/L	0.28	0.29	104	80-120	
Silver	mg/L	0.14	0.14	101	80-120	

MATRIX SPIKE SAMPLE: 2408828

Parameter	Units	40245952001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	<0.0083	0.28	0.28	100	75-125	
Barium	mg/L	0.094	0.28	0.38	102	75-125	
Cadmium	mg/L	<0.0013	0.28	0.29	105	75-125	
Chromium	mg/L	<0.0025	0.28	0.28	102	75-125	
Lead	mg/L	<0.0059	0.28	0.29	104	75-125	
Selenium	mg/L	<0.012	0.28	0.29	106	75-125	
Silver	mg/L	<0.0032	0.14	0.14	103	75-125	

MATRIX SPIKE SAMPLE: 2408829

Parameter	Units	40246130001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	<0.0083	0.28	0.28	102	75-125	
Barium	mg/L	0.34	0.28	0.62	101	75-125	
Cadmium	mg/L	0.0031J	0.28	0.29	105	75-125	
Chromium	mg/L	0.0045J	0.28	0.28	100	75-125	
Lead	mg/L	<0.0059	0.28	0.29	103	75-125	
Selenium	mg/L	<0.012	0.28	0.29	106	75-125	
Silver	mg/L	<0.0032	0.14	0.15	104	75-125	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2408830 2408831

Parameter	Units	40246415001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	<0.0083	0.28	0.28	0.29	0.29	104	103	75-125	1	20	
Barium	mg/L	0.52	0.28	0.28	0.79	0.80	98	101	75-125	1	20	
Cadmium	mg/L	<0.0013	0.28	0.28	0.29	0.30	105	107	75-125	1	20	
Chromium	mg/L	<0.0025	0.28	0.28	0.28	0.28	100	101	75-125	2	20	
Lead	mg/L	<0.0059	0.28	0.28	0.28	0.29	101	102	75-125	1	20	
Selenium	mg/L	<0.012	0.28	0.28	0.29	0.29	106	106	75-125	0	20	
Silver	mg/L	<0.0032	0.14	0.14	0.14	0.15	104	106	75-125	1	20	

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: CAR DEBRIS
Pace Project No.: 40245952

QC Batch: 417679
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40245952001

SAMPLE DUPLICATE: 2405087

Parameter	Units	40246030003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	5.1	5.1	0	10	

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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA

Project: CAR DEBRIS
Pace Project No.: 40245952

QC Batch: 417775
QC Batch Method: EPA 9095
Analysis Method: EPA 9095
Analysis Description: 9095 PAINT FILTER LIQUID TEST
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40245952001

METHOD BLANK: 2405562 Matrix: Solid
Associated Lab Samples: 40245952001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Free Liquids	no units	Fail		06/08/22 13:04	

LABORATORY CONTROL SAMPLE: 2405563

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Free Liquids	no units		Pass			

SAMPLE DUPLICATE: 2405564

Parameter	Units	40245794001 Result	Dup Result	RPD	Max RPD	Qualifiers
Free Liquids	no units	Pass	Pass			

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: CAR DEBRIS
Pace Project No.: 40245952

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.

ANALYTE QUALIFIERS

1q	Analyte was measured in the associated leach blank at a concentration of -0.000070mg/L.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

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Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: CAR DEBRIS
Pace Project No.: 40245952

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40245952001	1-YELLOW, 2-RED, 1-BAG, 2-BAG	EPA 3015A	418274	EPA 6010D	418399
40245952001	1-YELLOW, 2-RED, 1-BAG, 2-BAG	EPA 7470	418255	EPA 7470	418313
40245952001	1-YELLOW, 2-RED, 1-BAG, 2-BAG	ASTM D2974-87	417679		
40245952001	1-YELLOW, 2-RED, 1-BAG, 2-BAG	EPA 9095	417775		
40245952001	1-YELLOW, 2-RED, 1-BAG, 2-BAG	ASTM D6913/D7928	417438		

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CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-In Number Here: 40245952

ALL SHADED AREAS are for LAB USE ONLY

Company: OMAHA Track	Billing Information: OMAHA TRACK 12930 I Street OMAHA, NE 68137
Address: 505 Bainbridge St	
Report To: LISA @omahatrack.com	Email To: LISA @omahatrack.com
Copy To: LaCrosse @omahatrack.com	Site Collection Info/Address: 505 Bainbridge St
Customer Project Name/Number: GR Debris	State: WI County/City: LaCrosse Time Zone Collected: [ ]PT [ ]MT [ ]CT [ ]ET
Phone: 792-2274	Site/Facility ID #:
Email: LaCrosse @omahatrack	Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): Luke Kelemen	Purchase Order #: Quote #:
Collected By (signature):	Turnaround Date Required:
Sample Disposal: Dispose as appropriate [ ] Return Archive: ____ Hold: ____	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [ ] 5 Day (Expedite Charges Apply)
	DW PWS ID #: DW Location Code:
	Immediately Packed on Ice: [ ] Yes [ ] No
	Field Filtered (if applicable): [ ] Yes [ ] No Analysis: ____

Container Preservative Type **

Lab Project Manager:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other ____

Analyses

see bottle sheet

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y N NA
Custody Signatures Present	Y N NA
Collector Signature Present	Y N NA
Bottles Intact	Y N NA
Correct Bottles	Y N NA
Sufficient Volume	Y N NA
Samples Received on Ice	Y N NA
VOA - Headspace Acceptable	Y N NA
USDA Regulated Soils	Y N NA
Samples in Holding Time	Y N NA
Residual Chlorine Present	Y N NA
Cl Strips:	
Sample pH Acceptable	Y N NA
pH Strips:	
Sulfide Present	Y N NA
Lead Acetate Strips:	

Scan 6/3/22

LAB USE ONLY:
Lab Sample # / Comments:

001
002
003 Sum
004 6/3/2022

Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns
1 - yellow			6/2	10:00				1
2 - Red			6/2	10:00				1
-Bag			6/2	10:00				1
- Bag			6/2	10:00				1
			6/2	10:00				

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2767456

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: ____
Cooler 1 Temp Upon Receipt: ____oC
Cooler 1 Therm Corr. Factor: ____oC
Cooler 1 Corrected Temp: ____oC
Comments: 0

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Fedex	6/3/22 1020	Pace	6/3/22 1020
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

40245952

steve.mleczko@pacelabs.com

Pace Container Order #957696

Addresses

Order By :		Ship To :		Return To:	
Company	Omaha Track	Company	Omaha Track	Company	Pace Analytical Green Bay
Contact	Roberts, Lisa	Contact	Nate Keleman	Contact	Mleczko, Steven
Email	lisa@omahatrack.com	Email	lacrosse@omahatrack.com	Email	steve.mleczko@pacelabs.com
Address	505 Bainbridge	Address	505 Bainbridge	Address	1241 Bellevue Street
Address 2		Address 2		Address 2	Suite 9
City	LaCrosse	City	LaCrosse	City	Green Bay
State	WI Zip 54603	State	WI Zip 54603	State	WI Zip 54302
Phone		Phone		Phone	(920)469-2436

Info

Project Name: Particle Size and TCLP testing | Due Date: 05/20/2022 | Profile: 1 | Quote:

Project Manager: Mleczko, Steven | Return Date: | Carrier: Most Economical | Location: WI

Trip Blanks

- [ ] Include Trip Blanks

Bottle Labels

- [X] Blank
- [ ] Pre-Printed No Sample IDs
- [ ] Pre-Printed With Sample IDs

Bottles

- [ ] Boxed Cases
- [ ] Individually Wrapped
- [ ] Grouped By Sample ID/Matrix

Return Shipping Labels

- [ ] No Shipper
- [ ] With Shipper

COC Options

- [X] Number of Blanks: 1
- [ ] Pre-Printed

Misc

- [X] Sampling Instructions
- [X] Custody Seal
- [X] Temp. Blanks
- [X] Coolers
- [ ] Syringes
- [ ] Extra Bubble Wrap
- [ ] Short Hold/Rush Stickers
- [ ] DI Water Liter(s)
- [ ] USDA Regulated Soils

# of Samples	Matrix	Test	Container	Total	# of	Lot #	Notes
1	SL	Particle Size Analysis	1 Quart Ziplock Bag	2	0		
1	SL	TCLP 8 RCRA Metals	4oz. Amber Jar Unpreserved	1	0	G-2-005-04DB	
1	SL	Paint Filter Liquid Test	8 oz glass jar	1	0	F-1-340-03AB	

Hazard Shipping Placard In Place : NA

'Sample receiving hours are typically 8am-5pm, but may differ by location. Please check with your Pace Project Manager.

'Pace Analytical reserves the right to return hazardous, toxic, or radioactive samples to you.

'Pace Analytical reserves the right to charge for unused bottles, as well as cost associated with sample storage/disposal.

'Payment term are net 30 days.

'Please include the proposal number on the chain of custody to insure proper billing.

LAB USE:

Ship Date :	05/18/2022
Prepared By:	KLS
Verified By:	
Tracking Num:	509249209629

Sample

Total cost for all is $285

CLIENT USE (Optional):

Date Rec'd:	
Received By:	
Verified By:	

F-ALL-C-009-rev.00, 19Dec2016

Sample Preservation Receipt Form

Client Name: Omaha Track Project # 410-45952

All containers needing preservation have been checked and noted below: ☐Yes ☐No ☒N/A Initial when completed: Date/ Time:

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

Glass								Plastic					Vials						Jars				General								
AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN	VOA Vials (>6mm)	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
																			1					2							2.5 / 5 / 10
1																															2.5 / 5 / 10
SLM 6/3/22																								1+	SLM						2.5 / 5 / 10
																								1+	G/3						2.5 / 5 / 10
																															2.5 / 5 / 10
																															2.5 / 5 / 10
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																															2.5 / 5 / 10

6/3/22 NL

eptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: _____ Headspace in VOA Vials (>6mm) : ☐Yes ☐No ☒N/A *If yes look in headspace column

J	1 liter amber glass
J	1 liter clear glass
H	1 liter amber glass HCL
S	125 mL amber glass H2SO4
J	120 mL amber glass unpres
J	100 mL amber glass unpres
S	500 mL amber glass H2SO4
J	250 mL clear glass unpres

BP1U	1 liter plastic unpres
BP3U	250 mL plastic unpres
BP3B	250 mL plastic NaOH
BP3N	250 mL plastic HNO3
BP3S	250 mL plastic H2SO4

VG9A	40 mL clear ascorbic
DG9T	40 mL amber Na Thio
VG9U	40 mL clear vial unpres
VG9H	40 mL clear vial HCL
VG9M	40 mL clear vial MeOH
VG9D	40 mL clear vial DI

JGFU	4 oz amber jar unpres
JG9U	9 oz amber jar unpres
WGFU	4 oz clear jar unpres
WPFU	4 oz plastic jar unpres
SP5T	120 mL plastic Na Thiosulfate
ZPLC	ziploc bag
GN	

Sample Condition Upon Receipt Form (SCUR)

Project #: WO# : 40245952

40245952

Client Name: Omaha Track

Courier: ☐ CS Logistics ☒ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco ☐ Client ☐ Pace Other: _____

Tracking #: 273845141527

Custody Seal on Cooler/Box Present: ☒ yes ☐ no Seals intact: ☒ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☒ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☒ Bubble Bags ☐ None ☐ Other _____

Thermometer Used SR - 98 **Type of Ice:** (Wet) Blue Dry None ☒ Samples on ice

Cooler Temperature Uncorr: 4 /Corr: 4

Temp Blank Present: ☒ yes ☐ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents: Date: 6/3/22 /Initials: NK

Labeled By Initials: MA

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Chain of Custody Present:	☒Yes ☐No ☐N/A	1. +2CC 6/3/22 NK
Chain of Custody Filled Out:	☐Yes ☒No ☐N/A	2. pg. #1, Analyses, presen 6/3/22 NK
Chain of Custody Relinquished:	☒Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☒Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☒Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☒No	6.
Rush Turn Around Time Requested:	☐Yes ☒No	7.
Sufficient Volume: For Analysis: ☒Yes ☐No MS/MSD:	☐Yes ☒No ☐N/A	8.
Correct Containers Used:	☒Yes ☐No	9.
-Pace Containers Used:	☒Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☒N/A	
Containers Intact:	☒Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☒N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: S	☒Yes ☐No ☐N/A	12.
Trip Blank Present:	☐Yes ☐No ☒N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☒N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution: Lab added analyses to COC, identified from bottle sheet 6/3/22 NK

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logi

Page 2 of 2

BRAUN INTERTEC
The Science You Build On.

Letter of Transmittal

Transmittal #1
Transmittal Date 09/13/21

2309 Palace Street
La Crosse, WI 54603
Phone: 608-781-7277

Client:
Property Cleaning Systems, Inc
N5880 Lehman Road
West Salem, WI 54669

Project:
B2108592
Property Cleaning Systems Laboratory Testing
N5880 Lehman Road
West Salem, WI 54669

If you have any questions, please contact Ben Sullivan.

Table of Contents	
Title	**Description**
200 Sieve Loss By Washing	2021-09-13 - 402694

Distribution List	
Name	**Company**
Ball, Jerry	Property Cleaning Systems, Inc
Sullivan, Benjamin	Braun Intertec

BRAUN INTERTEC
The Science You Build On.

200 Sieve Loss By Washing

ASTM D1140

09/13/2021

2309 Palace Street
La Crosse, WI 54603
Phone: 608-781-7277

Client:

Property Cleaning Systems, Inc
N5880 Lehman Road
West Salem, WI 54669

Project:

B2108592
Property Cleaning Systems Laboratory Testing
N5880 Lehman Road
West Salem, WI 54669

Sample Information

Sample Number:	402694	**Source:**	Not given
Sampling Method:	Not Provided	**Sampled By:**	Client
Location:	Other		
Location Details:	Street Sweeper Material		
Specification:	For Informational Purposes Only		
Sample Date:	09/10/2021		
Received Date:	09/10/2021	**Lab:**	2309 Palace Street, La Crosse, WI
Tested Date:	09/13/2021	**Tested By:**	Tos, Yot

Laboratory Data

Loss By Washing (%):	3.2	**Method Used:**	Method A Soak In Water
Maximum Particle Size:	Finer than 4.75 mm (No. 4)	**Soaking Time (min):**	30
Moisture Content (%):	4.80		
Soil Classification:	Street Sweeper Material		

General

Results: The test is for informational purposes.

Benjamin Sullivan

The results included in this report relate only to the items inspected or tested. Additionally, this report is for the exclusive use of the addressed parties. We assume no responsibility to other parties regarding this report. The information indicated in this report shall not be reproduced, except in full, without the prior written approval.

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

January 06, 2022

Joshua Smale
Torrance Casting
3131 Commerce Street
La Crosse, WI 54603

RE: Project: TORRANCE CASTING
Pace Project No.: 40238945

Dear Joshua Smale:

Enclosed are the analytical results for sample(s) received by the laboratory on December 29, 2021. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

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

Sincerely,

Steven Mleczko
steve.mleczko@pacelabs.com
(920)469-2436
Project Manager

Enclosures

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CERTIFICATIONS

Project: TORRANCE CASTING
Pace Project No.: 40238945

Pace Analytical Services Green Bay
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

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: TORRANCE CASTING
Pace Project No.: 40238945

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40238945001	**2102715019**	Solid	12/28/21 12:27	12/29/21 10:50
40238945002	**2102715016**	Solid	12/28/21 12:27	12/29/21 10:50
40238945003	**2102715017**	Solid	12/28/21 12:27	12/29/21 10:50
40238945004	**2102715018**	Solid	12/28/21 12:27	12/29/21 10:50

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SAMPLE ANALYTE COUNT

Project: TORRANCE CASTING
Pace Project No.: 40238945

Lab ID	Sample ID	Method	Analysts	Analytes Reported
40238945001	**2102715019**	EPA 6010D	TXW	5
		ASTM D2974-87	SKW	1
40238945002	**2102715016**	EPA 6010D	TXW	5
		ASTM D2974-87	SKW	1
40238945003	**2102715017**	EPA 6010D	TXW	5
		ASTM D2974-87	SKW	1
40238945004	**2102715018**	EPA 6010D	TXW	5
		ASTM D2974-87	SKW	1

PASI-G = Pace Analytical Services - Green Bay

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ANALYTICAL RESULTS

Project: TORRANCE CASTING
Pace Project No.: 40238945

Sample: 2102715019 **Lab ID: 40238945001** Collected: 12/28/21 12:27 Received: 12/29/21 10:50 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
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Green Bay								
Chromium	**718**	mg/kg	23.0	6.4	10	01/04/22 06:20	01/05/22 17:16	7440-47-3	
Copper	**1040**	mg/kg	23.0	6.4	10	01/04/22 06:20	01/05/22 17:16	7440-50-8	
Lead	**<13.8**	mg/kg	46.0	13.8	10	01/04/22 06:20	01/05/22 17:16	7439-92-1	D3
Manganese	**13800**	mg/kg	11.5	4.3	10	01/04/22 06:20	01/05/22 17:16	7439-96-5	
Nickel	**494**	mg/kg	23.0	6.1	10	01/04/22 06:20	01/05/22 17:16	7440-02-0	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**56.7**	%	0.10	0.10	1		01/03/22 14:36		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: TORRANCE CASTING
Pace Project No.: 40238945

Sample: 2102715016 **Lab ID: 40238945002** Collected: 12/28/21 12:27 Received: 12/29/21 10:50 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
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Green Bay								
Chromium	**2080**	mg/kg	19.3	5.4	20	01/04/22 06:20	01/05/22 17:21	7440-47-3	
Copper	**2850**	mg/kg	19.3	5.3	20	01/04/22 06:20	01/05/22 17:21	7440-50-8	
Lead	**<11.5**	mg/kg	38.6	11.5	20	01/04/22 06:20	01/05/22 17:21	7439-92-1	D3
Manganese	**4880**	mg/kg	9.6	3.6	20	01/04/22 06:20	01/05/22 17:21	7439-96-5	
Nickel	**3070**	mg/kg	19.3	5.1	20	01/04/22 06:20	01/05/22 17:21	7440-02-0	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**<0.10**	%	0.10	0.10	1		01/03/22 14:36		

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ANALYTICAL RESULTS

Project: TORRANCE CASTING
Pace Project No.: 40238945

Sample: 2102715017 **Lab ID: 40238945003** Collected: 12/28/21 12:27 Received: 12/29/21 10:50 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
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Green Bay								
Chromium	**22.0**	mg/kg	1.1	0.30	1	01/04/22 06:20	01/04/22 17:09	7440-47-3	
Copper	**55.0**	mg/kg	1.1	0.30	1	01/04/22 06:20	01/04/22 17:09	7440-50-8	
Lead	**5.5**	mg/kg	2.2	0.65	1	01/04/22 06:20	01/04/22 17:09	7439-92-1	
Manganese	**539**	mg/kg	0.54	0.20	1	01/04/22 06:20	01/04/22 17:09	7439-96-5	
Nickel	**7.5**	mg/kg	1.1	0.29	1	01/04/22 06:20	01/04/22 17:09	7440-02-0	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**7.5**	%	0.10	0.10	1		01/03/22 14:36		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: TORRANCE CASTING
Pace Project No.: 40238945

Sample: 2102715018 **Lab ID: 40238945004** Collected: 12/28/21 12:27 Received: 12/29/21 10:50 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
6010D MET ICP	Analytical Method: EPA 6010D Preparation Method: EPA 3050B Pace Analytical Services - Green Bay								
Chromium	**4.8**	mg/kg	1.0	0.28	1	01/04/22 06:20	01/04/22 17:11	7440-47-3	
Copper	**6.5**	mg/kg	1.0	0.28	1	01/04/22 06:20	01/04/22 17:11	7440-50-8	
Lead	**5.7**	mg/kg	2.0	0.61	1	01/04/22 06:20	01/04/22 17:11	7439-92-1	
Manganese	**229**	mg/kg	0.51	0.19	1	01/04/22 06:20	01/04/22 17:11	7439-96-5	
Nickel	**3.0**	mg/kg	1.0	0.27	1	01/04/22 06:20	01/04/22 17:11	7440-02-0	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**3.8**	%	0.10	0.10	1		01/03/22 14:36		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: TORRANCE CASTING
Pace Project No.: 40238945

QC Batch: 405483
QC Batch Method: EPA 3050B
Analysis Method: EPA 6010D
Analysis Description: 6010D MET
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40238945001, 40238945002, 40238945003, 40238945004

METHOD BLANK: 2339770 Matrix: Solid
Associated Lab Samples: 40238945001, 40238945002, 40238945003, 40238945004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chromium	mg/kg	<0.28	1.0	01/04/22 16:42	
Copper	mg/kg	<0.28	1.0	01/04/22 16:42	
Lead	mg/kg	<0.60	2.0	01/04/22 16:42	
Manganese	mg/kg	<0.19	0.50	01/04/22 16:42	
Nickel	mg/kg	<0.26	1.0	01/04/22 16:42	

LABORATORY CONTROL SAMPLE: 2339771

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chromium	mg/kg	25	23.7	95	80-120	
Copper	mg/kg	25	24.2	97	80-120	
Lead	mg/kg	25	25.2	101	80-120	
Manganese	mg/kg	25	24.3	97	80-120	
Nickel	mg/kg	25	25.4	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2339772 2339773

Parameter	Units	40238960003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chromium	mg/kg	39.2	35	34.9	57.7	52.5	53	38	75-125	9	20	M0
Copper	mg/kg	21.9	35	34.9	52.1	46.8	86	71	75-125	11	20	M0
Lead	mg/kg	4.8	35	34.9	38.6	37.9	97	95	75-125	2	20	
Manganese	mg/kg	321	35	34.9	365	375	126	153	75-125	3	20	P6
Nickel	mg/kg	12.4	35	34.9	45.2	40.6	94	81	75-125	11	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.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: TORRANCE CASTING
Pace Project No.: 40238945

QC Batch: 405461
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40238945001, 40238945002, 40238945003, 40238945004

SAMPLE DUPLICATE: 2339670

Parameter	Units	40239025001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	6.6	6.5	1	10	

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

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Green Bay, WI 54302
(920)469-2436

QUALIFIERS

Project: TORRANCE CASTING
Pace Project No.: 40238945

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.

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: TORRANCE CASTING
Pace Project No.: 40238945

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40238945001	**2102715019**	EPA 3050B	405483	EPA 6010D	405544
40238945002	**2102715016**	EPA 3050B	405483	EPA 6010D	405544
40238945003	**2102715017**	EPA 3050B	405483	EPA 6010D	405544
40238945004	**2102715018**	EPA 3050B	405483	EPA 6010D	405544
40238945001	**2102715019**	ASTM D2974-87	405461		
40238945002	**2102715016**	ASTM D2974-87	405461		
40238945003	**2102715017**	ASTM D2974-87	405461		
40238945004	**2102715018**	ASTM D2974-87	405461		

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402389 45

CHAIN-OF-CUSTODY Analytical Request Document

Pace Analytical®

Chain-of-Custody is a LEGAL DOCUMENT - Complete all relevent fields

LAB USE ONLY- Affix Workorder/Login Label Here or List Pace Workorder Number or MTJL Log-in Number Here

ALL SHADED AREAS are for LAB USE ONLY

Company: Torrance Casting	Billing Information: Torrance Casting 3131 Commerce St, La Crosse, WI 54603
Address: 3131 Commerce St. Lacrosse	
Report To: Joshua Smale	Email To: JSS@torrancecasting.com
Copy To:	Site Collection Info/Address: 3131 Commerce St.
Customer Project Name/Number:	State: WI / County/City: Lacrosse / Time Zone Collected: [ ] PT [ ] MT [X] CT [ ] ET
Phone: (608)781-0600 Email: JSS@torrancecasting.com	Site/Facility ID #: / Compliance Monitoring? [ ] Yes [ ] No
Collected By (print): Joshua Smale	Purchase Order #: 202102593 / Quote #: / DW PWS ID #: / DW Location Code:
Collected By (signature):	Turnaround Date Required: / Immediately Packed on Ice: [X] Yes [ ] No
Sample Disposal: [X] Dispose as appropriate [ ] Return [ ] Archive: [ ] Hold:	Rush: [ ] Same Day [ ] Next Day [ ] 2 Day [ ] 3 Day [ ] 4 Day [X] 5 Day (Expedite Charges Apply) / Field Filtered (if applicable): [ ] Yes [X] No / Analysis:

** Preservative Types: (1) nitric acid, (2) sulfuric acid, (3) hydrochloric acid, (4) sodium hydroxide, (5) zinc acetate, (6) methanol, (7) sodium bisulfate, (8) sodium thiosulfate, (9) hexane, (A) ascorbic acid, (B) ammonium sulfate, (C) ammonium hydroxide, (D) TSP, (U) Unpreserved, (O) Other _____

* Matrix Codes (Insert in Matrix box below): Drinking Water (DW), Ground Water (GW), Wastewater (WW), Product (P), Soil/Solid (SL), Oil (OL), Wipe (WP), Air (AR), Tissue (TS), Bioassay (B), Vapor (V), Other (OT)

	Customer Sample ID	Matrix *	Comp / Grab	Collected (or Composite Start) Date	Collected (or Composite Start) Time	Composite End Date	Composite End Time	Res Cl	# of Ctns	Analyses	Lab Profile/Line:
1	210271 5019	SL	Grab	12-28	12:27P						001
2	210271 5016	SL	Grab	12-28	12:27P						002
3	210271 5017	SL	Grab	12-28	12:27P						003
4	210271 5018	SL	Grab	12-28	12:27P						004

Lab Profile/Line:

Lab Sample Receipt Checklist:

Custody Seals Present/Intact	Y	N	NA
Custody Signatures Present	Y	N	NA
Collector Signature Present	Y	N	NA
Bottles Intact	Y	N	NA
Correct Bottles	Y	N	NA
Sufficient Volume	Y	N	NA
Samples Received on Ice	Y	N	NA
VOA - Headspace Acceptable	Y	N	NA
USDA Regulated Soils	Y	N	NA
Samples in Holding Time	Y	N	NA
Residual Chlorine Present	Y	N	NA
Cl Strips: _____			
Sample pH Acceptable	Y	N	NA
pH Strips: _____			
Sulfide Present	Y	N	NA
Lead Acetate Strips: _____			

LAB USE ONLY:
Lab Sample # / Comments:

Customer Remarks / Special Conditions / Possible Hazards:

Type of Ice Used: Wet Blue Dry None

Packing Material Used:

Radchem sample(s) screened (<500 cpm): Y N NA

SHORT HOLDS PRESENT (<72 hours): Y N N/A

Lab Tracking #: 2697931

Samples received via: FEDEX UPS Client Courier Pace Courier

Lab Sample Temperature Info:
Temp Blank Received: Y N NA
Therm ID#: _____
Cooler 1 Temp Upon Receipt: _____oC
Cooler 1 Therm Corr. Factor: _____oC
Cooler 1 Corrected Temp: _____oC
Comments:

Relinquished by/Company: (Signature)	Date/Time:	Received by/Company: (Signature)	Date/Time:
/ Torrance Casting	12-28-21 12:38 PM		
UPS	12/29/21 1050		12/29/21 1052
_____	_____	_____	_____

MTJL LAB USE ONLY
Table #:
Acctnum:
Template:
Prelogin:
PM:
PB:

Trip Blank Received: Y N NA
HCL MeOH TSP Other

Non Conformance(s): YES / NO

of: _____

Sample Preservation Receipt Form

Client Name: Torrance Casting Project # 40238945

Pace Analytical Services, LLC
1241 Bellevue Street, Suite 9
Green Bay, WI 54302

All containers needing preservation have been checked and noted below: □Yes □No □N/A

Initial when completed: Date/ Time:

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

Pace Lab #	Glass								Plastic					Vials						Jars				General			VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
	AG1U	BG1U	AG1H	AG4S	AG4U	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	VG9A	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN							
001																				/												2.5 / 5 / 10
002																				/												2.5 / 5 / 10
003																				/												2.5 / 5 / 10
004																				/												2.5 / 5 / 10
005																																2.5 / 5 / 10
006																																2.5 / 5 / 10
007																																2.5 / 5 / 10
008																																2.5 / 5 / 10
009																																2.5 / 5 / 10
010																																2.5 / 5 / 10
011																																2.5 / 5 / 10
012																																2.5 / 5 / 10
013																																2.5 / 5 / 10
014																																2.5 / 5 / 10
015																																2.5 / 5 / 10
016																																2.5 / 5 / 10
017																																2.5 / 5 / 10
018																												12/29/21				2.5 / 5 / 10
019																																2.5 / 5 / 10
020																																2.5 / 5 / 10

Exceptions to preservation check: VOA, Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other:_____ Headspace in VOA Vials (>6mm) : □Yes □No □N/A ***If yes look in headspace column**

AG1U	1 liter amber glass
BG1U	1 liter clear glass
AG1H	1 liter amber glass HCL
AG4S	125 mL amber glass H2SO4
AG4U	120 mL amber glass unpres
AG5U	100 mL amber glass unpres
AG2S	500 mL amber glass H2SO4
BG3U	250 mL clear glass unpres

BP1U	1 liter plastic unpres
BP3U	250 mL plastic unpres
BP3B	250 mL plastic NaOH
BP3N	250 mL plastic HNO3
BP3S	250 mL plastic H2SO4

VG9A	40 mL clear ascorbic
DG9T	40 mL amber Na Thio
VG9U	40 mL clear vial unpres
VG9H	40 mL clear vial HCL
VG9M	40 mL clear vial MeOH
VG9D	40 mL clear vial DI

JGFU	4 oz amber jar unpres
JG9U	9 oz amber jar unpres
WGFU	4 oz clear jar unpres
WPFU	4 oz plastic jar unpres
SP5T	120 mL plastic Na Thiosulfate
ZPLC	ziploc bag
GN	

Pace Analytical® 1241 Bellevue Street, Green Bay, WI 54302	Document Name: Sample Condition Upon Receipt (SCUR)	Document Revised: 26Mar2020
	Document No.: ENV-FRM-GBAY-0014-Rev.00	Author: Pace Green Bay Quality Office

Sample Condition Upon Receipt Form (SCUR)

Client Name: Torrance Castings Project #:

WO# : 40238945

40238945

Courier: ☐ CS Logistics ☐ Fed Ex ☐ Speedee ☑ UPS ☐ Waltco ☐ Client ☐ Pace Other:

Tracking #: 1Z584973030125 3725

Custody Seal on Cooler/Box Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☐ no

Packing Material: ☐ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other

Thermometer Used SR - 105 **Type of Ice:** (Wet) Blue Dry None ☑ Samples on ice, cooling process has begun

Cooler Temperature Uncorr: 4 /Corr: 4

Temp Blank Present: ☐ yes ☑ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents: Date: 12/29/21 /Initials: SK

Labeled By Initials: AJ

Temp should be above freezing to 6°C.
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Chain of Custody Present:	☑Yes ☐No ☐N/A	1. 4 2CC 12/29/21 SK
Chain of Custody Filled Out:	☐Yes ☑No ☐N/A	2. Preserve, Analysis - determined by enclosed bottle order 12/29/21 SK
Chain of Custody Relinquished:	☑Yes ☐No ☐N/A	3.
Sampler Name & Signature on COC:	☑Yes ☐No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume: For Analysis: ☑Yes ☐No MS/MSD:	☐Yes ☑No ☐N/A	8.
Correct Containers Used:	☑Yes ☐No	9.
-Pace Containers Used:	☑Yes ☐No ☐N/A	
-Pace IR Containers Used:	☐Yes ☐No ☑N/A	
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC: -Includes date/time/ID/Analysis Matrix: S	☐Yes ☑No ☐N/A	12. Client used water soluable ink - Labels unlegible. Could pick out a few digits. PM determined clients ID was the jar bar code determined jar placement.
Trip Blank Present:	☐Yes ☐No ☑N/A	13.
Trip Blank Custody Seals Present	☐Yes ☐No ☑N/A	
Pace Trip Blank Lot # (if purchased):		

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: Date/Time:

Comments/ Resolution:

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logi

Page 2 of 2

DAVY LABORATORIES
A Division of Davy Engineering Co., Inc.
115 6th Street South
La Crosse, WI 54601
(608) 782-3130
www.davyinc.com

LABORATORY ANALYSIS REPORT

Campbell, Town of
Attn: Jason Hilton
2219 Bainbridge St.
La Crosse, WI 54603

Date: March 15, 2024
Client No: 00185

Sample No: 24B0656-01
Sample Site: Shop

Sample Collected: 26-Feb-24 10:45

Sample Received: 26-Feb-24 11:43

Parameter	Result	Units	LOD	LOQ/RL	Dilution	Prepared	Analyzed	Method	Qualifier
Subcontracted									
Free Liquid	**0.00**	**%**			1	28-Feb-24 08:09	28-Feb-24 08:12	EPA 9095B	A-01
Particle Size Distribution (Sieve)	**5**	**% passing**			1	03-Mar-24 10:35	03-Mar-24 10:35	ASTM D421-85	Sub-5

Submitted by:
Davy Laboratories

Julie A. Klimek
Julie A. Klimek, Laboratory Director

The laboratory analyses reported were determined in accordance with methods from approved authoritative sources. Approved authoritative sources are defined and listed within the respective state certification codes. The results are representative of the samples only; conditions can be expected to vary at different times and under different sampling conditions. This report may not be reproduced, except in full, without the written approval of the laboratory.
WI Certification 632021390 and WI DATCP 105-216, MN NELAC Certification 055-999-151, IA Certification 304. Revision #4 - 2/22/2024

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LABORATORY ANALYSIS REPORT

Campbell, Town of
Attn: Jason Hilton
2219 Bainbridge St.
La Crosse, WI 54603

Date: March 15, 2024
Client No: 00185

Notes and Definitions

Z-01	0.00
Sub-5	Wisconsin Laboratory Certification No. 157066030
A-01	Subcontract Laboratory 445023150
LOD	Limit of Detection, adjusted for the dilution factor
LOQ/RL	Limit of Quantitation/Reporting Limit, adjusted for the dilution factor

Total metals are equivalent to total recoverable metals.

Cooler Information

Temperature °C	
Received on Ice	No
Required COC Information completed	Yes
Sample labels match COC	Yes
All samples received in the appropriate Containers	Yes
All samples received with sufficient volume	Yes
All samples received with sufficient holding time	Yes
All sample bottles received with H2SO4 were pH <2	No
All sample bottles received with HNO3 were pH <2	No
All sample bottles received with HCl were pH <2	No
All sample bottles received with NaOH were pH >12	No
All sample bottles for cyanide confirmed Sulfide absent	No
All sample bottles for cyanide confirmed Residual Cl absent	No

Preservation of VOC samples checked by the analyst.
Preservation of FOG samples checked by the analyst.
Residual Chlorine absent checked by the analyst unless noted above.

Case Narrative

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Division of Davy Engineering Co.

LABORATORY ANALYSIS REPORT

Campbell, Town of
Attn: Jason Hilton
2219 Bainbridge St.
La Crosse, WI 54603

Date: March 15, 2024
Client No: 00185

La Crosse County Landfill
Application for Special Waste Disposal

PART A: WASTE GENERATOR INFORMATION

1. Generator Name Town of Shelby
2. Generator Mailing Address 2800 Ward Ave
   La Crosse, WI 54601
3. Facility Address (site of waste generation) (same)
4. Generator City Town of Shelby
5. Generator State/Zip Wisconsin / 54601
6. General Contact Person Terry Wright
   Phone # and email 608 788 1032 x5 twright@townofshelby.com
7. Technical Contact Person (same)
   Phone # and email

---

1. Name of Waste Street Sweepings
2. Process Generating Waste Sweep streets, screen out with 3/4 screen - anything larger than 3/4 to landfill
3. Waste Color brown
4. Waste Odor ✓ None _____ Mild _____ Strong
5. Physical State n/a None _____ Liquid _____ Semi-Solid Other _____
6. Free Liquids _____ Yes _____ % ✓ No
7. pH ____ <2 ____ 2-4.0 ____ 4.1-7.0 ____ 7.1-10.0 ____ 10.1-12.5 ____ >12.5 ____ N/A ✓
8. Flash Point (cc) ✓ None _____ <140F _____ 140-199F _____ >200
9. a. Waste Composition:

	Range
_____	_____ to _____%
n/a	_____ to _____%
_____	_____ to _____%
_____	_____ to _____%
_____	_____ to _____%

b. Does Waste Contain

	Yes	No	Do Not Know
PCBS	____	____	_____
Cyanide	____	____	_____
Sulfide	____	____	_____
Phenol	____	____	_____
Chlorinated Solvents	____	____	_____
Aromatic Solvents	____	____	_____

10. Analytical Laboratory _____
11. Date of Analysis _____

PART B: CAR WASH CATCH BASIS SLUDGE INFORMATION

Industrial discharge _____Yes _____No n/a
Tank interiors _____Yes _____No
Vehicle types _____

PART C: TRANSPORTATION INFORMATION

1. Method of delivery _____Drum _____Paper Truck ___✓_Dump Truck
   _____Roll-off _____Other _____

2. Waste Quantity/Units _____

   ☐ One-time Disposal
   ☑ On-going Disposal

   Frequency each spring

3. Hauler Name and Address Town of Shelby
   2500 Ward Ave
   La Crosse, WI 54601

4. Bill to Name and Address Town of Shelby
   2500 Ward Ave
   La Crosse, WI 54601

To be Completed by La Crosse County Solid Waste

Waste Acceptance/Rejection		
1) Does waste meet requirements of the current Plan of Operations?	☒ Yes	☐ No
2) Is waste acceptable upon approval by WDNR?	☐ Yes	☐ No
3) Plan of Operations Approval Required? (Attach copy if yes)	☐ Yes	☐ No
4) Waste accepted for disposal?	☒ Yes	☐ No
5) Signature/Title	Jessica Davis, Special Waste	

PART D: GENERATOR CERTIFICATION

By signing this application, the generator certifies:

1. This waste is not "Hazardous Waste" as defined by USEPA and/or state regulations.
2. This waste ☐ does ☑ does not contain regulated radioactive materials and ☐ does ☑ does not contain regulated concentrations of PCBs (polychlorinated biphenyls). If "does" is checked, specify level here _____.
3. This waste does not contain regulated infectious waste as defined by NR526.05 Wisconsin Administrative Code.
4. The waste does not contain regulated concentrations of the following pesticides and herbicides: Chlordane, Endrin, Heptachlor (and its epoxide), Lindane, Methoxychlor, Toxaphene, 2, 4, 5-TP (Silvex).
5. The waste does not contain halogenated compounds such as: tetrachloroethylene, trichloroethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, ortho-dichlorobenzene, dichlorodifluoromethane, 1,1,2-trichloro-1, 2,2-trifluoroethane, trichlorofluoromethane, 1,1-dichloroethylene, and 1,2-dichlorethylene at greater than 1% (10,000 ppm) total solvent concentration. This listing includes any combination of the above named halogenated compounds where the total concentration or the sum of the concentration of the individual compounds exceed 1% or 10,000 ppm on a weights to weight basis.
6. This sheet and the attachments contain true and accurate description of the waste material. All relevant information regarding known or suspected hazards in the possession of the Generator has been disclosed.
7. The analytical data presented herein or attached hereto were derived from testing a representative sample taken in accordance with 40 CFR 261.20 © or equivalent rules.
8. If any changes occur in the character of the waste, the Generator shall notify the County prior to providing the waste to the County.
9. Signature
10. Title Public Works Director
11. Name (Type or print) Terry Wright
12. Date 5/27/2021

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

April 24, 2023

Tom Perkins
TRC Madison
708 Heartland Trail
Suite 3000
Madison, WI 53717

RE: Project: 542579
Pace Project No.: 40260832

Dear Tom Perkins:

Enclosed are the analytical results for sample(s) received by the laboratory on April 15, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Asheville
- Pace Analytical Services - Green Bay

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

Sincerely,

Tod Noltemeyer
tod.noltemeyer@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: DAN HAAK, TRC - MADISON
Peggy Popp, TRC - Madison

PRELIMINARY

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: 542579
Pace Project No.: 40260832

Pace Analytical Services Green Bay
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
South Carolina Certification #: 83006001
Texas Certification #: T104704529-21-8
Virginia VELAP Certification ID: 11873
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-21-00008
Federal Fish & Wildlife Permit #: 51774A

Pace Analytical Services Asheville
2225 Riverside Drive, Asheville, NC 28804
Florida/NELAP Certification #: E87648
North Carolina Drinking Water Certification #: 37712
North Carolina Wastewater Certification #: 40
South Carolina Laboratory ID: 99030
South Carolina Certification #: 99030001
Virginia/VELAP Certification #: 460222

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Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: 542579
Pace Project No.: 40260832

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40260832001	**WC-1**	Solid	04/07/23 13:00	04/15/23 09:45
40260832002	**WC-2**	Solid	04/12/23 14:00	04/15/23 09:45

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SAMPLE ANALYTE COUNT

Project: 542579
Pace Project No.: 40260832

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40260832001	**WC-1**	WI MOD DRO	MRN	1	PASI-G
		WI MOD GRO	ALD	1	PASI-G
		EPA 6010D	SIS	10	PASI-G
		EPA 7470	AJT	1	PASI-G
		EPA 8260	EIB	4	PASI-G
		ASTM D2974-87	SRG	1	PASI-G
		EPA 9095	HNT	1	PASI-G
		ASTM D6913	AXW	14	PASI-G
40260832002	**WC-2**	EPA 8082A	BLM	10	PASI-G
		EPA 6010D	SIS	10	PASI-G
		EPA 7470	AJT	1	PASI-G
		EPA 8270E	RJN	17	PASI-G
		EPA 8260	EIB	13	PASI-G
		EPA 9076	KQB	1	PASI-A
		EPA 9095	HNT	1	PASI-G
		SM 2710F	HNT	2	PASI-G

PASI-A = Pace Analytical Services - Asheville
PASI-G = Pace Analytical Services - Green Bay

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SUMMARY OF DETECTION

Project: 542579
Pace Project No.: 40260832

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40260832001	**WC-1**					
WI MOD DRO	Diesel Range Organics	513	mg/kg	56.4	04/18/23 08:44	DC
WI MOD GRO	Gasoline Range Organics	232	mg/kg	14.7	04/22/23 00:13	GO,H1
EPA 6010D	Barium	0.49	mg/L	0.0050	04/19/23 13:08	
EPA 6010D	Cadmium	0.0079	mg/L	0.0050	04/19/23 13:08	
EPA 6010D	Lead	0.016J	mg/L	0.020	04/19/23 13:08	
EPA 6010D	Nickel	0.014	mg/L	0.010	04/19/23 13:08	
EPA 6010D	Zinc	5.3	mg/L	0.040	04/19/23 13:08	
ASTM D2974-87	Percent Moisture	15.1	%	0.10	04/19/23 16:57	
EPA 9095	Free Liquids	PASS	no units		04/21/23 14:01	
ASTM D6913	Sieve 3.0"	100.0	%		04/18/23 15:34	
ASTM D6913	Sieve 2.0"	100.0	%		04/18/23 15:34	
ASTM D6913	Sieve 1.5"	100.0	%		04/18/23 15:34	
ASTM D6913	Sieve 1.0"	100.0	%		04/18/23 15:34	
ASTM D6913	Sieve 0.75"	100.0	%		04/18/23 15:34	
ASTM D6913	Sieve 0.375"	98.2	%		04/18/23 15:34	
ASTM D6913	Sieve #4	97.3	%		04/18/23 15:34	
ASTM D6913	Sieve #10	95.8	%		04/18/23 15:34	
ASTM D6913	Sieve #20	95.2	%		04/18/23 15:34	
ASTM D6913	Sieve #40	84.1	%		04/18/23 15:34	
ASTM D6913	Sieve #60	37.4	%		04/18/23 15:34	
ASTM D6913	Sieve #100	14.3	%		04/18/23 15:34	
ASTM D6913	Sieve #140	9.2	%		04/18/23 15:34	
ASTM D6913	Sieve #200	6.3	%		04/18/23 15:34	
40260832002	**WC-2**					
EPA 6010D	Arsenic	0.018J	mg/L	0.025	04/19/23 13:10	
EPA 6010D	Copper	0.015	mg/L	0.010	04/19/23 13:10	
EPA 6010D	Nickel	0.051	mg/L	0.010	04/19/23 13:10	
EPA 6010D	Zinc	0.094	mg/L	0.040	04/19/23 13:10	
EPA 9076	Chlorine, Total	0.022	%	0.010	04/20/23 06:51	N2
EPA 9095	Free Liquids	PASS	no units		04/21/23 14:03	1q
SM 2710F	Density	0.54	g/mL		04/24/23 11:35	
SM 2710F	Specific Gravity	0.54	no units		04/24/23 11:35	

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(920)469-2436

PROJECT NARRATIVE

Project: 542579
Pace Project No.: 40260832

Date: April 24, 2023

WC-1 (Lab ID: 40260832001)

- Sample container used for ZHE had headspace.
- Incorrect container used for sample collection for ZHE analysis. Ziploc Bag.

WC-2 (Lab ID: 40260832002)

- Incorrect container used for sample collection for ZHE analysis. Ziploc Bag.
- Sample container used for ZHE had headspace.

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Green Bay, WI 54302
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PROJECT NARRATIVE

Project: 542579
Pace Project No.: 40260832

Method: **EPA 8082A**
Description: 8082A GCS PCB
Client: TRC - MADISON
Date: April 24, 2023

General Information:
1 sample was analyzed for EPA 8082A by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3541 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: 542579
Pace Project No.: 40260832

Method: **WI MOD DRO**
Description: WIDRO GCS
Client: TRC - MADISON
Date: April 24, 2023

General Information:
1 sample was analyzed for WI MOD DRO by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with WI MOD DRO with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 542579
Pace Project No.: 40260832

Method: **WI MOD GRO**
Description: WIGRO GCV
Client: TRC - MADISON
Date: April 24, 2023

General Information:
1 sample was analyzed for WI MOD GRO by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H1: Analysis conducted outside the recognized method holding time.
- WC-1 (Lab ID: 40260832001)

Sample Preparation:
The samples were prepared in accordance with TPH GRO/PVOC WI ext. with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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(920)469-2436

PROJECT NARRATIVE

Project: 542579
Pace Project No.: 40260832

Method: **EPA 6010D**
Description: 6010D MET ICP, TCLP
Client: TRC - MADISON
Date: April 24, 2023

General Information:
2 samples were analyzed for EPA 6010D by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3015A with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 442660

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 10649297001,40260635001,40260686002,40260724001,40260832002,40260844001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 2541361)
  - Arsenic
  - Nickel
  - Selenium
- MS (Lab ID: 2541364)
  - Barium
  - Lead

Additional Comments:

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Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: 542579
Pace Project No.: 40260832

Method: **EPA 7470**
Description: 7470 Mercury, TCLP
Client: TRC - MADISON
Date: April 24, 2023

General Information:
2 samples were analyzed for EPA 7470 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 7470 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: 542579
Pace Project No.: 40260832

Method: **EPA 8270E**
Description: 8270E MSSV TCLP Sep Funnel
Client: TRC - MADISON
Date: April 24, 2023

General Information:
1 sample was analyzed for EPA 8270E by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3510 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: 542579
Pace Project No.: 40260832

Method: **EPA 8260**
Description: 8260 MSV TCLP
Client: TRC - MADISON
Date: April 24, 2023

General Information:
2 samples were analyzed for EPA 8260 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: 542579
Pace Project No.: 40260832

Method: **EPA 9076**
Description: 9076 Total Chlorine
Client: TRC - MADISON
Date: April 24, 2023

General Information:
1 sample was analyzed for EPA 9076 by Pace Analytical Services Asheville. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 769151

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.

- MS (Lab ID: 3993210)
  - Chlorine, Total
- MSD (Lab ID: 3993211)
  - Chlorine, Total
- WC-2 (Lab ID: 40260832002)
  - Chlorine, Total

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PROJECT NARRATIVE

Project: 542579
Pace Project No.: 40260832

Method: **EPA 9095**
Description: 9095 Paint Filter Liquid Test
Client: TRC - MADISON
Date: April 24, 2023

General Information:
2 samples were analyzed for EPA 9095 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 443001

1q: The method requires 100g of sample for analysis. As a result of sample matrix (or insufficient sample volume availible), only 39.222 g of sample was used during this analysis. It is the user's responsibility to verify the acceptance of this data for intended use.

- WC-2 (Lab ID: 40260832002)
  - Free Liquids

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PROJECT NARRATIVE

Project: 542579
Pace Project No.: 40260832

Method: **ASTM D6913**
Description: ASTM D6913 Grain Size
Client: TRC - MADISON
Date: April 24, 2023

General Information:
1 sample was analyzed for ASTM D6913 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Batch Comments:

coarse and fine sieved 4/19/23
- QC Batch: 442686

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PROJECT NARRATIVE

Project: 542579
Pace Project No.: 40260832

Method: **SM 2710F**
Description: Specific Gravity /Bulk Density
Client: TRC - MADISON
Date: April 24, 2023

General Information:
1 sample was analyzed for SM 2710F by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: 542579
Pace Project No.: 40260832

Sample: WC-1 **Lab ID: 40260832001** Collected: 04/07/23 13:00 Received: 04/15/23 09:45 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 Preparation Method: WI MOD DRO Pace Analytical Services - Green Bay								
Diesel Range Organics	**513**	mg/kg	56.4	16.9	15	04/17/23 09:59	04/18/23 08:44		DC
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext. Pace Analytical Services - Green Bay								
Gasoline Range Organics	**232**	mg/kg	14.7	7.3	5	04/21/23 12:30	04/22/23 00:13		GO,H1
6010D MET ICP, TCLP	Analytical Method: EPA 6010D Preparation Method: EPA 3015A Leachate Method/Date: EPA 1311; 04/17/23 14:53 Pace Analytical Services - Green Bay								
Arsenic	**<0.0083**	mg/L	0.025	0.0083	1	04/19/23 07:49	04/19/23 13:08	7440-38-2	
Barium	**0.49**	mg/L	0.0050	0.0015	1	04/19/23 07:49	04/19/23 13:08	7440-39-3	
Cadmium	**0.0079**	mg/L	0.0050	0.0013	1	04/19/23 07:49	04/19/23 13:08	7440-43-9	
Chromium	**<0.0025**	mg/L	0.010	0.0025	1	04/19/23 07:49	04/19/23 13:08	7440-47-3	
Copper	**<0.0034**	mg/L	0.010	0.0034	1	04/19/23 07:49	04/19/23 13:08	7440-50-8	
Lead	**0.016J**	mg/L	0.020	0.0059	1	04/19/23 07:49	04/19/23 13:08	7439-92-1	
Nickel	**0.014**	mg/L	0.010	0.0026	1	04/19/23 07:49	04/19/23 13:08	7440-02-0	
Selenium	**<0.012**	mg/L	0.040	0.012	1	04/19/23 07:49	04/19/23 13:08	7782-49-2	
Silver	**<0.0032**	mg/L	0.010	0.0032	1	04/19/23 07:49	04/19/23 13:08	7440-22-4	
Zinc	**5.3**	mg/L	0.040	0.012	1	04/19/23 07:49	04/19/23 13:08	7440-66-6	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 04/17/23 14:53 Pace Analytical Services - Green Bay								
Mercury	**<0.066**	ug/L	0.20	0.066	1	04/18/23 12:50	04/19/23 07:47	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 04/17/23 14:53 Pace Analytical Services - Green Bay								
Benzene	**<3.0**	ug/L	10.0	3.0	10		04/18/23 16:25	71-43-2	
Surrogates									
Toluene-d8 (S)	103	%	70-130		10		04/18/23 16:25	2037-26-5	
4-Bromofluorobenzene (S)	108	%	70-130		10		04/18/23 16:25	460-00-4	
1,2-Dichlorobenzene-d4 (S)	102	%	70-130		10		04/18/23 16:25	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**15.1**	%	0.10	0.10	1		04/19/23 16:57		
9095 Paint Filter Liquid Test	Analytical Method: EPA 9095 Pace Analytical Services - Green Bay								
Free Liquids	**PASS**	no units			1		04/21/23 14:01		

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ANALYTICAL RESULTS

Project: 542579
Pace Project No.: 40260832

Sample: WC-1 **Lab ID: 40260832001** Collected: 04/07/23 13:00 Received: 04/15/23 09:45 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
ASTM D6913 Grain Size	Analytical Method: ASTM D6913 Pace Analytical Services - Green Bay								
Sieve 3.0"	**100.0**	%			1		04/18/23 15:34		
Sieve 2.0"	**100.0**	%			1		04/18/23 15:34		
Sieve 1.5"	**100.0**	%			1		04/18/23 15:34		
Sieve 1.0"	**100.0**	%			1		04/18/23 15:34		
Sieve 0.75"	**100.0**	%			1		04/18/23 15:34		
Sieve 0.375"	**98.2**	%			1		04/18/23 15:34		
Sieve #4	**97.3**	%			1		04/18/23 15:34		
Sieve #10	**95.8**	%			1		04/18/23 15:34		
Sieve #20	**95.2**	%			1		04/18/23 15:34		
Sieve #40	**84.1**	%			1		04/18/23 15:34		
Sieve #60	**37.4**	%			1		04/18/23 15:34		
Sieve #100	**14.3**	%			1		04/18/23 15:34		
Sieve #140	**9.2**	%			1		04/18/23 15:34		
Sieve #200	**6.3**	%			1		04/18/23 15:34		

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ANALYTICAL RESULTS

Project: 542579
Pace Project No.: 40260832

Sample: WC-2 **Lab ID: 40260832002** Collected: 04/12/23 14:00 Received: 04/15/23 09:45 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8082A GCS PCB	Analytical Method: EPA 8082A Preparation Method: EPA 3541 Pace Analytical Services - Green Bay								
PCB-1016 (Aroclor 1016)	**<156**	ug/kg	511	156	1	04/18/23 18:15	04/18/23 23:19	12674-11-2	
PCB-1221 (Aroclor 1221)	**<156**	ug/kg	511	156	1	04/18/23 18:15	04/18/23 23:19	11104-28-2	
PCB-1232 (Aroclor 1232)	**<156**	ug/kg	511	156	1	04/18/23 18:15	04/18/23 23:19	11141-16-5	
PCB-1242 (Aroclor 1242)	**<156**	ug/kg	511	156	1	04/18/23 18:15	04/18/23 23:19	53469-21-9	
PCB-1248 (Aroclor 1248)	**<156**	ug/kg	511	156	1	04/18/23 18:15	04/18/23 23:19	12672-29-6	
PCB-1254 (Aroclor 1254)	**<156**	ug/kg	511	156	1	04/18/23 18:15	04/18/23 23:19	11097-69-1	
PCB-1260 (Aroclor 1260)	**<156**	ug/kg	511	156	1	04/18/23 18:15	04/18/23 23:19	11096-82-5	
PCB, Total	**<156**	ug/kg	511	156	1	04/18/23 18:15	04/18/23 23:19	1336-36-3	
Surrogates									
Tetrachloro-m-xylene (S)	65	%	50-99		1	04/18/23 18:15	04/18/23 23:19	877-09-8	
Decachlorobiphenyl (S)	65	%	38-95		1	04/18/23 18:15	04/18/23 23:19	2051-24-3	
6010D MET ICP, TCLP	Analytical Method: EPA 6010D Preparation Method: EPA 3015A Leachate Method/Date: EPA 1311; 04/17/23 14:53 Pace Analytical Services - Green Bay								
Arsenic	**0.018J**	mg/L	0.025	0.0083	1	04/19/23 07:49	04/19/23 13:10	7440-38-2	
Barium	**<0.0015**	mg/L	0.0050	0.0015	1	04/19/23 07:49	04/19/23 13:10	7440-39-3	M0
Cadmium	**<0.0013**	mg/L	0.0050	0.0013	1	04/19/23 07:49	04/19/23 13:10	7440-43-9	
Chromium	**<0.0025**	mg/L	0.010	0.0025	1	04/19/23 07:49	04/19/23 13:10	7440-47-3	
Copper	**0.015**	mg/L	0.010	0.0034	1	04/19/23 07:49	04/19/23 13:10	7440-50-8	
Lead	**<0.0059**	mg/L	0.020	0.0059	1	04/19/23 07:49	04/19/23 13:10	7439-92-1	M0
Nickel	**0.051**	mg/L	0.010	0.0026	1	04/19/23 07:49	04/19/23 13:10	7440-02-0	
Selenium	**<0.012**	mg/L	0.040	0.012	1	04/19/23 07:49	04/19/23 13:10	7782-49-2	
Silver	**<0.0032**	mg/L	0.010	0.0032	1	04/19/23 07:49	04/19/23 13:10	7440-22-4	
Zinc	**0.094**	mg/L	0.040	0.012	1	04/19/23 07:49	04/19/23 13:10	7440-66-6	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 04/17/23 14:53 Pace Analytical Services - Green Bay								
Mercury	**<0.066**	ug/L	0.20	0.066	1	04/18/23 12:50	04/19/23 07:49	7439-97-6	
8270E MSSV TCLP Sep Funnel	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 04/17/23 14:53 Pace Analytical Services - Green Bay								
1,4-Dichlorobenzene	**<17.8**	ug/L	50.0	17.8	1	04/18/23 09:42	04/19/23 11:50	106-46-7	
2,4,5-Trichlorophenol	**<18.2**	ug/L	50.0	18.2	1	04/18/23 09:42	04/19/23 11:50	95-95-4	
2,4,6-Trichlorophenol	**<20.0**	ug/L	50.0	20.0	1	04/18/23 09:42	04/19/23 11:50	88-06-2	
2,4-Dinitrotoluene	**<11.9**	ug/L	50.0	11.9	1	04/18/23 09:42	04/19/23 11:50	121-14-2	
2-Methylphenol(o-Cresol)	**<7.7**	ug/L	50.0	7.7	1	04/18/23 09:42	04/19/23 11:50	95-48-7	
3&4-Methylphenol(m&p Cresol)	**<6.0**	ug/L	50.0	6.0	1	04/18/23 09:42	04/19/23 11:50		
Hexachloro-1,3-butadiene	**<16.4**	ug/L	50.0	16.4	1	04/18/23 09:42	04/19/23 11:50	87-68-3	
Hexachlorobenzene	**<25.2**	ug/L	100	25.2	1	04/18/23 09:42	04/19/23 11:50	118-74-1	
Hexachloroethane	**<15.1**	ug/L	50.0	15.1	1	04/18/23 09:42	04/19/23 11:50	67-72-1	
Nitrobenzene	**<15.7**	ug/L	50.0	15.7	1	04/18/23 09:42	04/19/23 11:50	98-95-3	

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(920)469-2436

ANALYTICAL RESULTS

Project: 542579
Pace Project No.: 40260832

Sample: WC-2 **Lab ID: 40260832002** Collected: 04/12/23 14:00 Received: 04/15/23 09:45 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	LOQ	LOD	DF	Prepared	Analyzed	CAS No.	Qual
8270E MSSV TCLP Sep Funnel	Analytical Method: EPA 8270E Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 04/17/23 14:53 Pace Analytical Services - Green Bay								
Pentachlorophenol	**<16.3**	ug/L	50.0	16.3	1	04/18/23 09:42	04/19/23 11:50	87-86-5	
Phenol	**<9.8**	ug/L	50.0	9.8	1	04/18/23 09:42	04/19/23 11:50	108-95-2	
Pyridine	**<73.0**	ug/L	100	73.0	1	04/18/23 09:42	04/19/23 11:50	110-86-1	
Surrogates									
Nitrobenzene-d5 (S)	88	%	10-120		1	04/18/23 09:42	04/19/23 11:50	4165-60-0	
2-Fluorobiphenyl (S)	65	%	10-101		1	04/18/23 09:42	04/19/23 11:50	321-60-8	
2,4,6-Tribromophenol (S)	77	%	10-142		1	04/18/23 09:42	04/19/23 11:50	118-79-6	
Phenol-d6 (S)	32	%	10-54		1	04/18/23 09:42	04/19/23 11:50	13127-88-3	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 04/17/23 14:53 Pace Analytical Services - Green Bay								
Benzene	**<3.0**	ug/L	10.0	3.0	10		04/18/23 18:20	71-43-2	
2-Butanone (MEK)	**<65.2**	ug/L	250	65.2	10		04/18/23 18:20	78-93-3	
Carbon tetrachloride	**<3.7**	ug/L	10.0	3.7	10		04/18/23 18:20	56-23-5	
Chlorobenzene	**<8.6**	ug/L	10.0	8.6	10		04/18/23 18:20	108-90-7	
Chloroform	**<5.0**	ug/L	50.0	5.0	10		04/18/23 18:20	67-66-3	
1,2-Dichloroethane	**<2.9**	ug/L	10.0	2.9	10		04/18/23 18:20	107-06-2	
1,1-Dichloroethene	**<5.8**	ug/L	10.0	5.8	10		04/18/23 18:20	75-35-4	
Tetrachloroethene	**<4.1**	ug/L	10.0	4.1	10		04/18/23 18:20	127-18-4	
Trichloroethene	**<3.2**	ug/L	10.0	3.2	10		04/18/23 18:20	79-01-6	
Vinyl chloride	**<1.7**	ug/L	10.0	1.7	10		04/18/23 18:20	75-01-4	
Surrogates									
Toluene-d8 (S)	102	%	70-130		10		04/18/23 18:20	2037-26-5	
4-Bromofluorobenzene (S)	106	%	70-130		10		04/18/23 18:20	460-00-4	
1,2-Dichlorobenzene-d4 (S)	101	%	70-130		10		04/18/23 18:20	2199-69-1	
9076 Total Chlorine	Analytical Method: EPA 9076 Pace Analytical Services - Asheville								
Chlorine, Total	**0.022**	%	0.010	0.010	1		04/20/23 06:51		N2
9095 Paint Filter Liquid Test	Analytical Method: EPA 9095 Pace Analytical Services - Green Bay								
Free Liquids	**PASS**	no units			1		04/21/23 14:03		1q
Specific Gravity /Bulk Density	Analytical Method: SM 2710F Pace Analytical Services - Green Bay								
Density	**0.54**	g/mL			1		04/24/23 11:35		
Specific Gravity	**0.54**	no units			1		04/24/23 11:35		

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

QC Batch: 442998
QC Batch Method: TPH GRO/PVOC WI ext.
Analysis Method: WI MOD GRO
Analysis Description: WIGRO Solid GCV
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40260832001

METHOD BLANK: 2543606 Matrix: Solid
Associated Lab Samples: 40260832001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	<1.2	2.5	04/21/23 17:45	
a,a,a-Trifluorotoluene (S)	%	106	80-120	04/21/23 17:45	

LABORATORY CONTROL SAMPLE & LCSD: 2543607 2543608

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Gasoline Range Organics	mg/kg	10	10.3	11.5	103	115	80-120	11	20	

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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.

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

QC Batch: 442657
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury TCLP
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40260832001, 40260832002

METHOD BLANK: 2541305 Matrix: Water
Associated Lab Samples: 40260832001, 40260832002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.066	0.20	04/19/23 07:25	

METHOD BLANK: 2539050 Matrix: Water
Associated Lab Samples: 40260832001, 40260832002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.066	0.20	04/19/23 08:14	

METHOD BLANK: 2540970 Matrix: Water
Associated Lab Samples: 40260832001, 40260832002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.066	0.20	04/19/23 07:58	

METHOD BLANK: 2540971 Matrix: Water
Associated Lab Samples: 40260832001, 40260832002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	ug/L	<0.066	0.20	04/19/23 08:10	

LABORATORY CONTROL SAMPLE: 2541306

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	5	5.2	103	85-115	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2541307 2541308

Parameter	Units	40260772008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	ug/L	<0.066	5	5	5.7	5.8	114	115	85-115	1	20	

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

MATRIX SPIKE SAMPLE: 2541309

Parameter	Units	40260844001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	<0.066	5	5.2	104	85-115	

MATRIX SPIKE SAMPLE: 2541310

Parameter	Units	40260724001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	<0.066	5	5.5	111	85-115	

MATRIX SPIKE SAMPLE: 2541311

Parameter	Units	40260832002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	<0.066	5	5.4	108	85-115	

MATRIX SPIKE SAMPLE: 2541312

Parameter	Units	40260686002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Mercury	ug/L	<0.000066 mg/L	5	5.2	103	85-115	

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

QC Batch: 442660
QC Batch Method: EPA 3015A
Analysis Method: EPA 6010D
Analysis Description: 6010D MET TCLP
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40260832001, 40260832002

METHOD BLANK: 2541357 Matrix: Water
Associated Lab Samples: 40260832001, 40260832002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	<0.0083	0.025	04/19/23 12:13	
Barium	mg/L	<0.0015	0.0050	04/19/23 12:13	
Cadmium	mg/L	<0.0013	0.0050	04/19/23 12:13	
Chromium	mg/L	<0.0025	0.010	04/19/23 12:13	
Copper	mg/L	<0.0034	0.010	04/19/23 12:13	
Lead	mg/L	<0.0059	0.020	04/19/23 12:13	
Nickel	mg/L	<0.0026	0.010	04/19/23 12:13	
Selenium	mg/L	<0.012	0.040	04/19/23 12:13	
Silver	mg/L	<0.0032	0.010	04/19/23 12:13	
Zinc	mg/L	<0.012	0.040	04/19/23 12:13	

METHOD BLANK: 2540959 Matrix: Solid
Associated Lab Samples: 40260832001, 40260832002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	<0.0083	0.025	04/19/23 12:55	
Barium	mg/L	0.0018J	0.0050	04/19/23 12:55	
Cadmium	mg/L	<0.0013	0.0050	04/19/23 12:55	
Chromium	mg/L	0.0038J	0.010	04/19/23 12:55	
Copper	mg/L	<0.0034	0.010	04/19/23 12:55	
Lead	mg/L	0.020J	0.020	04/19/23 12:55	
Nickel	mg/L	0.0041J	0.010	04/19/23 12:55	
Selenium	mg/L	<0.012	0.040	04/19/23 12:55	
Silver	mg/L	<0.0032	0.010	04/19/23 12:55	
Zinc	mg/L	<0.012	0.040	04/19/23 12:55	

METHOD BLANK: 2540960 Matrix: Solid
Associated Lab Samples: 40260832001, 40260832002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	<0.0083	0.025	04/19/23 13:18	
Barium	mg/L	<0.0015	0.0050	04/19/23 13:18	
Cadmium	mg/L	<0.0013	0.0050	04/19/23 13:18	
Chromium	mg/L	<0.0025	0.010	04/19/23 13:18	
Copper	mg/L	<0.0034	0.010	04/19/23 13:18	
Lead	mg/L	<0.0059	0.020	04/19/23 13:18	

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

METHOD BLANK: 2540960 Matrix: Solid
Associated Lab Samples: 40260832001, 40260832002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nickel	mg/L	<0.0026	0.010	04/19/23 13:18	
Selenium	mg/L	<0.012	0.040	04/19/23 13:18	
Silver	mg/L	<0.0032	0.010	04/19/23 13:18	
Zinc	mg/L	<0.012	0.040	04/19/23 13:18	

METHOD BLANK: 2540961 Matrix: Solid
Associated Lab Samples: 40260832001, 40260832002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	<0.0083	0.025	04/19/23 13:25	
Barium	mg/L	<0.0015	0.0050	04/19/23 13:25	
Cadmium	mg/L	<0.0013	0.0050	04/19/23 13:25	
Chromium	mg/L	<0.0025	0.010	04/19/23 13:25	
Copper	mg/L	<0.0034	0.010	04/19/23 13:25	
Lead	mg/L	<0.0059	0.020	04/19/23 13:25	
Nickel	mg/L	<0.0026	0.010	04/19/23 13:25	
Selenium	mg/L	<0.012	0.040	04/19/23 13:25	
Silver	mg/L	<0.0032	0.010	04/19/23 13:25	
Zinc	mg/L	<0.012	0.040	04/19/23 13:25	

LABORATORY CONTROL SAMPLE: 2541358

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.28	0.27	97	80-120	
Barium	mg/L	0.28	0.28	102	80-120	
Cadmium	mg/L	0.28	0.29	103	80-120	
Chromium	mg/L	0.28	0.29	103	80-120	
Copper	mg/L	0.28	0.28	102	80-120	
Lead	mg/L	0.28	0.29	104	80-120	
Nickel	mg/L	0.28	0.29	106	80-120	
Selenium	mg/L	0.28	0.30	107	80-120	
Silver	mg/L	0.14	0.14	99	80-120	
Zinc	mg/L	0.28	0.29	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2541359 2541360

Parameter	Units	10649297001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	0.28	0.28	0.28	0.28	102	100	75-125	2	20	
Barium	mg/L	0.47	0.28	0.28	0.75	0.75	101	99	75-125	1	20	

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2541359 2541360

Parameter	Units	10649297001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Cadmium	mg/L	ND	0.28	0.28	0.29	0.29	106	104	75-125	1	20	
Chromium	mg/L	ND	0.28	0.28	0.29	0.29	104	103	75-125	1	20	
Copper	mg/L	ND	0.28	0.28	0.30	0.29	106	104	75-125	1	20	
Lead	mg/L	ND	0.28	0.28	0.29	0.29	103	102	75-125	2	20	
Nickel	mg/L	ND	0.28	0.28	0.30	0.30	106	106	75-125	1	20	
Selenium	mg/L	ND	0.28	0.28	0.32	0.31	112	110	75-125	2	20	
Silver	mg/L	ND	0.14	0.14	0.14	0.14	102	101	75-125	2	20	
Zinc	mg/L	0.050	0.28	0.28	0.34	0.34	106	104	75-125	2	20	

MATRIX SPIKE SAMPLE: 2541361

Parameter	Units	40260635001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	<0.83	0.28	<0.83	-84	75-125	M0
Barium	mg/L	144	0.28	146	497	75-125	P6
Cadmium	mg/L	<0.13	0.28	0.33J	118	75-125	
Chromium	mg/L	<0.25	0.28	0.54J	118	75-125	
Copper	mg/L	7.6	0.28	8.1	208	75-125	P6
Lead	mg/L	2580	0.28	2680	35300	75-125	P6
Nickel	mg/L	<0.26	0.28	0.42J	130	75-125	M0
Selenium	mg/L	<1.2	0.28	<1.2	-19	75-125	M0
Silver	mg/L	<0.32	0.14	<0.32	90	75-125	
Zinc	mg/L	24.4	0.28	25.7	488	75-125	P6

MATRIX SPIKE SAMPLE: 2541362

Parameter	Units	40260686002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	<0.0083	0.28	0.27	99	75-125	
Barium	mg/L	0.0056	0.28	0.29	103	75-125	
Cadmium	mg/L	0.041	0.28	0.33	103	75-125	
Chromium	mg/L	<0.0025	0.28	0.29	103	75-125	
Copper	mg/L	0.35	0.28	0.62	99	75-125	
Lead	mg/L	0.012J	0.28	0.30	105	75-125	
Nickel	mg/L	0.92	0.28	1.2	98	75-125	
Selenium	mg/L	<0.012	0.28	0.30	108	75-125	
Silver	mg/L	<0.0032	0.14	0.14	99	75-125	
Zinc	mg/L	6.3	0.28	6.4	51	75-125	P6

MATRIX SPIKE SAMPLE: 2541363

Parameter	Units	40260724001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	<0.0083	0.28	0.28	100	75-125	

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

MATRIX SPIKE SAMPLE: 2541363

Parameter	Units	40260724001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Barium	mg/L	0.34	0.28	0.62	102	75-125	
Cadmium	mg/L	<0.0013	0.28	0.30	109	75-125	
Chromium	mg/L	<0.0025	0.28	0.28	102	75-125	
Copper	mg/L	<0.0034	0.28	0.30	107	75-125	
Lead	mg/L	0.011J	0.28	0.29	101	75-125	
Nickel	mg/L	0.0084J	0.28	0.30	104	75-125	
Selenium	mg/L	<0.012	0.28	0.33	117	75-125	
Silver	mg/L	<0.0032	0.14	0.14	103	75-125	
Zinc	mg/L	<0.012	0.28	0.29	101	75-125	

MATRIX SPIKE SAMPLE: 2541364

Parameter	Units	40260832002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	0.018J	0.28	0.30	101	75-125	
Barium	mg/L	<0.0015	0.28	0.36	130	75-125	M0
Cadmium	mg/L	<0.0013	0.28	0.29	106	75-125	
Chromium	mg/L	<0.0025	0.28	0.29	104	75-125	
Copper	mg/L	0.015	0.28	0.32	110	75-125	
Lead	mg/L	<0.0059	0.28	1.5	551	75-125	M0
Nickel	mg/L	0.051	0.28	0.35	108	75-125	
Selenium	mg/L	<0.012	0.28	0.32	114	75-125	
Silver	mg/L	<0.0032	0.14	0.14	102	75-125	
Zinc	mg/L	0.094	0.28	0.39	108	75-125	

MATRIX SPIKE SAMPLE: 2541365

Parameter	Units	40260844001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	<0.083	0.28	0.29	106	75-125	
Barium	mg/L	0.62	0.28	0.91	104	75-125	
Cadmium	mg/L	<0.013	0.28	0.30	107	75-125	
Chromium	mg/L	0.029J	0.28	0.32	106	75-125	
Copper	mg/L	0.36	0.28	0.65	103	75-125	
Lead	mg/L	<0.059	0.28	0.27	93	75-125	
Nickel	mg/L	0.43	0.28	0.74	113	75-125	
Selenium	mg/L	<0.12	0.28	0.34J	111	75-125	
Silver	mg/L	<0.032	0.14	0.15	103	75-125	
Zinc	mg/L	185	0.28	181	-1390	75-125	P6

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

QC Batch: 442558
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV TCLP
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40260832001, 40260832002

METHOD BLANK: 2541013 Matrix: Water
Associated Lab Samples: 40260832001, 40260832002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	<0.58	1.0	04/18/23 06:42	
1,2-Dichloroethane	ug/L	<0.29	1.0	04/18/23 06:42	
2-Butanone (MEK)	ug/L	<6.5	25.0	04/18/23 06:42	
Benzene	ug/L	<0.30	1.0	04/18/23 06:42	
Carbon tetrachloride	ug/L	<0.37	1.0	04/18/23 06:42	
Chlorobenzene	ug/L	<0.86	1.0	04/18/23 06:42	
Chloroform	ug/L	<0.50	5.0	04/18/23 06:42	
Tetrachloroethene	ug/L	<0.41	1.0	04/18/23 06:42	
Trichloroethene	ug/L	<0.32	1.0	04/18/23 06:42	
Vinyl chloride	ug/L	<0.17	1.0	04/18/23 06:42	
1,2-Dichlorobenzene-d4 (S)	%	104	70-130	04/18/23 06:42	
4-Bromofluorobenzene (S)	%	108	70-130	04/18/23 06:42	
Toluene-d8 (S)	%	105	70-130	04/18/23 06:42	

METHOD BLANK: 2538801 Matrix: Solid
Associated Lab Samples: 40260832001, 40260832002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	<5.8	10.0	04/18/23 09:19	
1,2-Dichloroethane	ug/L	<2.9	10.0	04/18/23 09:19	
2-Butanone (MEK)	ug/L	<65.2	250	04/18/23 09:19	
Benzene	ug/L	<3.0	10.0	04/18/23 09:19	
Carbon tetrachloride	ug/L	<3.7	10.0	04/18/23 09:19	
Chlorobenzene	ug/L	<8.6	10.0	04/18/23 09:19	
Chloroform	ug/L	<5.0	50.0	04/18/23 09:19	
Tetrachloroethene	ug/L	<4.1	10.0	04/18/23 09:19	
Trichloroethene	ug/L	<3.2	10.0	04/18/23 09:19	
Vinyl chloride	ug/L	<1.7	10.0	04/18/23 09:19	
1,2-Dichlorobenzene-d4 (S)	%	103	70-130	04/18/23 09:19	
4-Bromofluorobenzene (S)	%	106	70-130	04/18/23 09:19	
Toluene-d8 (S)	%	102	70-130	04/18/23 09:19	

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

METHOD BLANK: 2540973 Matrix: Solid
Associated Lab Samples: 40260832001, 40260832002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	<5.8	10.0	04/18/23 14:29	
1,2-Dichloroethane	ug/L	<2.9	10.0	04/18/23 14:29	
2-Butanone (MEK)	ug/L	<65.2	250	04/18/23 14:29	
Benzene	ug/L	<3.0	10.0	04/18/23 14:29	
Carbon tetrachloride	ug/L	<3.7	10.0	04/18/23 14:29	
Chlorobenzene	ug/L	<8.6	10.0	04/18/23 14:29	
Chloroform	ug/L	<5.0	50.0	04/18/23 14:29	
Tetrachloroethene	ug/L	<4.1	10.0	04/18/23 14:29	
Trichloroethene	ug/L	<3.2	10.0	04/18/23 14:29	
Vinyl chloride	ug/L	<1.7	10.0	04/18/23 14:29	
1,2-Dichlorobenzene-d4 (S)	%	105	70-130	04/18/23 14:29	
4-Bromofluorobenzene (S)	%	112	70-130	04/18/23 14:29	
Toluene-d8 (S)	%	104	70-130	04/18/23 14:29	

LABORATORY CONTROL SAMPLE: 2541014

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	50	52.4	105	74-130	
1,2-Dichloroethane	ug/L	50	50.9	102	70-137	
Benzene	ug/L	50	49.6	99	70-130	
Carbon tetrachloride	ug/L	50	56.1	112	80-146	
Chlorobenzene	ug/L	50	49.9	100	70-130	
Chloroform	ug/L	50	50.8	102	80-123	
Tetrachloroethene	ug/L	50	48.5	97	70-130	
Trichloroethene	ug/L	50	49.4	99	70-130	
Vinyl chloride	ug/L	50	39.5	79	63-134	
1,2-Dichlorobenzene-d4 (S)	%			102	70-130	
4-Bromofluorobenzene (S)	%			110	70-130	
Toluene-d8 (S)	%			104	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2541944 2541945

Parameter	Units	40260563001 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	<0.0058 mg/L	500	500	585	549	117	110	71-130	6	20	
1,2-Dichloroethane	ug/L	<0.0029 mg/L	500	500	536	549	107	110	70-137	2	20	
Benzene	ug/L	<0.0030 mg/L	500	500	533	532	107	106	70-130	0	20	
Carbon tetrachloride	ug/L	<0.0037 mg/L	500	500	606	614	121	123	80-146	1	20	
Chlorobenzene	ug/L	<0.0086 mg/L	500	500	528	544	106	109	70-130	3	20	

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2541944 2541945

Parameter	Units	40260563001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloroform	ug/L	<0.0050 mg/L	500	500	545	545	109	109	80-123	0	20	
Tetrachloroethene	ug/L	<0.0041 mg/L	500	500	517	517	103	103	70-130	0	20	
Trichloroethene	ug/L	<0.0032 mg/L	500	500	530	536	106	107	70-130	1	20	
Vinyl chloride	ug/L	<0.0017 mg/L	500	500	433	399	87	80	60-137	8	20	
1,2-Dichlorobenzene-d4 (S)	%						99	103	70-130			
4-Bromofluorobenzene (S)	%						107	108	70-130			
Toluene-d8 (S)	%						101	103	70-130			

MATRIX SPIKE SAMPLE: 2541946

Parameter	Units	40260724001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	<5.8	500	590	118	71-130	
1,2-Dichloroethane	ug/L	<2.9	500	544	109	70-137	
Benzene	ug/L	<3.0	500	545	109	70-130	
Carbon tetrachloride	ug/L	<3.7	500	608	122	80-146	
Chlorobenzene	ug/L	<8.6	500	534	107	70-130	
Chloroform	ug/L	<5.0	500	550	110	80-123	
Tetrachloroethene	ug/L	<4.1	500	509	102	70-130	
Trichloroethene	ug/L	<3.2	500	525	105	70-130	
Vinyl chloride	ug/L	<1.7	500	593	119	60-137	
1,2-Dichlorobenzene-d4 (S)	%				103	70-130	
4-Bromofluorobenzene (S)	%				109	70-130	
Toluene-d8 (S)	%				100	70-130	

MATRIX SPIKE SAMPLE: 2541947

Parameter	Units	40260832002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	<5.8	500	581	116	71-130	
1,2-Dichloroethane	ug/L	<2.9	500	516	103	70-137	
Benzene	ug/L	<3.0	500	522	104	70-130	
Carbon tetrachloride	ug/L	<3.7	500	595	119	80-146	
Chlorobenzene	ug/L	<8.6	500	520	104	70-130	
Chloroform	ug/L	<5.0	500	517	103	80-123	
Tetrachloroethene	ug/L	<4.1	500	505	101	70-130	
Trichloroethene	ug/L	<3.2	500	513	103	70-130	
Vinyl chloride	ug/L	<1.7	500	581	116	60-137	
1,2-Dichlorobenzene-d4 (S)	%				100	70-130	
4-Bromofluorobenzene (S)	%				107	70-130	
Toluene-d8 (S)	%				105	70-130	

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

QC Batch: 442693
QC Batch Method: EPA 3541
Analysis Method: EPA 8082A
Analysis Description: 8082 GCS PCB
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40260832002

METHOD BLANK: 2541683 Matrix: Solid
Associated Lab Samples: 40260832002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg	<15.2	50.0	04/18/23 19:05	
PCB-1221 (Aroclor 1221)	ug/kg	<15.2	50.0	04/18/23 19:05	
PCB-1232 (Aroclor 1232)	ug/kg	<15.2	50.0	04/18/23 19:05	
PCB-1242 (Aroclor 1242)	ug/kg	<15.2	50.0	04/18/23 19:05	
PCB-1248 (Aroclor 1248)	ug/kg	<15.2	50.0	04/18/23 19:05	
PCB-1254 (Aroclor 1254)	ug/kg	<15.2	50.0	04/18/23 19:05	
PCB-1260 (Aroclor 1260)	ug/kg	<15.2	50.0	04/18/23 19:05	
Decachlorobiphenyl (S)	%	79	38-95	04/18/23 19:05	
Tetrachloro-m-xylene (S)	%	79	50-99	04/18/23 19:05	

LABORATORY CONTROL SAMPLE: 2541684

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
PCB-1016 (Aroclor 1016)	ug/kg		<15.2			
PCB-1221 (Aroclor 1221)	ug/kg		<15.2			
PCB-1232 (Aroclor 1232)	ug/kg		<15.2			
PCB-1242 (Aroclor 1242)	ug/kg		<15.2			
PCB-1248 (Aroclor 1248)	ug/kg		<15.2			
PCB-1254 (Aroclor 1254)	ug/kg		<15.2			
PCB-1260 (Aroclor 1260)	ug/kg	500	417	83	71-104	
Decachlorobiphenyl (S)	%			82	38-95	
Tetrachloro-m-xylene (S)	%			82	50-99	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2541685 2541686

Parameter	Units	40260806001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
PCB-1016 (Aroclor 1016)	ug/kg	<0.018 mg/kg			<18.3	<18.3					20	
PCB-1221 (Aroclor 1221)	ug/kg	<0.018 mg/kg			<18.3	<18.3					20	
PCB-1232 (Aroclor 1232)	ug/kg	<18.3			<18.3	<18.3					20	
PCB-1242 (Aroclor 1242)	ug/kg	<18.3			<18.3	<18.3					20	
PCB-1248 (Aroclor 1248)	ug/kg	<18.3			<18.3	<18.3					20	
PCB-1254 (Aroclor 1254)	ug/kg	<18.3			<18.3	<18.3					20	
PCB-1260 (Aroclor 1260)	ug/kg	<18.3	602	602	442	428	73	71	42-109	3	20	
Decachlorobiphenyl (S)	%						71	70	38-95			
Tetrachloro-m-xylene (S)	%						72	70	50-99			

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

QC Batch: 442618
QC Batch Method: EPA 3510
Analysis Method: EPA 8270E
Analysis Description: 8270E TCLP MSSV
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40260832002

METHOD BLANK: 2541164 Matrix: Water
Associated Lab Samples: 40260832002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	<3.6	10.0	04/19/23 08:35	
2,4,5-Trichlorophenol	ug/L	<3.6	10.0	04/19/23 08:35	
2,4,6-Trichlorophenol	ug/L	<4.0	10.0	04/19/23 08:35	
2,4-Dinitrotoluene	ug/L	<2.4	10.0	04/19/23 08:35	
2-Methylphenol(o-Cresol)	ug/L	<1.5	10.0	04/19/23 08:35	
3&4-Methylphenol(m&p Cresol)	ug/L	<1.2	10.0	04/19/23 08:35	
Hexachloro-1,3-butadiene	ug/L	<3.3	10.0	04/19/23 08:35	
Hexachlorobenzene	ug/L	<5.0	20.0	04/19/23 08:35	
Hexachloroethane	ug/L	<3.0	10.0	04/19/23 08:35	
Nitrobenzene	ug/L	<3.1	10.0	04/19/23 08:35	
Pentachlorophenol	ug/L	<3.3	10.0	04/19/23 08:35	
Phenol	ug/L	<2.0	10.0	04/19/23 08:35	
Pyridine	ug/L	<14.6	20.0	04/19/23 08:35	
2,4,6-Tribromophenol (S)	%	91	10-142	04/19/23 08:35	
2-Fluorobiphenyl (S)	%	59	10-101	04/19/23 08:35	
Nitrobenzene-d5 (S)	%	82	10-120	04/19/23 08:35	
Phenol-d6 (S)	%	37	10-54	04/19/23 08:35	

METHOD BLANK: 2540972 Matrix: Water
Associated Lab Samples: 40260832002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	<17.8	50.0	04/19/23 09:40	
2,4,5-Trichlorophenol	ug/L	<18.2	50.0	04/19/23 09:40	
2,4,6-Trichlorophenol	ug/L	<20.0	50.0	04/19/23 09:40	
2,4-Dinitrotoluene	ug/L	<11.9	50.0	04/19/23 09:40	
2-Methylphenol(o-Cresol)	ug/L	<7.7	50.0	04/19/23 09:40	
3&4-Methylphenol(m&p Cresol)	ug/L	<6.0	50.0	04/19/23 09:40	
Hexachloro-1,3-butadiene	ug/L	<16.4	50.0	04/19/23 09:40	
Hexachlorobenzene	ug/L	<25.2	100	04/19/23 09:40	
Hexachloroethane	ug/L	<15.1	50.0	04/19/23 09:40	
Nitrobenzene	ug/L	<15.7	50.0	04/19/23 09:40	
Pentachlorophenol	ug/L	<16.3	50.0	04/19/23 09:40	
Phenol	ug/L	<9.8	50.0	04/19/23 09:40	
Pyridine	ug/L	<73.0	100	04/19/23 09:40	
2,4,6-Tribromophenol (S)	%	89	10-142	04/19/23 09:40	
2-Fluorobiphenyl (S)	%	56	10-101	04/19/23 09:40	
Nitrobenzene-d5 (S)	%	82	10-120	04/19/23 09:40	

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

METHOD BLANK: 2540972 Matrix: Water
Associated Lab Samples: 40260832002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenol-d6 (S)	%	36	10-54	04/19/23 09:40	

LABORATORY CONTROL SAMPLE: 2541165

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	50	29.1	58	32-130	
2,4,5-Trichlorophenol	ug/L	50	36.3	73	40-115	
2,4,6-Trichlorophenol	ug/L	50	39.3	79	33-115	
2,4-Dinitrotoluene	ug/L	50	41.3	83	61-130	
2-Methylphenol(o-Cresol)	ug/L	50	38.1	76	68-130	
3&4-Methylphenol(m&p Cresol)	ug/L	50	35.6	71	62-130	
Hexachloro-1,3-butadiene	ug/L	50	21.7	43	10-70	
Hexachlorobenzene	ug/L	50	41.5	83	68-130	
Hexachloroethane	ug/L	50	25.9	52	16-130	
Nitrobenzene	ug/L	50	46.7	93	70-130	
Pentachlorophenol	ug/L	50	32.1	64	32-93	
Phenol	ug/L	50	20.3	41	31-130	
Pyridine	ug/L	50	24.6	49	40-130	
2,4,6-Tribromophenol (S)	%			96	10-142	
2-Fluorobiphenyl (S)	%			63	10-101	
Nitrobenzene-d5 (S)	%			93	10-120	
Phenol-d6 (S)	%			41	10-54	

MATRIX SPIKE SAMPLE: 2541166

Parameter	Units	40260724001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	<17.8	250	156	62	32-130	
2,4,5-Trichlorophenol	ug/L	<18.2	250	157	63	40-115	
2,4,6-Trichlorophenol	ug/L	<20.0	250	138	55	33-115	
2,4-Dinitrotoluene	ug/L	<11.9	250	206	82	61-130	
2-Methylphenol(o-Cresol)	ug/L	<7.7	250	200	80	68-130	
3&4-Methylphenol(m&p Cresol)	ug/L	<6.0	250	185	74	62-130	
Hexachloro-1,3-butadiene	ug/L	<16.4	250	117	47	10-70	
Hexachlorobenzene	ug/L	<25.2	250	225	90	68-130	
Hexachloroethane	ug/L	<15.1	250	123	49	16-130	
Nitrobenzene	ug/L	<15.7	250	249	100	70-130	
Pentachlorophenol	ug/L	<16.3	250	107	43	32-93	
Phenol	ug/L	<9.8	250	108	43	31-130	
Pyridine	ug/L	<73.0	250	125	50	40-130	
2,4,6-Tribromophenol (S)	%				85	10-142	
2-Fluorobiphenyl (S)	%				66	10-101	
Nitrobenzene-d5 (S)	%				102	10-120	

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

MATRIX SPIKE SAMPLE: 2541166

Parameter	Units	40260724001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Phenol-d6 (S)	%				43	10-54	

MATRIX SPIKE SAMPLE: 2541167

Parameter	Units	40260832002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	<17.8	250	160	64	32-130	
2,4,5-Trichlorophenol	ug/L	<18.2	250	148	59	40-115	
2,4,6-Trichlorophenol	ug/L	<20.0	250	146	58	33-115	
2,4-Dinitrotoluene	ug/L	<11.9	250	224	90	61-130	
2-Methylphenol(o-Cresol)	ug/L	<7.7	250	180	72	68-130	
3&4-Methylphenol(m&p Cresol)	ug/L	<6.0	250	162	65	62-130	
Hexachloro-1,3-butadiene	ug/L	<16.4	250	117	47	10-70	
Hexachlorobenzene	ug/L	<25.2	250	212	85	68-130	
Hexachloroethane	ug/L	<15.1	250	139	55	16-130	
Nitrobenzene	ug/L	<15.7	250	240	96	70-130	
Pentachlorophenol	ug/L	<16.3	250	140	56	32-93	
Phenol	ug/L	<9.8	250	90.5	36	31-130	
Pyridine	ug/L	<73.0	250	122	49	40-130	
2,4,6-Tribromophenol (S)	%				80	10-142	
2-Fluorobiphenyl (S)	%				73	10-101	
Nitrobenzene-d5 (S)	%				97	10-120	
Phenol-d6 (S)	%				38	10-54	

MATRIX SPIKE SAMPLE: 2541168

Parameter	Units	40260772008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	<17.8	250	137	55	32-130	
2,4,5-Trichlorophenol	ug/L	<18.2	250	203	81	40-115	
2,4,6-Trichlorophenol	ug/L	<20.0	250	202	81	33-115	
2,4-Dinitrotoluene	ug/L	<11.9	250	203	81	61-130	
2-Methylphenol(o-Cresol)	ug/L	<7.7	250	208	83	68-130	
3&4-Methylphenol(m&p Cresol)	ug/L	<6.0	250	164	66	62-130	
Hexachloro-1,3-butadiene	ug/L	<16.4	250	85.5	34	10-70	
Hexachlorobenzene	ug/L	<25.2	250	203	81	68-130	
Hexachloroethane	ug/L	<15.1	250	107	43	16-130	
Nitrobenzene	ug/L	<15.7	250	215	86	70-130	
Pentachlorophenol	ug/L	<16.3	250	116	46	32-93	
Phenol	ug/L	<9.8	250	102	41	31-130	
Pyridine	ug/L	<73.0	250	116	47	40-130	
2,4,6-Tribromophenol (S)	%				97	10-142	
2-Fluorobiphenyl (S)	%				67	10-101	
Nitrobenzene-d5 (S)	%				85	10-120	
Phenol-d6 (S)	%				43	10-54	

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

QC Batch: 442479
QC Batch Method: WI MOD DRO
Analysis Method: WI MOD DRO
Analysis Description: WIDRO GCS
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40260832001

METHOD BLANK: 2540858 Matrix: Solid
Associated Lab Samples: 40260832001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics	mg/kg	<1.3	4.3	04/18/23 06:45	

LABORATORY CONTROL SAMPLE & LCSD: 2540859 2540860

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Range Organics	mg/kg	40	31.1	35.8	78	90	70-120	14	20	

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

QC Batch: 442791
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40260832001

SAMPLE DUPLICATE: 2542214

Parameter	Units	40260858001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	5.6	5.5	1	10	

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

QC Batch: 769151
QC Batch Method: EPA 9076
Analysis Method: EPA 9076
Analysis Description: 9076 Total Chlorine
Laboratory: Pace Analytical Services - Asheville

Associated Lab Samples: 40260832002

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3993210 3993211

Parameter	Units	92662461005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chlorine, Total	%	ND	0.05	0.05	0.054	0.054	100	99	80-120	0	20	N2

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

QC Batch: 443001
QC Batch Method: EPA 9095
Analysis Method: EPA 9095
Analysis Description: 9095 PAINT FILTER LIQUID TEST
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40260832001, 40260832002

METHOD BLANK: 2543618 Matrix: Solid
Associated Lab Samples: 40260832001, 40260832002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Free Liquids	no units	FAIL		04/21/23 13:57	

LABORATORY CONTROL SAMPLE: 2543619

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Free Liquids	no units		PASS			

SAMPLE DUPLICATE: 2543620

Parameter	Units	40260948001 Result	Dup Result	RPD	Max RPD	Qualifiers
Free Liquids	no units	PASS	PASS			

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QUALITY CONTROL DATA

Project: 542579
Pace Project No.: 40260832

QC Batch: 443090
QC Batch Method: SM 2710F
Analysis Method: SM 2710F
Analysis Description: Specific Gravity /Bulk Density
Laboratory: Pace Analytical Services - Green Bay

Associated Lab Samples: 40260832002

SAMPLE DUPLICATE: 2544334

Parameter	Units	40261183001 Result	Dup Result	RPD	Max RPD	Qualifiers
Density	g/mL	1.0	1.0	2	20	
Specific Gravity	no units	1.0	1.0	2	20	

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QUALIFIERS

Project: 542579
Pace Project No.: 40260832

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.

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TNI - The NELAC Institute.

SAMPLE QUALIFIERS

Sample: 40260832001

[1] Sample container used for ZHE had headspace.

[2] Incorrect container used for sample collection for ZHE analysis. Ziploc Bag.

Sample: 40260832002

[1] Incorrect container used for sample collection for ZHE analysis. Ziploc Bag.

[2] Sample container used for ZHE had headspace.

BATCH QUALIFIERS

Batch: 442686

[1] coarse and fine sieved 4/19/23

ANALYTE QUALIFIERS

1q	The method requires 100g of sample for analysis. As a result of sample matrix (or insufficient sample volume availible), only 39.222 g of sample was used during this analysis. It is the user's responsibility to verify the acceptance of this data for intended use.
DC	Chromatographic pattern inconsistent with typical Diesel Fuel.
GO	Early and late peaks present outside the GRO window.
H1	Analysis conducted outside the recognized method holding time.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
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.
P6	Matrix spike recovery was outside laboratory control limits due to a parent sample concentration notably higher than the spike level.

PRELIMINARY

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

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 542579
Pace Project No.: 40260832

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40260832002	**WC-2**	EPA 3541	442693	EPA 8082A	442694
40260832001	**WC-1**	WI MOD DRO	442479	WI MOD DRO	442548
40260832001	**WC-1**	TPH GRO/PVOC WI ext.	442998	WI MOD GRO	442999
40260832001	**WC-1**	EPA 3015A	442660	EPA 6010D	442753
40260832002	**WC-2**	EPA 3015A	442660	EPA 6010D	442753
40260832001	**WC-1**	EPA 7470	442657	EPA 7470	442696
40260832002	**WC-2**	EPA 7470	442657	EPA 7470	442696
40260832002	**WC-2**	EPA 3510	442618	EPA 8270E	442675
40260832001	**WC-1**	EPA 8260	442558		
40260832002	**WC-2**	EPA 8260	442558		
40260832001	**WC-1**	ASTM D2974-87	442791		
40260832002	**WC-2**	EPA 9076	769151		
40260832001	**WC-1**	EPA 9095	443001		
40260832002	**WC-2**	EPA 9095	443001		
40260832001	**WC-1**	ASTM D6913	442686		
40260832002	**WC-2**	SM 2710F	443090		

PRELIMINARY

This report shall not be reproduced, except in full,
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Appendix D

Landfill Gas Extraction System

D-1 – Surface Emission Monitoring
D-2 – System Downtime
D-3 – System Maintenance
D-4 – LFG Wellhead Balance Data

D-1 – Surface Emission Monitoring

Building a Better World for All of Us®

November 15, 2023

RE: La Crosse County Solid Waste Management Facility
Surface Emission Monitoring Report
FID 632063630
SEH No. LACSW 171049 14.00

Jadd Stilwell - Solid Waste Director
La Crosse County Landfill
3200 Berlin Drive
La Crosse, WI 54601

Dear Mr. Stilwell:

Short Elliott Hendrickson Inc. (SEH®) is submitting this letter on behalf of the La Crosse County Solid Waste Management Facility (La Crosse County) to document the results of Surface Emission Monitoring (SEM) performed at the La Crosse County Landfill (WDNR Lic. No 3253) on October 26, 2023.

QUALITY ASSURANCE/QUALITY CONTROL

Surface methane monitoring was performed in general accordance with EPA Method 21 and requirements I.A.2.b. (18-20) of La Crosse County's Air Operation Permit 63206363A-P11. SEH used a Bascom Turner Instruments, Inc. Method 21 Gas-Rover™ to measure surface methane concentrations. The unit was calibrated in the field using the manufacturer's recommended procedures and a 500 parts per million by volume (ppm_v) methane calibration standard. Upwind ambient air was utilized as the zero gas. Field equipment calibration precision testing and response time testing passed EPA Method 21 criteria. Calibration precision and response time was measured and recorded prior to performing surface monitoring. Calibration precision was also verified following completion of field activities. Results of the calibrations and monitoring are provided in Attachment A.

SURFACE METHANE MONITORING RESULTS

During the October 26, 2023 annual SEM, methane was not detected at a concentration equal to or greater than 500 ppm_v above measured background concentrations at any location with waste in place for a period of 5 years or more if active; or 2 years or more if closed or at final grade.

Attachment B provides a figure showing the traverse route followed. Special attention was given to areas of new vegetation, rill formations, and cover penetrations. Per regulations, all surface penetrations were checked for surface emissions and areas of active filling, construction activities and steep slopes were avoided due to safety concerns. The landfill was well vegetated and no areas of significant landfill cover issues were observed.

FUTURE SURFACE METHANE MONITORING PLAN

The next surface monitoring event is tentatively scheduled to be completed again during Summer/Fall 2024. A brief report summarizing the results of the 2024 surface monitoring will be submitted to La Crosse County within 60 days of completing the field monitoring.

CLOSING

In accordance with La Crosse County Landfill air permit, a surface emission monitoring scan was completed on October 26, 2023 and this document summarizes the results of the monitoring. The October 26, 2023 SEM event indicated surface emission concentrations were below permissible levels: meeting the compliance requirements of the air permit.

If you have any questions regarding this submittal, please contact me at 608.498.4844.

Sincerely,

SHORT ELLIOTT HENDRICKSON INC.

Brian L. Kent, CHMM
Project Manager

BLK/blk/PAS
Attachments

c: Lucas Jewell, WDNR-Air Management Engineer – Electronic File
Jackie Davis, La Crosse County Solid Waste – Electronic File

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Attachment A

Surface Methane Monitoring Log

La Crosse County Landfill
Surface Emission Monitoring Log

Site Information

User/Date:	Veronica Aranda, October 26, 2023
Weather Conditions:	Cloudy, Raining, 54F, 9mph E, 29.88 Hg

Equipment Calibration Data

Make and Model of Equipment:	Bascom Turner Method 21 Gas Rover
Calibration Gas/Concentration:	Methane/500 ppmv

Precision Test: Test Concentration w/ 500 ppmv methane. Method requires average precision error be equal to or less than 10% of calibration standard value.

Date	Test 1		Test 2		Test 3		**Average**	
	ppmv	%error	ppmv	%error	ppmv	%error	ppmv	%error
10/26/23	500		501		500		500.3	<1%
10/26/23 post	501							

Response Time: Test Concentration w/ 500 ppm methane. Method requires response time to be less than 30 seconds to reach 90% of calibration standards (450 ppm).

Date	Test 1 RT (Sec.)	Test 2 RT (Sec.)	Test 3 RT (Sec.)	Average RT (Sec.)
10/26/23	2.5	2	2.5	2.33
10/26/23 post	2.5			

Surface Emission Scan

Date/User	Veronica Aranda, October 26, 2023
Weather conditions (Temp., wind speed, direction, surface conditions, etc)	Cloudy, Raining, 54F, 9mph E, 29.88 Hg. Surface vegetated
Up wind BG conc. (ppmv)	0
Down wind BG conc. (ppmv)	0
Calibration check following completion (500 ppmv standard)	See precision test

Exceedance Concentration (>500 ppmv)	Location/Notes
None	N/A

Attachment B
Traverse Route

NOTES:

1. CONTOUR INTERVAL IS 2-FOOT.
2. EXISTING GRADE SHOWN UPDATED WITH SURVEY BY PARAGON ASSOCIATES, INC. ON JULY 3, 2022.
3. MONITORING PLAN SUBJECT TO CHANGE BASED ON FILLING AND WASTE RELOCATION OPERATIONS AT THE TIME OF MONITORING EVENT. AS ALLOWED BY PERMIT CONDITION 1.A.2.b(18)(d). AREAS WITH STEEP SLOPES OR OTHER DANGEROUS AREAS MAY BE EXCLUDED FROM THE MONITORING PLAN.
4. SURFACE EMISSION MONITORING CONDUCTED ON OCTOBER 26, 2023.

LEGEND

- 830 — EXISTING GRADE CONTOUR
- EUG — UNDERGROUND ELECTRIC LINE
- EOH — OVERHEAD ELECTRIC LINE
- T-BUR — UNDERGROUND TELEPHONE
- FO — FIBER OPTIC
- TV-BUR — UNDERGROUND CHARTER CABLE
- WATER SUPPLY PIPE
- SANITARY SEWER PIPE
- STORM WATER PIPE
- LL — LEACHATE PIPE
- FM — LEACHATE FORCEMAIN
- G — GAS PIPE
- LFG — LANDFILL GAS PIPE
- ACM — COMPRESSED AIR PIPE
- C — CONDENSATE PIPE
- DRAIN TILE PIPE
- XC — FENCE
- CLOSED DEMOLITION SITE LIMITS
- APPROVED WASTE LIMITS
- PHASED LANDFILL LIMITS
- PERMANENT EASEMENT
- PROPERTY LINE
- PAVED ROAD
- UNPAVED ROAD
- PB — PUMP BUILDING
- ET — ELECTRICAL TRANSFORMER
- PP — UTILITY POLE
- CO-2A — CLEANOUT PIPE
- MH-1 — MANHOLE
- LHW-8A — LEACHATE HEAD WELL
- GV — GAS VENT
- GW-9 — LANDFILL GAS WELL
- GP-1 — GAS PROBE
- MW-71 — GROUNDWATER MONITORING WELL
- SURFACE EMISSION MONITORING ROUTE

N

100 0 100 200
scale 50 feet

SEH Project	LACSW 171063	Rev.#	Revision Issue Description	Date	Rev.#	Revision Issue Description	Date	
Drawn By	TTR	.			.			
Designed By	TTR	.			.			
Checked By	BLK	.			.			

SEH
PHONE: 608.782.3161
329 JAY STREET, SUITE 301
LA CROSSE, WI 54601-4034
www.sehinc.com

PLANS PREPARED FOR:

LA CROSSE COUNTY SOLID WASTE DEPT
3200 BERLIN DRIVE
LA CROSSE, WI 54601

LA CROSSE COUNTY LANDFILL
2023 ANNUAL MONITORING

2023 SURFACE EMISSION TRAVERSE ROUTE

Save: 11/13/2023 3:37 PM tromanko Plot: 11/13/2023 3:40 PM X:\KOLL\LACSW\171063\5-final-dsgn\51-drawings\85-HeavyCiv\2023 SEMP\SHEETS\LA171063FIG1.dwg

D-2 – System Downtime

G2E Equipment Downtime

*** Monitoring of the landfill gas collection system is conducted continuously. There were no periods when the landfill gas collection system was down for a period exceeding 5 days. Unless recorded in the Semi-Annual Monitoring Reports as part of the Air Permit submittal requirements.**

2023	Condition/Alarm	Collection System Operating/Description	Approx. Hrs No Flare
1.4	System Down	Condensate drain line	1
1.13	Engine Down	Spark plug change out	1
1.16-1.17	Engine Down	Air bubble on engine side	3
1.19-1.20	System Down	Condensate drain line	1
2.8	System Down		2
2.15-2.16	System Down	Condensate drain line & engine Maintenance	11
3.23	System Down	Spark plug change out	1
4.7-4.11	System Down	Transducer failure on chiller and fault on engine.	61
4.21	System Down	Spark plug change out	1
5.15	System Down	Maintenance, oil change	2
5.22	Engine Down	Gas setpoint issue	1
6.1	Engine Down	Safety Sensor	1
6.3	Engine Down	Control Issue	1
6.16	System Down	Condensate Drain line	7
6.20	Engine Down	Control Issue	1
6.30	Engine Down	Spark plug change out	4
7.3-7.5	Engine Down	Engine Issues and maintenance	17
7.18	Engine Down	Engine Issue	4
7.20-7.21	System Down	Comm Issues	12
7.24	Engine Down	Engine Issue	2
8.10-8.11	Engine Down	Gas quality	0
8.14-8.26	Engine Down	Maintenance	245
8.28	Engine Down	Maintenance	2
8.30-8.31	Engine Down	Gas sensor	31
9.01-9.12	Engine Down	Part issue-wiring	202
9.22-25	System Down	Stack testing/condensate issue	69
10.6-10.9	System Down		
11.15	System Down	Flow meter battery failure	1
11.22-11.30	System Down	Seal and ingnitor issues gundersen, shutdown due to flare tech.	142
12.01	System Down	Seal and ingnitor issues gundersen, shutdown due to flare tech.	6
12.12-12.15	Engine Down	Water Pump failure on engine	56
12.26.12.27	Engine Down	Engine issue	21

D-3 – System Maintenance

Annual Inspection Log

Malfunction, Prevention, and Abatement Plan

La Crosse County Solid Waste Department

La Crosse, Wisconsin

Date of Inspection: **Inspector Name:**

11/22/2023 **Jackie Davis/John Zink**

"X" when complete	Inspection/Maintenance Activity	Notes/Comments or Actions Taken
Landfill Gas Collection System		
x	Send LFG field meter used for monthly wellfield monitoring (GEM 5000), in to factory (LANDTEC) for annual check and calibration, as recommended by manufacturer.	
x	Surface methane emissions are checked annually in accordance with the air permit. Corrective action is taken if emissions are greater than permit requirements.	
LFG Blower System		
X	Check blower motor alignment.	
X	Check coupling alignments and realign as necessary.	
X	Check nuts & bolts and tighten as necessary.	
X	Check wire connection for corrosion and tightness.	
X	Check rubber expansion joints for wear.	
X	Calibrate ST-98 flow meter. (Send to lab)	
LFG Flare Combustion System		
X	Inspect pilot gas pressure gauge. Check working bearings and teeth of the movement mechanism; clean if necessary.	
X	Confirm the correct operation of all thermocouple assemblies. Replace all if showing signs of incorrect operation.	
X	Inspect the pilot assembly, ignition rod, electrode, and insulators for damage. Repair or replace if necessary.	
X	Inspect and clean pilot gas solenoid valve (including valve strainer or filter) and internal valve parts. If parts area worn or damaged, install a complete ASCO Rebuild Kit.	
X	Inspect pilot gas pressure reducing regulator.	
X	Confirm the control logic is functioning properly and all input and output signals are correct.	
X	Confirm the integrity of conduit seals.	
X	Verify the supply power voltage.	
X	Verify power to motor starters.	
X	During operation, measure gas blower line current and voltage.	
X	Calibrate circular chart recorder (4-20mA)	
G2E Chromatograph		
X	Calibration of gas chromatograph to cal/supply gas.	

Semi-Annual Inspection Log

Malfunction, Prevention, and Abatement Plan
La Crosse County Solid Waste Department
La Crosse, Wisconsin

Date of Inspection: **Inspector Name:**

5/1/2023 **Jackie Davis**

"X" when complete	Inspection/Maintenance Activity	Notes/Comments or Actions Taken
LFG Flare Combustion System		
x	Remove the flame arrester element for cleaning if pressure differential exceeds one inch H2O	
x	Inspect all flanges and connections for indications of leaking. Repair or replace if necessary.	
x	Verify all safety shutdown devices are working properly. (See JZ manual, Section IX, “System Testing”)	
x	Remove and clean any filter elements or mesh strainers.	
G2E Blower/Compressor, Gas Conditioning Skid and Glycol Chiller		
x	Clean all strainers.	
x	Clean glycol chiller condenser.	
x	Check lamps on gas conditioning system control panel with push to test feature.	
x	Check blower belt and re-tension as necessary.	
x	Change oil on blower.	
x	Grease bearings on each end of blower motor.	
x	Verify pressure differential in knock out pot (PDI 321) and clean if differential exceeds 5 inWC.	
x	Verify glycol system operating pressure and re-fill as necessary.	
G2E Blower/Compressor, Glycol Chiller and Control Panels		
x	Verify all safety shutdown devices are working properly.	
x	Verify all auto change over systems are operating properly.	
G2E Chromatograph		
x	Visually inspect all filter assemblies.	
x	Verify start-up and shutdown procedures.	
x	Inspect all stainless steel gas supply lines for signs of wear.	

Semi-Annual Inspection Log

Malfunction, Prevention, and Abatement Plan
La Crosse County Solid Waste Department
La Crosse, Wisconsin

Date of Inspection: **Inspector Name:**

11/15/2023 **Jackie Davis**

"X" when complete	Inspection/Maintenance Activity	Notes/Comments or Actions Taken
LFG Flare Combustion System		
x	Remove the flame arrester element for cleaning if pressure differential exceeds one inch H2O	
x	Inspect all flanges and connections for indications of leaking. Repair or replace if necessary.	
x	Verify all safety shutdown devices are working properly. (See JZ manual, Section IX, “System Testing”)	
x	Remove and clean any filter elements or mesh strainers.	
G2E Blower/Compressor, Gas Conditioning Skid and Glycol Chiller		
x	Clean all strainers.	
x	Clean glycol chiller condenser.	
x	Check lamps on gas conditioning system control panel with push to test feature.	
x	Check blower belt and re-tension as necessary.	
x	Change oil on blower.	
x	Grease bearings on each end of blower motor.	
x	Verify pressure differential in knock out pot (PDI 321) and clean if differential exceeds 5 inWC.	
x	Verify glycol system operating pressure and re-fill as necessary.	
G2E Blower/Compressor, Glycol Chiller and Control Panels		
x	Verify all safety shutdown devices are working properly.	
x	Verify all auto change over systems are operating properly.	
G2E Chromatograph		
x	Visually inspect all filter assemblies.	
x	Verify start-up and shutdown procedures.	
x	Inspect all stainless steel gas supply lines for signs of wear.	

Monthly Inspection Log

Malfunction, Prevention, and Abatement Plan
La Crosse County Solid Waste Department
La Crosse, Wisconsin

Date of Inspection: 1/31/2023 **Inspector Name:** Jackie Davis

"X" when complete	Inspection/Maintenance Activity	Notes/Comments or Actions Taken
Landfill Gas Collection System		
X	Calibrate LFG field meters used for monthly well field monitoring (Land GEM 5000), as applicable	Complete as part of Gas Balance
X	Monitor and inspect each gas collection well for equipment malfunctions, leaks in gas well head piping, sample ports, leachate pump condition, cap cracks, vegetation distress and other signs of needed maintenance.	Complete as part of Gas Balance
LFG Blower System		
X	Purge bearings with new grease to remove condensation if needed. Use caution as excessive pressure can damage the seals (see JZ manual, tab 11, p.5).	
X	Check for unusual vibrations or noises, locate and repair. If system has not been operated, bump blowers to confirm operation.	
X	Exercise all valves to ensure proper operation.	
LFG Flare Combustion System		
X	Confirm panel enclosure heater is functioning. (September - April)	
X	Inspect any gauges and valves for deterioration	
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	
X	Change temperature chart recorder paper and verify chart values are accurate based off of ST-98 digital display readings. Confirm thermocouple readings match ambient temperatures.	
X	Operate pilot gas solenoid valve to insure proper opening and closing. Verify pilot ignition.	
X	Visually inspect the flare stack and windshield for damage or deterioration.	
G2E Blower/Compressor, Glycol Chiller and Control Panels		
X	Confirm glycol choller control panel enclosure fan and temperature controllers are functioning and air filter is clean.	
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	

Monthly Inspection Log

Malfunction, Prevention, and Abatement Plan
La Crosse County Solid Waste Department
La Crosse, Wisconsin

Date of Inspection: **2/21/2023** **Inspector Name:** **Jackie Davis**

"X" when complete	Inspection/Maintenance Activity	Notes/Comments or Actions Taken
Landfill Gas Collection System		
X	Calibrate LFG field meters used for monthly well field monitoring (Land GEM 5000), as applicable	Complete as part of Gas Balance
X	Monitor and inspect each gas collection well for equipment malfunctions, leaks in gas well head piping, sample ports, leachate pump condition, cap cracks, vegetation distress and other signs of needed maintenance.	Complete as part of Gas Balance
LFG Blower System		
X	Purge bearings with new grease to remove condensation if needed. Use caution as excessive pressure can damage the seals (see JZ manual, tab 11, p.5).	
X	Check for unusual vibrations or noises, locate and repair. If system has not been operated, bump blowers to confirm operation.	
X	Exercise all valves to ensure proper operation.	
LFG Flare Combustion System		
X	Confirm panel enclosure heater is functioning. (September - April)	
X	Inspect any gauges and valves for deterioration	
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	
X	Change temperature chart recorder paper and verify chart values are accurate based off of ST-98 digital display readings. Confirm thermocouple readings match ambient temperatures.	
X	Operate pilot gas solenoid valve to insure proper opening and closing. Verify pilot ignition.	
X	Visually inspect the flare stack and windshield for damage or deterioration.	
G2E Blower/Compressor, Glycol Chiller and Control Panels		
X	Confirm glycol choller control panel enclosure fan and temperature controllers are functioning and air filter is clean.	
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	

Monthly Inspection Log

Malfunction, Prevention, and Abatement Plan
La Crosse County Solid Waste Department
La Crosse, Wisconsin

Date of Inspection: **3/28/2023** **Inspector Name:** **Jackie Davis**

"X" when complete	Inspection/Maintenance Activity	Notes/Comments or Actions Taken
Landfill Gas Collection System		
X	Calibrate LFG field meters used for monthly well field monitoring (Land GEM 5000), as applicable	Complete as part of Gas Balance
X	Monitor and inspect each gas collection well for equipment malfunctions, leaks in gas well head piping, sample ports, leachate pump condition, cap cracks, vegetation distress and other signs of needed maintenance.	Complete as part of Gas Balance
LFG Blower System		
X	Purge bearings with new grease to remove condensation if needed. Use caution as excessive pressure can damage the seals (see JZ manual, tab 11, p.5).	
X	Check for unusual vibrations or noises, locate and repair. If system has not been operated, bump blowers to confirm operation.	
X	Exercise all valves to ensure proper operation.	
LFG Flare Combustion System-Not running G-2-E Enging currently back online		
X	Confirm panel enclosure heater is functioning. (September - April)	
X	Inspect any gauges and valves for deterioration	
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	
X	Change temperature chart recorder paper and verify chart values are accurate based off of ST-98 digital display readings. Confirm thermocouple readings match ambient temperatures.	
X	Operate pilot gas solenoid valve to insure proper opening and closing. Verify pilot ignition.	
X	Visually inspect the flare stack and windshield for damage or deterioration.	
G2E Blower/Compressor, Glycol Chiller and Control Panels		
X	Confirm glycol choller control panel enclosure fan and temperature controllers are functioning and air filter is clean.	
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	

Monthly Inspection Log

Malfunction, Prevention, and Abatement Plan
La Crosse County Solid Waste Department
La Crosse, Wisconsin

Date of Inspection: **Inspector Name:**
4/28/2023 **Jackie Davis and Melisa Goergen**

"X" when complete	Inspection/Maintenance Activity	Notes/Comments or Actions Taken
Landfill Gas Collection System		
X	Calibrate LFG field meters used for monthly well field monitoring (Land GEM 5000), as applicable	Complete as part of Gas Balance
X	Monitor and inspect each gas collection well for equipment malfunctions, leaks in gas well head piping, sample ports, leachate pump condition, cap cracks, vegetation distress and other signs of needed maintenance.	Complete as part of Gas Balance
LFG Blower System		
X	Purge bearings with new grease to remove condensation if needed. Use caution as excessive pressure can damage the seals (see JZ manual, tab 11, p.5).	
X	Check for unusual vibrations or noises, locate and repair. If system has not been operated, bump blowers to confirm operation.	
X	Exercise all valves to ensure proper operation.	
LFG Flare Combustion System		
X	Confirm panel enclosure heater is functioning. (September - April)	
X	Inspect any gauges and valves for deterioration	
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	
X	Change temperature chart recorder paper and verify chart values are accurate based off of ST-98 digital display readings. Confirm thermocouple readings match ambient temperatures.	
X	Operate pilot gas solenoid valve to insure proper opening and closing. Verify pilot ignition.	
X	Visually inspect the flare stack and windshield for damage or deterioration.	
G2E Blower/Compressor, Glycol Chiller and Control Panels		
X	Confirm glycol choller control panel enclosure fan and temperature controllers are functioning and air filter is clean.	
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	

Monthly Inspection Log

Malfunction, Prevention, and Abatement Plan
La Crosse County Solid Waste Department
La Crosse, Wisconsin

Date of Inspection: **Inspector Name:**
5/19/2023 **Jackie Davis, Melisa Goergen , and Jadd Stilwell**

"X" when complete	Inspection/Maintenance Activity	Notes/Comments or Actions Taken
Landfill Gas Collection System		
X	Calibrate LFG field meters used for monthly well field monitoring (Land GEM 5000), as applicable	Complete as part of Gas Balance
X	Monitor and inspect each gas collection well for equipment malfunctions, leaks in gas well head piping, sample ports, leachate pump condition, cap cracks, vegetation distress and other signs of needed maintenance.	Complete as part of Gas Balance
LFG Blower System		
X	Purge bearings with new grease to remove condensation if needed. Use caution as excessive pressure can damage the seals (see JZ manual, tab 11, p.5).	
X	Check for unusual vibrations or noises, locate and repair. If system has not been operated, bump blowers to confirm operation.	
X	Exercise all valves to ensure proper operation.	
LFG Flare Combustion System		
X	Confirm panel enclosure heater is functioning. (September - April)	
X	Inspect any gauges and valves for deterioration	
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	
X	Change temperature chart recorder paper and verify chart values are accurate based off of ST-98 digital display readings. Confirm thermocouple readings match ambient temperatures.	
X	Operate pilot gas solenoid valve to insure proper opening and closing. Verify pilot ignition.	
X	Visually inspect the flare stack and windshield for damage or deterioration.	
G2E Blower/Compressor, Glycol Chiller and Control Panels		
X	Confirm glycol choller control panel enclosure fan and temperature controllers are functioning and air filter is clean.	
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	

Monthly Inspection Log

Malfunction, Prevention, and Abatement Plan
La Crosse County Solid Waste Department
La Crosse, Wisconsin

Date of Inspection: 6/9/2023 **Inspector Name:** Jackie Davis

"X" when complete	Inspection/Maintenance Activity	Notes/Comments or Actions Taken
Landfill Gas Collection System		
X	Calibrate LFG field meters used for monthly well field monitoring (Land GEM 5000), as applicable	Complete as part of Gas Balance
X	Monitor and inspect each gas collection well for equipment malfunctions, leaks in gas well head piping, sample ports, leachate pump condition, cap cracks, vegetation distress and other signs of needed maintenance.	Complete as part of Gas Balance
LFG Blower System		
X	Purge bearings with new grease to remove condensation if needed. Use caution as excessive pressure can damage the seals (see JZ manual, tab 11, p.5).	
X	Check for unusual vibrations or noises, locate and repair. If system has not been operated, bump blowers to confirm operation.	
X	Exercise all valves to ensure proper operation.	
LFG Flare Combustion System		
X	Confirm panel enclosure heater is functioning. (September - April)	
X	Inspect any gauges and valves for deterioration	
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X	Change temperature chart recorder paper and verify chart values are accurate based off of ST-98 digital display readings. Confirm thermocouple readings match ambient temperatures.	
X	Operate pilot gas solenoid valve to insure proper opening and closing. Verify pilot ignition.	
X	Visually inspect the flare stack and windshield for damage or deterioration.	
G2E Blower/Compressor, Glycol Chiller and Control Panels		
X	Confirm glycol choller control panel enclosure fan and temperature controllers are functioning and air filter is clean.	
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	

Monthly Inspection Log

Malfunction, Prevention, and Abatement Plan
La Crosse County Solid Waste Department
La Crosse, Wisconsin

Date of Inspection: **Inspector Name:**
7/12/2023 **Jackie Davis and John Zink technician semi-annual maintenance**

"X" when complete	Inspection/Maintenance Activity	Notes/Comments or Actions Taken
Landfill Gas Collection System		
X	Calibrate LFG field meters used for monthly well field monitoring (Land GEM 5000), as applicable	Complete as part of Gas Balance
X	Monitor and inspect each gas collection well for equipment malfunctions, leaks in gas well head piping, sample ports, leachate pump condition, cap cracks, vegetation distress and other signs of needed maintenance.	Complete as part of Gas Balance
LFG Blower System		
X	Purge bearings with new grease to remove condensation if needed. Use caution as excessive pressure can damage the seals (see JZ manual, tab 11, p.5).	
X	Check for unusual vibrations or noises, locate and repair. If system has not been operated, bump blowers to confirm operation.	
X	Exercise all valves to ensure proper operation.	
LFG Flare Combustion System		
X	Confirm panel enclosure heater is functioning. (September - April)	
X	Inspect any gauges and valves for deterioration	
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	
X	Change temperature chart recorder paper and verify chart values are accurate based off of ST-98 digital display readings. Confirm thermocouple readings match ambient temperatures.	
X	Operate pilot gas solenoid valve to insure proper opening and closing. Verify pilot ignition.	
X	Visually inspect the flare stack and windshield for damage or deterioration.	
G2E Blower/Compressor, Glycol Chiller and Control Panels		
X	Confirm glycol choller control panel enclosure fan and temperature controllers are functioning and air filter is clean.	Cleaned
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	

Monthly Inspection Log

Malfunction, Prevention, and Abatement Plan
La Crosse County Solid Waste Department
La Crosse, Wisconsin

Date of Inspection: 8/8/2023 **Inspector Name:** Jackie Davis

"X" when complete	Inspection/Maintenance Activity	Notes/Comments or Actions Taken
Landfill Gas Collection System		
X	Calibrate LFG field meters used for monthly well field monitoring (Land GEM 5000), as applicable	Complete as part of Gas Balance
X	Monitor and inspect each gas collection well for equipment malfunctions, leaks in gas well head piping, sample ports, leachate pump condition, cap cracks, vegetation distress and other signs of needed maintenance.	Complete as part of Gas Balance
LFG Blower System		
X	Purge bearings with new grease to remove condensation if needed. Use caution as excessive pressure can damage the seals (see JZ manual, tab 11, p.5).	
X	Check for unusual vibrations or noises, locate and repair. If system has not been operated, bump blowers to confirm operation.	
X	Exercise all valves to ensure proper operation.	
LFG Flare Combustion System		
X	Confirm panel enclosure heater is functioning. (September - April)	
X	Inspect any gauges and valves for deterioration	
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	
X	Change temperature chart recorder paper and verify chart values are accurate based off of ST-98 digital display readings. Confirm thermocouple readings match ambient temperatures.	
X	Operate pilot gas solenoid valve to insure proper opening and closing. Verify pilot ignition.	
X	Visually inspect the flare stack and windshield for damage or deterioration.	
G2E Blower/Compressor, Glycol Chiller and Control Panels		
X	Confirm glycol choller control panel enclosure fan and temperature controllers are functioning and air filter is clean.	
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	

Monthly Inspection Log

Malfunction, Prevention, and Abatement Plan
La Crosse County Solid Waste Department
La Crosse, Wisconsin

Date of Inspection: **9/22/2023** **Inspector Name:** **Jackie Davis**

"X" when complete	Inspection/Maintenance Activity	Notes/Comments or Actions Taken
Landfill Gas Collection System		
X	Calibrate LFG field meters used for monthly well field monitoring (Land GEM 5000), as applicable	Complete as part of Gas Balance
X	Monitor and inspect each gas collection well for equipment malfunctions, leaks in gas well head piping, sample ports, leachate pump condition, cap cracks, vegetation distress and other signs of needed maintenance.	Complete as part of Gas Balance
LFG Blower System		
X	Purge bearings with new grease to remove condensation if needed. Use caution as excessive pressure can damage the seals (see JZ manual, tab 11, p.5).	
X	Check for unusual vibrations or noises, locate and repair. If system has not been operated, bump blowers to confirm operation.	
X	Exercise all valves to ensure proper operation.	
LFG Flare Combustion System		
X	Confirm panel enclosure heater is functioning. (September - April)	
X	Inspect any gauges and valves for deterioration	
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	
X	Change temperature chart recorder paper and verify chart values are accurate based off of ST-98 digital display readings. Confirm thermocouple readings match ambient temperatures.	
X	Operate pilot gas solenoid valve to insure proper opening and closing. Verify pilot ignition.	
X	Visually inspect the flare stack and windshield for damage or deterioration.	
G2E Blower/Compressor, Glycol Chiller and Control Panels		
X	Confirm glycol choller control panel enclosure fan and temperature controllers are functioning and air filter is clean.	
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	

Monthly Inspection Log

Malfunction, Prevention, and Abatement Plan
La Crosse County Solid Waste Department
La Crosse, Wisconsin

Date of Inspection: 10/24/2023 **Inspector Name:** Jackie Davis

"X" when complete	Inspection/Maintenance Activity	Notes/Comments or Actions Taken
Landfill Gas Collection System		
X	Calibrate LFG field meters used for monthly well field monitoring (Land GEM 5000), as applicable	Complete as part of Gas Balance
X	Monitor and inspect each gas collection well for equipment malfunctions, leaks in gas well head piping, sample ports, leachate pump condition, cap cracks, vegetation distress and other signs of needed maintenance.	Complete as part of Gas Balance
LFG Blower System		
X	Purge bearings with new grease to remove condensation if needed. Use caution as excessive pressure can damage the seals (see JZ manual, tab 11, p.5).	
X	Check for unusual vibrations or noises, locate and repair. If system has not been operated, bump blowers to confirm operation.	
X	Exercise all valves to ensure proper operation.	
LFG Flare Combustion System		
X	Confirm panel enclosure heater is functioning. (September - April)	
X	Inspect any gauges and valves for deterioration	
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	
X	Change temperature chart recorder paper and verify chart values are accurate based off of ST-98 digital display readings. Confirm thermocouple readings match ambient temperatures.	
X	Operate pilot gas solenoid valve to insure proper opening and closing. Verify pilot ignition.	
X	Visually inspect the flare stack and windshield for damage or deterioration.	
G2E Blower/Compressor, Glycol Chiller and Control Panels		
X	Confirm glycol choller control panel enclosure fan and temperature controllers are functioning and air filter is clean.	
X	Inspect all electrical enclosures for any apparent corrosion or moisture.	

Monthly Inspection Log

Malfunction, Prevention, and Abatement Plan
La Crosse County Solid Waste Department
La Crosse, Wisconsin

Date of Inspection: 11/29/2023 **Inspector Name:** Jackie Davis

"X" when complete	Inspection/Maintenance Activity	Notes/Comments or Actions Taken
Landfill Gas Collection System		
x	Calibrate LFG field meters used for monthly well field monitoring (Land GEM 2000+), as applicable	Complete as part of Gas Balance
x	Monitor and inspect each gas collection well for equipment malfunctions, leaks in gas well head piping, sample ports, leachate pump condition, cap cracks, vegetation distress and other signs of needed maintenance.	Complete as part of Gas Balance
LFG Blower System		
x	Purge bearings with new grease to remove condensation if needed. Use caution as excessive pressure can damage the seals (see JZ manual, tab 11, p.5).	
x	Check for unusual vibrations or noises, locate and repair. If system has not been operated, bump blowers to confirm operation.	
x	Exercise all valves to ensure proper operation.	
LFG Flare Combustion System		
x	Confirm panel enclosure heater is functioning. (September - April)	
x	Inspect any gauges and valves for deterioration	
x	Inspect all electrical enclosures for any apparent corrosion or moisture.	
x	Change temperature chart recorder paper and verify chart values are accurate based off of ST-98 digital display readings. Confirm thermocouple readings match ambient temperatures.	
x	Operate pilot gas solenoid valve to insure proper opening and closing. Verify pilot ignition.	
x	Visually inspect the flare stack and windshield for damage or deterioration.	
G2E Blower/Compressor, Glycol Chiller and Control Panels		
x	Confirm glycol choller control panel enclosure fan and temperature controllers are functioning and air filter is clean.	
x	Inspect all electrical enclosures for any apparent corrosion or moisture.	

Monthly Inspection Log

Malfunction, Prevention, and Abatement Plan
La Crosse County Solid Waste Department
La Crosse, Wisconsin

Date of Inspection: **12/28/2023**
Inspector Name: **Jackie Davis**

"X" when complete	Inspection/Maintenance Activity	Notes/Comments or Actions Taken
Landfill Gas Collection System		
x	Calibrate LFG field meters used for monthly well field monitoring (Land GEM 5000), as applicable	Complete as part of Gas Balance
x	Monitor and inspect each gas collection well for equipment malfunctions, leaks in gas well head piping, sample ports, leachate pump condition, cap cracks, vegetation distress and other signs of needed maintenance.	Complete as part of Gas Balance
LFG Blower System		
x	Purge bearings with new grease to remove condensation if needed. Use caution as excessive pressure can damage the seals (see JZ manual, tab 11, p.5).	
x	Check for unusual vibrations or noises, locate and repair. If system has not been operated, bump blowers to confirm operation.	
x	Exercise all valves to ensure proper operation.	
LFG Flare Combustion System		
x	Confirm panel enclosure heater is functioning. (September - April)	
x	Inspect any gauges and valves for deterioration	
x	Inspect all electrical enclosures for any apparent corrosion or moisture.	
x	Change temperature chart recorder paper and verify chart values are accurate based off of ST-98 digital display readings. Confirm thermocouple readings match ambient temperatures.	
x	Operate pilot gas solenoid valve to insure proper opening and closing. Verify pilot ignition.	
x	Visually inspect the flare stack and windshield for damage or deterioration.	
G2E Blower/Compressor, Glycol Chiller and Control Panels		
x	Confirm glycol choller control panel enclosure fan and temperature controllers are functioning and air filter is clean.	
x	Inspect all electrical enclosures for any apparent corrosion or moisture.	

La Crosse County Solid Waste Management Facility
Semi-Annual Monitoring Report
January 1, 2023 through June 30, 2023
Air Operation Permit No. 63206363A-P11

On behalf of La Crosse County, Short Elliott Hendrickson Inc. (SEH®) has prepared this Semi-Annual Monitoring Report for the La Crosse County Solid Waste Management Facility ("the Facility") for the January 1, 2023 through June 30, 2023 reporting period. The Facility currently operates under Air Operation Permit No. 63206363A-P11, issued on March 8, 2022.

This report is being submitted to the Wisconsin Department of Natural Resources (WDNR) to comply with permit condition I.ZZZ.3.b.(1) which requires that "results of monitoring or a summary of the monitoring results required by this permit" shall be submitted to the WDNR. The report shall be submitted for the January 1 to June 30 period by September 1. In addition, all deviations from and violations of applicable requirements shall be clearly identified in the report, and each submittal shall be certified by a responsible official as to the truth, accuracy and completeness of the report.

A summary of the monitoring conducted during this reporting period (and the permit section requiring the monitoring) is presented below.

1. **I.A.2.b.(32) – Monitoring of landfill gas collection system to determine if system was not operating for a period exceeding 5 days.**
   Monitoring of the landfill gas collection system is conducted continuously. There were no periods when the landfill gas collection system was down for a period exceeding 5 days. There were also no periods where the duration of a startup, shutdown, or malfunction of the candle stick flare (P01) or the landfill gas treatment system exceeded one hour.

2. **I.A.2.c.(1)(n) – Determine, on a monthly basis, the average actual landfill gas collection rate (in cubic feet per minute).**
   The Facility operates an active landfill gas collection system and monitors the flow/volume of collected landfill gas. Records of the average landfill gas collection rate each month are kept on-site and during this 6-month reporting period the average landfill gas collection rate was 10,688,022 SCF/Month. Collected landfill gas is either diverted to Gundersen's landfill gas to energy system or combusted at an onsite candlestick flare if Gundersen is not operating.

3. **I.A.2.b. (22), (24), (27), (29) – Monitoring of flare (P01) and other gas treatment systems.**
   Operation of the Landfill Gas to Energy (LFGTE) system (i.e. gas flow to the Gunderson Lutheran engine when operating) continued throughout the reporting period within permit requirements. Minor maintenance was performed on the Gundersen Lutheran LFGTE system during this reporting period and no landfill gas was routed to the LFGTE system while maintenance occurred; landfill gas was routed to the flare whenever the LFGTE system was not in use.

   A thermocouple is in place to detect flare flame. Thermocouple temperature is continuously monitored. When the flare is down or undergoing maintenance, the LFG header closes and no gas is routed to flare.

4. **I.A.2.b.(11) and I.A.2.c.(1)(p) – Monthly collection header and well head monitoring for pressure.**
   Pressure readings were recorded monthly at the collection header, all vertical gas extraction wells and the STOCs. No positive pressure readings were recorded during this reporting period.

5. **I.A.2.b.(13) and I.A.2.c.(1) (q), (r) – Monthly well head monitoring for temperature and oxygen.**
   Temperature and oxygen readings were recorded monthly at all vertical gas extraction wells and the STOCs. No temperature exceedances (≥131 °F) or oxygen exceedances (≥5%) were recorded during this reporting period.

6. **I.A.2.b. (18) & (19) – Annual landfill surface monitoring for methane concentrations of 500 ppm or more above the background concentration.**
   Annual surface monitoring was performed on October 12, 2022. No concentrations above 500 ppm or more above the background concentration were observed. The next surface monitoring is anticipated to be performed during fall 2023.

7. **I.A.2.c.(1)(h) – Up-to-date records of the installation date and location of each well, horizontal collector, surface collector, and other gas extraction device that comprise the landfill gas collection system.**
   Records relating to the landfill gas collection system and associated infrastructure are maintained at the landfill office. No new temporary odor control wells were connected to or removed from the landfill gas collection system during this semi-annual period.

8. **I.A.2.b.(21) – Monthly inspections of closed landfill areas that contain gas extraction wells for visible signs of needed maintenance.**
   The closed areas of the landfill are inspected on a monthly basis during the gas extraction well monitoring events. Routine preventative maintenance items were completed during the 1st half of 2023 including re-tensioning nuts and bolts for flanges and hose connections and exercising all valves to confirm correct operation.

9. **I.ZZZ.3.b.(1)(c) – All deviations from and violations of applicable requirements.**
   During the 1/24/2023 semi-annual shutdown and inspection of the flare station panel an erroneous spike in flow was captured by the chart recorder. The flow meter for the flare was disconnected for annual calibration. Flow to the flare could not be monitored until the flow meter was returned and reinstalled on 3/30/2023. During this time, the LFG flow was diverted to the Gundersen LFTGE system and no landfill gas was directed to flare. A Notification of Deviation was submitted to the WDNR on 1/25/2023 and 3/31/23 at the beginning and end of this deviation event.

   On 5/26/2023, the biogas flare technician was onsite to perform semi-annual inspection. Powering down flare station panel caused a recording on the flare thermal recorder for 4 hours. No landfill gas was sent to flare during this time. A Notification of Deviation was submitted to the WDNR on 5/30/2023.

The required certification by a responsible official in accordance with NR 439.03(1)(b), Wis. Adm. Code is included below. This report covers the six-month period from January 1, 2023 through June 30, 2023.

Certification Statement

I am a responsible official for the La Crosse County Solid Waste Management Facility and have reviewed the facility's monitoring summary for the reporting period specified above. Based on the information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete.

Signed

Jadd Stilwell
Printed Name

8/17/2023
Date

Director
Title

PAS/BLK
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La Crosse County Solid Waste Management Facility
Semi-Annual Monitoring Report
July 1, 2023 through December 30, 2023
Air Operation Permit No. 63206363A-P11

On behalf of La Crosse County, Short Elliott Hendrickson Inc. (SEH®) has prepared this Semi-Annual Monitoring Report for the La Crosse County Solid Waste Management Facility ("the Facility") for the July 1, 2023 through December 31, 2023 reporting period. The Facility operated under Air Operation Permit No. 63206363A-P11, issued on March 8, 2022, during this period of time. A revised Air Operation Permit No. 63206363A-P20 was issued on January 2, 2024.

This report is being submitted to the Wisconsin Department of Natural Resources (WDNR) to comply with permit condition I.ZZZ.3.b.(1) which requires that "results of monitoring or a summary of the monitoring results required by this permit" shall be submitted to the WDNR. The report shall be submitted for the July 1 to December 31 period by March 1. In addition, all deviations from and violations of applicable requirements shall be clearly identified in the report, and each submittal shall be certified by a responsible official as to the truth, accuracy and completeness of the report.

A summary of the monitoring conducted during this reporting period (and the permit section requiring the monitoring) is presented below.

1. **I.A.2.b.(32) – Monitoring of landfill gas collection system to determine if system was not operating for a period exceeding 5 days.**
   Monitoring of the landfill gas collection system is conducted continuously. There were no periods when the landfill gas collection system was down for a period exceeding 5 days. There were also no periods where the duration of a startup, shutdown, or malfunction of the candle stick flare (P01) or the landfill gas treatment system exceeded one hour.

2. **I.A.2.c.(1)(n) – Determine, on a monthly basis, the average actual landfill gas collection rate (in cubic feet per minute).**
   The Facility operates an active landfill gas collection system and monitors the flow/volume of collected landfill gas. Records of the average landfill gas collection rate each month are kept on-site and during this 6-month reporting period the average landfill gas collection rate was 9,477,529 SCF/Month. Collected landfill gas is either diverted to Gundersen's landfill gas to energy system or combusted at an onsite candlestick flare if Gundersen is not operating.

3. **I.A.2.b. (22), (24), (27), (29) – Monitoring of flare (P01) and other gas treatment systems.**
   Operation of the Landfill Gas to Energy (LFGTE) system (i.e. gas flow to the Gunderson Lutheran engine when operating) continued throughout the reporting period within permit requirements. Minor maintenance was performed on the Gundersen Lutheran LFGTE system during this reporting period and no landfill gas was routed to the LFGTE system while maintenance occurred; landfill gas was routed to the flare whenever the LFGTE system was not in use.

A thermocouple is in place to detect flare flame. Thermocouple temperature is continuously monitored. When the flare is down or undergoing maintenance, the LFG header closes and no gas is routed to flare.

4. **I.A.2.b.(11) and I.A.2.c.(1)(p) – Monthly collection header and well head monitoring for pressure.**
   Pressure readings were recorded monthly at the collection header, all vertical gas extraction wells and the STOCs. No positive pressure readings were recorded during this reporting period.

5. **I.A.2.b.(13) and I.A.2.c.(1) (q), (r) – Monthly well head monitoring for temperature and oxygen.**
   Temperature and oxygen readings were recorded monthly at all vertical gas extraction wells and the STOCs. No temperature exceedances (≥131 °F) or oxygen exceedances (≥5%) were recorded during this reporting period.

6. **I.A.2.b. (18) & (19) – Annual landfill surface monitoring for methane concentrations of 500 ppm or more above the background concentration.**
   Annual surface monitoring was performed on October 26, 2023. No concentrations above 500 ppm or more above the background concentration were observed. The next surface monitoring is anticipated to be performed during fall 2024.

7. **I.A.2.c.(1)(h) – Up-to-date records of the installation date and location of each well, horizontal collector, surface collector, and other gas extraction device that comprise the landfill gas collection system.**
   Records relating to the landfill gas collection system and associated infrastructure are maintained at the landfill office. No new temporary odor control wells were connected to or removed from the landfill gas collection system during this semi-annual period.

8. **I.A.2.b.(21) – Monthly inspections of closed landfill areas that contain gas extraction wells for visible signs of needed maintenance.**
   The closed areas of the landfill are inspected on a monthly basis during the gas extraction well monitoring events. Routine preventative maintenance items were completed during the 2nd half of 2023 including re-tensioning nuts and bolts for flanges and hose connections and exercising all valves to confirm correct operation.

9. **I.ZZZ.3.b.(1)(c) – All deviations from and violations of applicable requirements.**
   On 10/23/2023, there were erroneous flow readings on the thermal chart recorder due to frequent startup and shutdown during routine preventative maintenance. When the system was restarted after the completion of maintenance, the thermal chart recorder operated as designed. A Notification of Deviation was submitted to the WDNR on 10/26/23.

   During the 11/22/2023 semi-annual shutdown and inspection of the flare station panel an erroneous spike in flow was captured by the chart recorder. During this time, the LFG flow was diverted to the Gundersen LFTGE system and no landfill gas was directed to flare. A Notification of Deviation was submitted to the WDNR on 11/24/2023.

The required certification by a responsible official in accordance with NR 439.03(1)(b), Wis. Adm. Code is included below. This report covers the six-month period from July 1, 2023 through December 30, 2023.

Certification Statement

I am a responsible official for the La Crosse County Solid Waste Management Facility and have reviewed the facility's monitoring summary for the reporting period specified above. Based on the information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete.

Signed	Jadd Stilwell
	Printed Name
2/29/2024	Director
Date	Title

PAS/BLK
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La Crosse County Solid Waste Management Facility
Air Permit Monitoring Summary - I.A.1. and I.A.2. Limitations
Air Permit No. 63206363A-P11
July 1, 2023 through December 31, 2023

Emitting Unit	Permit Condition	Rule Citation	Pollutant/ Parameter	Limit/Condition	Compliance Demonstration Method	Recordkeeping and Monitoring	Any Deviations During Reporting Period? Yes	Any Deviations During Reporting Period? No	Notes
P01/S01 - Candle Stick Flare	I.A.1.a(1)	NR 445.08(2)(f)	Visible Emissions	0 percent opacity, except for periods not to exceed a total of 5 minutes during any 2 consecutive hours.				X	No testing during reporting period.
F99/S99 - MSW Landfill **P01/S01** - Candle Stick Flare	I.A.2.a(1)	NR 445.07(1) and NR 445.08(2)(f)	HAP	The permittee shall install and operate an active gas collection system that effectively captures the landfill gas generated within the landfill in the manner specified in the most recently approved plan of operation, issued by the Department's Waste Management Program or as approved by the department.	Gas Collection System Design per I.A.2.b.(23)	Plan of Ops Records on File: I.A.2.c.(1)(a)-(b), (f), (o), (aa) Required updates recorded: (c) Average annual solid waste acceptance rate (Mg/yr) (d) Amount of solid waste in-place in each section of the landfill (Mg) (g) Up-to-date technical drawings (h) Up-to-date installation dates (i) Date when each area and cell of the landfill began accepting waste (j) Date when each cell of the landfill was closed or reached final grade (k) Alternative pressure levels (L) Alternative temperature, nitrogen, and oxygen levels (m) Maximum expected LFG generation flow rate (cfm) (ad) Dates when the gas collection system was expanded (ae) Dates when a collector became abandoned and no longer operable.		X	Note: Until the calculated NMOC generation rate is equal to or greater than 50 Mg/yr, STOCs components shall be monitored for pressure, temperature, and oxygen or nitrogen concentration, but shall not be subject to the pressure, temperature, oxygen and nitrogen limits. STOC Components include: leachate cleanouts, leachate recirculation, abandoned horizontal collectors, horizontal gas collectors, manholes and other systems or components whose primary intended purpose is not gas collection and are used for supplemental control of fugitive gas and odors.
F99/S99 - MSW Landfill **P01/S01** - Candle Stick Flare	I.A.2.a(2)(a), I.A.2.a(2)(b), I.A.2.a(2)(c), I.A.2.a(2)(d), I.A.2.a(2)(e)	NR 445.07(1) and NR 445.08(2)(f)	HAP	The active gas collection system shall: (a) Be designed to handle the maximum expected gas flow rate from the entire area of the landfill that warrants control over the intended use period of the candlestick flare (Process P01); and (b) Collect gas from each area, cell, or group of cells in the landfill in which solid waste has been in place for (i) 5 years of more if active; or(ii) 2 years or more if closed or at final grade; (c) collect gas at a sufficient extraction rate; and (d) Be designed to minimize off-site migration of subsurface gas.	Gas Collection System Operation per I.A.2.b.(1)-(17) Surface Emission Monitoring per I.A.2.b.(18)-(21)	Gas Collection System Monitoring: I.A.2.c.(1) (n) Monthly monitoring of average actual landfill gas collection rate (p), (q), and (r) Monthly monitoring of pressure, temperature, nitrogen or oxygen (t) and (u) Records of each non-negative gauge pressure reading (v), (w), (x) Records for each temperature, oxygen level and nitrogen level exceedance (af) Dates when system was inoperable (ah) Dates when system was shutdown (ai) Dates when all valves were closed (aj) Records of maintenance conducted on the gas collection system I.A.2.c.(2) Annual Calibrations (a) Each temperature monitoring device (b) Each pressure drop monitoring device (c) Each portable nitrogen meter (d) Each oxygen meter Surface Emission Monitoring: I.A.2.c.(1) (e) A surface monitoring design plan in on file (s) Results of methane surface concentration monitoring (y) and (z) Records for each exceedance and corrective action (ab) Results of cover integrity monitoring (ac) Records of cover maintenance		X	See Summary for I.A.2.b. and c.
F99/S99 - MSW Landfill **P01/S01** - Candle Stick Flare	I.A.2.a(3)(a), I.A.2.a(3)(b)	NR 445.07(1) and NR 445.08(2)(f)	HAP	The Permittee shall route all the collected landfill gas to one or more of the following (a) open flare (Process P01), (b) A treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of (a) above and operating in accordance with 40 CFR s. 60.18. The treatment shall consist, at a minimum, of the following: (b)(i) a device that removes particulate matter down to at least 10 microns, (b)(ii) a device that removes moisture from the landfill gas, (b)(iii) a device that compresses the landfill gas.	Routing of Collected Gas per I.A.2.b.(22) and (32) Operation of P01 per I.A.2.b.(24)-(30) Operation of Landfill Gas Treatment System per I.A.2.b.(31)	Recordkeeping I.A.2.c.(1) (ag) Description and duration of all periods when either P01 or the landfill gas treatment system was not operating (ak) Any maintenance performed on P01 and the landfill gas treatment system (aL)(i) the flare type Monitoring of the Flare P01 per I.A.2.c.(1)(aL) (ii) dates and times when a flame is not present (iii) and (iv) Whenever a device is used to record flow, gas flow rate monitoring, measured at least every 15 minutes. Or Secure the bypass line and inspect once every month (v) Calculated monthly flow rate		X	All gas routed to Flare or Landfill Gas to Energy (LFGTE) system during reporting period

La Crosse County Solid Waste Management Facility
Air Permit Monitoring Summary - I.A.1. and I.A.2. Limitations
Air Permit No. 63206363A-P11
July 1, 2023 through December 31, 2023

Emitting Unit	Permit Condition	Rule Citation	Pollutant/ Parameter	Limit/Condition	Compliance Demonstration Method	Recordkeeping and Monitoring	Any Deviations During Reporting Period? Yes	Any Deviations During Reporting Period? No	Notes
F99/S99 - MSW Landfill **P01/S01** - Candle Stick Flare	I.A.2.a(4)(a), I.A.2.a(4)(b), I.A.2.a(4)(c), I.A.2.a(4)(d), I.A.2.a(4)(e), I.A.2.a(4)(f), I.A.2.a(4)(g)	NR 445.07(1), NR 445.07(6)(a) and NR 445.08(2)-(3)	HAP	The gas collection system and Process P01 may be capped or removed provided that all the conditions below are met: (a) The landfill shall no longer be accepting solid waste. (b) the gas collection and control systems shall have been in operation for a minimum of 15 years.; (c) The calculated NMOC generation rate is less than 50 Mg/yr on three consecutive test dates. The test dates shall be no less than 90 days apart and no more than 180 days apart. (d) Except for the alternatives in(4)(e)-(g), calculated emissions for each state HAP that is also listed in the most recent Compilation of Air Pollutant Emission Factors (AP-42) For municipal solid waste landfills may not exceed 25% of the threshold specified in Table A,Column (c) of ch. NR 445. (e) For each state HAP that has a standard expressed as an ambient air concentration in Table A of Ch. Nr 445, calculated emissions will not cause the ambient air concentration in Column (g) of that table to be exceeded. (f) Except as specified in (g) below, for each state HAP with a control requirement in Table A of Ch. NR 445 and having a unit risk factor established by either US EPA or the California Air Resources Board, Calculated emissions may not cause the ambient air concentration off the permittee's property that results in in an inhalation impact greater than one in a million (1 in a million). (g) For one or more state HAPs with a control requirement in Table A of ch. NR 445 and having a unit risk factor established by either US EPA or the California Air Resources Board, calculated emissions may not cause the ambient air concentration off the permittees property that results in a cumulative inhalation impact from those state HAPs greater than one in one-hundred thousand (1 in 100,000).		Recordkeeping relevant to removal of gas collection system I.A.2.c.(1) (am)-(an)		**X**	Not applicable during this reporting period.
F99/S99 - MSW Landfill **P01/S01** - Candle Stick Flare	I.A.2.a(5)	NR 445.03	HAP	The permittee may not cause, allow, or permit emissions into the ambient air of any substance or combination of substances in such quantity, concentration, or duration as to be injurious to human health, plant or animal life. Hazardous substances include but are not limited to hazardous air contaminants listed in Table A of ch. NR 445.07.				**X**	Compliance demonstrated through application of best available control technology (BACT) - gas collection system in I.A.2(1), control device in I.A.2(3), and the monitoring/ recordkeeping in I.A.3.

BLK — Reviewer

2/19/2024 — Date

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F99/S99 - MSW Landfill	I.A.2.b(1)(a), I.A.2.b(1)(b), I.A.2.b(1)(c), I.A.2.b.(1)(d)	NR 407.09(4)(a)1.	HAP	**(1) The permittee shall operate the collection system with negative pressure at each wellhead (except STOCS) except under the following conditions:** (a) a fire or increased well temperature. The permittee shall record each instance when positive pressure occurs in efforts to avoid a fire. These records shall be submitted with the annual reports as provided in I.ZZZ.3.a(1). (b) use of a geomembrane or synthetic cover. All positive pressure limits shall be approved by the department. See (d) below. (c) a decommissioned well. A well may experience a static positive pressure after shut down to accommodate for declining flows. All design changes shall be approved by the department. (d) The permittee shall follow a thorough evaluation and systematic trouble-shooting protocol before the department may approve an alternate operating scenario for specific gas collection well(s). Alternate operating scenarios may include alternate limits for temperature, pressure, and/or oxygen concentration, shutting off well(s) temporarily or permanently. This alternate operating scenario process is described in Appendix C of the following document: "Wisconsin Landfill Air Emissions: A Cross-Program Regulatory Approach", compiled by the DNR's Air/Waste Workgroup on Landfill Gas, May 2007. This document is available at dnr.wi.gov/cias/guidance/guidance external (search for Guidance Information Document (GID) 1600).	Gas Collection System Monitoring: I.A.2.c.(1) (p) Monthly monitoring of pressure (t) and (u) Records of each non-negative gauge pressure reading Required updates recorded: (k) Alternative pressure levels		**X**	Compliance maintained during the reporting period
F99/S99 - MSW Landfill	I.A.2.b(2)	NR 439.055(1)	HAP	(2) The permittee shall install a sampling port, a thermostat, other temperature measuring device, or an access port for temperature measurements; and a gauge pressure monitoring device or an access port for gauge pressure measurements at each wellhead (including STOCS).			**X**	Compliance maintained during the reporting period via CES/LANDTECH Accu-flo well head
F99/S99 - MSW Landfill	I.A.2.b(3)(a), I.A.2.b(3)(b), I.A.2.b(3)(c)	NR 407.09(4)(a)1.	HAP	**(3) The permittee shall operate each interior wellhead (except STOCs) in the gas collection system in the following manner**: (a) Except as specified in (c) below, with a landfill gas temperature less than 131 degrees F (55 C). (b) Except as specified in (c) below, with either a nitrogen level less than 20%, or an oxygen level less than 5%. (c) The permittee may establish a higher operating temperature, nitrogen level, and/or oxygen level at a particular well so long as that or those higher operating levels are approved by the department. A higher operating value demonstration shall show supporting data that the elevated parameter does not cause fires or significantly inhibit anaerobic decomposition by killing methanogens.	Gas Collection System Monitoring: I.A.2.c.(1) (q), and (r) Monthly monitoring of temperature, nitrogen or oxygen (v), (w) and (x) Records for each temperature, oxygen level and nitrogen level exceedance Required updates recorded: (L) Alternative temperature, nitrogen, and oxygen levels		**X**	Compliance maintained during the reporting period

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F99/S99 - MSW Landfill	I.A.2.b(4)	NR 439.055(3)(a)	HAP	(4) Each temperature monitoring device shall be accurate to within +/- 0.5% of the temperature being measured in degrees Fahrenheit or within +/- 5 °F of the temperature being measured, or the equivalent in degrees C, whichever is greater.	I.A.2.c.(2) Annual Calibrations (a) Each temperature monitoring device		X	Compliance maintained during the reporting period via CES/LANDTECH Accu-flo well head with thermometer
F99/S99 - MSW Landfill	I.A.2.b(5)	NR 439.055(3)(b)	HAP	(5) Each pressure monitoring device shall be accurate to within 5% or +/- 1 inch of water column, whichever is greater.	I.A.2.c.(2) Annual Calibrations (b) Each pressure drop monitoring device		X	Compliance maintained during the reporting period via CES/LANDTECH GEM2000
F99/S99 - MSW Landfill	I.A.2.b(6)	NR 439.055(1)	HAP	(6) The permittee shall determine the nitrogen level using US EPA Method 3C, unless an alternative test is established....			X	Not applicable. Oxygen used to show compliance
F99/S99 - MSW Landfill	I.A.2.b(7)(a), I.A.2.b(7)(b), I.A.2.b(7)(c), I.A.2.b(7)(d), I.A.2.b(7)(e)	NR 407.09(4)(a)1.	HAP	(7) Unless an alternative test method is established as allowed by the department, the oxygen level shall be determined by an oxygen meter using Method 3A or 3C except that: (a) the span shall be set so that the regulatory limit is between 20 and 50% of the span; (b) A data recorder is not required (c) Only two calibration gases are required, a zero and span, and ambient air may be used as the span; (d) A calibration error check is not required; (e)The allowable sample bias, zero drift, and calibration drift are +/- 10%.	I.A.2.c.(2) Annual Calibrations (d) Each oxygen meter		X	Compliance maintained during the reporting period via CES/LANDTECH GEM2000
F99/S99 - MSW Landfill	I.A.2.b(8)(a), I.A.2.b(8)(b), I.A.2.b(8)(c), I.A.2.b(8)(d), I.A.2.b(8)(e), I.A.2.b(8)(f), I.A.2.b(8)(g)	NR 407.09(4)(a)1.	HAP	(8) The permittee shall operate the collection system so that the methane concentration at the surface of the landfill is less than 500 ppm above the background concentration. To determine if this level is exceeded, the permittee shall conduct surface testing at the following locations, and in the manner and frequency specified in I.A.2.b.(18): (a) around the perimeter of the collection area (b) at all penetrations (c) along a pattern that traverses the landfill at 30 meter intervals apart, and (d) where visual observations indicate elevated concentrations of landfill gas, such as distressed vegetation and cracks or seeps in the cover. (e) The permittee may establish an alternative traversing pattern that ensures equivalent coverage (f) A surface monitoring design plan shall be developed that includes a topographical map with the monitoring route and the rationale for any site specific deviations from the 30 meter intervals (g) Areas with steep slopes or other dangerous areas may be excluded from the surface testing.	Surface Emission Monitoring: I.A.2.c.(1) (e) A surface monitoring design plan in on file		X	Annual surface monitoring last completed October 26, 2023. Plan submitted to WDNR for approval prior to performing surface monitoring. Surface concentrations< 500 ppm. Next anticipated SEM event to occur in July-December 2024 time period
F99/S99 - MSW Landfill	I.A.2.b(9)(a), I.A.2.b(9)(b), I.A.2.b(9)(c)	NR 407.09(4)(a)1.	HAP	(9) The permittee shall calculate the maximum expected gas generation flow rate from the landfill using one of the equations in I.A.2.b.(9)(a-c).	Required updates recorded: I.A.2.c.(1)(m) Maximum expected LFG generation flow rate (cfm) Monitoring: I.A.2.c.(1)(n) Monthly monitoring of average actual landfill gas collection rate		X	Completed as part of annual emission inventory ST-98 flowmeter calibrated January 2023.

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						Yes	No	
F99/S99 - MSW Landfill	I.A.2.b(10)	NR 407.09(4)(a)1.	HAP	(10) The permittee shall design a system of vertical wells, horizontal collectors, or other collection devices satisfactory to the Department's Waste and Materials Management Program or as approved by the department. The gas collection system shall be capable of controlling and extracting gas from all portions of the landfill sufficient to meet all operational and performance standards.	Plan of Ops Records on File: I.A.2.c.(1)(a)-(b), (f), (o), (aa)		**X**	Plan of Operation approved by Department's Waste and Materials Management Department.
F99/S99 - MSW Landfill	I.A.2.b(11)	NR 407.09(4)(a)1.	HAP	(11) The permittee shall measure gauge pressure in the gas collection header at each individual well monthly.	Gas Collection System Monitoring: I.A.2.c.(1) (p) Monthly monitoring of pressure		**X**	Required monitoring performed
F99/S99 - MSW Landfill	I.A.2.b(12)(a), I.A.2.b(12)(b), I.A.2.b(12)(c), I.A.2.b(12)(d)	NR 407.09(4)(a)1.	HAP	(12) Any pressure reading that is not negative shall be recorded as a monitored exceedance and the following actions are taken, the exceedance is not a violation of the conditions in I.A.1.b.(1). (a) If a positive pressure exists, action shall be initiated to correct the exceedance within 10 calendar days, except of the three conditions allowed under compliance demonstration condition I.A.1.b.((1) (a)-(c). (b) Except as specified in I.A.1.b.(15), if negative pressure cannot be achieved without excess air infiltration within 45 days of the first measurement, the gas collection system shall be implemented to correct the exceedance within 120 days of the initial measurement of positive pressure. (c) Any attempted corrective measure shall not cause exceedances of other operational or performance standards. (d) An alternative timeline for correcting the exceedance may be submitted to the department for approval.	Gas Collection System Monitoring: I.A.2.c.(1) (t) and (u) Records of each non-negative gauge pressure reading		**X**	Compliance maintained during the reporting period
F99/S99 - MSW Landfill	I.A.2.b(13)	NR 407.09(4)(a)1.	HAP	(13) The permittee shall monitor each well (including STOCs) monthly for temperature, and nitrogen or oxygen level as specified in conditions I.A.1.b.(3).	Gas Collection System Monitoring: I.A.2.c.(1) (q), and (r) Monthly monitoring of pressure, temperature, nitrogen or oxygen		**X**	Required monitoring performed

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F99/S99 - MSW Landfill	I.A.2.b(14)(a), I.A.2.b(14)(b), I.A.2.b(14)(b), I.A.2.b(14)(c), I.A.2.b(14)(d)	NR 407.09(4)(a)1.	HAP	(14) Any temperature, nitrogen, or oxygen readings that do not meet the levels specified in the applicable conditions I.A.1.b.(3) shall be recorded as a monitored exceedance, and the following actions shall be taken. As long as those actions are taken, the exceedance is not a violation of the applicable conditions specified in I.A.1.b.(3). (a) Action shall be initiated to correct the exceedance within 5 calendar days. (b) **Except as specified in I.A.1.b.(15)**, if correction of the exceedance cannot be achieved within 45 calendar days after the first measurement, then the gas collection system shall be expanded or other appropriate corrective action shall be implemented to correct the exceedance within 120 days after the initial exceedance. (c) Any attempted corrective measures shall not cause exceedances of other operational or performance standards. (d) An alternative timeline for correcting the exceedance may be submitted to the department for approval.	Gas Collection System Monitoring: I.A.2.c.(1) (w) and (x) Records for each temperature, oxygen level and nitrogen level exceedance		**X**	Compliance maintained during the reporting period, remonitoring not required.
F99/S99 - MSW Landfill	I.A.2.b(15)	NR 407.09(4)(a)1.	HAP	(15) The permittee is not required to expand the gas collection system as required in condition I.A.2.b.(12),(14) and (19) during the first 180 days after gas collection system start-up of new gas collection system components. Alternatively, a remedy in the exceedance- such as upgrading the blower, header pipes, P01, or the landfill gas treatment system - with a corresponding timeline for such installation - may be conducted if approved by the department.			**X**	No expansion during the reporting period.
F99/S99 - MSW Landfill	I.A.2.b(16)	NR 407.09(4)(a)1.	HAP	(16) If the permittee is seeking to demonstrate compliance with conditions I.A.2.a.(2)(d) through the use of a collection system not conforming to the specifications provided in Appendix A, then the permittee shall provide information satisfactory to the Department's Waste and Materials Management Program that off-site migration is being controlled.			**X**	No request during the reporting period.
F99/S99 - MSW Landfill	I.A.2.b(17)(a), I.A.2.b(17)(b), I.A.2.b(17)(c)	NR 407.09(4)(a)1.	HAP	(17) To demonstrate compliance with conditions I.A.2.a.(2)(b), the permittee shall (a) place each well or design component in the manner approved by the Department's Waste and Materials Management Division, or as approved by the department, as provided in I.A.2.a(1). (b) Except for as allowed in (c) below, install each well within 60 days after the date on which the initial waste has been in place for a period of (i) 5 years or more if active; or (ii) 2 years or more if closed or at final grade. (c) Installation of wells may be delayed until NMOC generation rate equals or exceeds 50 Mg/yr if gas is extracted from the area through another gas collection device, such as STOC gas control devices (eg- leachate cleanout).	Required updates recorded: (c) Average annual solid waste acceptance rate (Mg/yr) (d) Amount of solid waste in-place in each section of the landfill (Mg) (g) Up-to-date technical drawings (h) Up-to-date installation dates (i) Date when each area and cell of the landfill began accepting waste (j) Date when each cell of the landfill was closed or reached final grade (ad) Dates when the gas collection system was expanded (ae) Dates when a collector became abandoned and no longer operable.		**X**	Compliance achieved via horizontal STOCs and vertical wells Drawings, waste, and well placement/removal dates have been updated in facility files.

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F99/S99 - MSW Landfill	I.A.2.b(18)(a), I.A.2.b(18)(b), I.A.2.b(18)(c), I.A.2.b(18)(d), I.A.2.b(18)(e), I.A.2.b(18)(f), I.A.2.b(18)(g), I.A.2.b(18)(h)	NR 407.09(4)(a)1.	HAP	(18) The permittee shall determine the methane concentration at the surface of the landfill (above the background concentration) annually in the following manner: (a) the permittee shall use an organic vapor analyzer, flame ionization detector, or other portable monitor meeting the specifications as provided in conditions I.A.2.b.(20). (b) Except as specified in (c)-(d) below, the permittee shall conduct surface testing at the locations specified in Condition I.A.2.b.(8). (c) A surface monitoring design plan shall be developed that includes a topographical map, with the monitoring route and the rationale for any site-specific deviations from the 30 meter intervals. (d) The permittee shall determine the background concentration by moving the probe inlet upwind and downwind outside the boundary of the landfill at a distance of at least 30 meters from the perimeter wells. (e) the permittee shall perform surface emission monitoring in accordance with s.4.3.1 of Method 21 or appendix A of 40 CFR part 60, incorporated by reference in NR 440.17(1), except that the probe inlet shall be placed within 50 to 10 cm of the ground. (f) Monitoring shall be performed during typical meteorological conditions.	Surface Emission Monitoring: I.A.2.c.(1) (s) Results of methane surface concentration monitoring		**X**	Annual surface monitoring last completed October 23, 2023. Plan submitted to WDNR for approval prior to performing surface monitoring. Surface concentrations< 500 ppm. Next anticipated SEM event to occur in July-December 2024 time period
F99/S99 - MSW Landfill	I.A.2.b(19)(a), I.A.2.b(19)(b), I.A.2.b(19)(c), I.A.2.b(19)(d), I.A.2.b(19)(e)	NR 407.09(4)(a)1.		(19) The permittee shall record any surface methane concentration reading of 500 ppm or more above the background concentration at any location as a monitored exceedance, and shall take the actions specified in I.A.1.b.(19)(a-e). As long as the specified actions are taken, the exceedance is not a violation of the conditions specified in I.A.1.b.(8) (SEE PERMIT FOR CONDITIONS A_E)	Surface Emission Monitoring: I.A.2.c.(1) (y) and (z) Records for each exceedance and corrective action		**X**	Surface concentrations< 500 ppm.
F99/S99 - MSW Landfill	I.A.2.b(20)(a), I.A.2.b(20)(b), I.A.2.b(20)(c), I.A.2.b(20)(d)	NR 407.09(4)(a)1.		(20) The permittee shall comply with the following instrumentation specifications and procedures for surface emission monitoring devices (see air permit section I.A.2.b.(20)(a-d)).	Surface Emission Monitoring: I.A.2.c.(1) (s) Results of methane surface concentration monitoring		**X**	Equipment used (FID TVA-1000) complies with requirements
F99/S99 - MSW Landfill	I.A.2.b(21)	NR 407.09(4)(a)1.	HAP	(21) The permittee shall conduct monthly inspections of closed landfill areas that contain gas extraction wells for equipment malfunctions, cap cracks, erosion, vegetation distress, and other visible signs of needed cover maintenance, and implement cover repairs as necessary.	Surface Emission Monitoring: I.A.2.c.(1) (ab) Results of cover integrity monitoring (ac) Records of cover maintenance		**X**	Required inspections performed
F99/S99 - MSW Landfill	I.A.2.b(22)	NR 407.09(4)(a)1.	HAP	(22) The permittee shall operate the gas collection system such that all collected gases are vented to the landfill gas treatment system and/or P01. In the event that the gas collection system, landfill gas treatment system and/or Process P01 is inoperable, the gas mover system shall be shut down and all valves in the gas collection system and the control devices contributing to venting of the gas to the atmosphere shall be closed within 1 hour. See condition b.(32)	Gas Collection System Monitoring: I.A.2.c.(1) (af) Dates when system was inoperable (ag) Description and duration of all periods when either P01 or the landfill gas treatment system was not operating (ah) Dates when system was shutdown (ai) Dates when all valves were closed (aj) Records of maintenance conducted on the gas collection system		**X**	All collected LFG is routed to the flare or to the LFGTE system. Thermocouple in place to detect flare flame. When flare is down, LFG header closes and no gas is routed to flare.
F99/S99 - MSW Landfill	I.A.2.b(23)	NR 407.09(4)(a)1.	HAP	(23) The permittee shall ensure that the applicable specifications of the landfill gas collection system in Appendix A of this document are met.			**X**	Specifications achieved

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P01/S01 - Candle Stick Flare	I.A.2.b(24)	NR 407.09(4)(a)1.	HAP	(24) The permittee shall operate Process P01 at all times that the collected gas is routed to it.	Recordkeeping I.A.2.c.(1) (ag) Description and duration of all periods when either P01 or the landfill gas treatment system was not operating (ak) Any maintenance performed on P01 and the landfill gas treatment system		X	All collected LFG is routed to the flare or to the LFGTE system. Thermocouple in place to detect flare flame. When flare is down, LFG header closes and no gas is routed to flare.
P01/S01 - Candle Stick Flare	I.A.2.b(25)	NR 407.09(4)(a)1.	HAP	(25) Process P01 shall be a steam assisted, air assisted, or nonassisted flare.	Recordkeeping I.A.2.c.(1)(aL)(i) the flare type		X	P01 is nonassisted flare
P01/S01 - Candle Stick Flare	I.A.2.b(26)	NR 407.09(4)(a)1.	HAP	(26) Process P01 shall be designed for and operated with no visible emissions as determined by the methods specified in a condition I.A.1.c.(1) except for periods not to exceed 5 minutes during any 2 consecutive hours.	Recordkeeping I.A.2.c.(1)(aL)(i) the flare type		X	No visible emissions noted during reported period.
P01/S01 - Candle Stick Flare	I.A.2.b(27)	NR 407.09(4)(a)1.	HAP	(27) The permittee may not vent landfill gas to Process P01 whenever a flame is not present, as determined by the methods specified in condition I.A.2.b.(29)(a).	Monitoring of the Flare P01 per I.A.2.c.(1)(aL) (ii) dates and times when a flame is not present		X	All collected LFG is routed to the flare or to the LFGTE system. Thermocouple in place to detect flare flame. When flare is down, LFG header closes and no gas is routed to flare.
P01/S01 - Candle Stick Flare	I.A.2.b(28)	NR 407.09(4)(a)1.	HAP	(28) Process P01 shall be designed for and operated with an exit velocity, as determined by the methods specified in conditions I.A.2.b.(30) less than 18.3 m/sec (60 ft/sec) except as specified in NR 440.18(3)(d)3..	Recordkeeping I.A.2.c.(1)(aL)(i) the flare type		X	Flare designed for maximum future LFG flow
P01/S01 - Candle Stick Flare	I.A.2.b(29)(a), I.A.2.b(29)(b)	NR 407.09(4)(a)1.	HAP	(29) For Process P01, the permittee shall install, calibrate, maintain an operate according to the manufacturers specifications the following equipment: (a) A heat sensing device, such as an ultraviolet beam sensor or thermocouple, at the pilot light or flame itself to indicate the continuous presence of a flame. (b) A device that records flow to the flare. The permittee shall install, calibrate, and maintain a gas flow rate measuring device that shall record the flow to the control device at every 15 minutes; or Secure the bypass line valve in the closed position with a car-seal or a lock and key type configuration. A visual inspection of the seal or closure mechanism shall be performed at least once every month to ensure that the valve is maintained in the closed position and that the gas flow is not diverted through the bypass line.	Monitoring of the Flare P01 per I.A.2.c.(1)(aL) (ii) dates and times when a flame is not present (iii) and (iv) Whenever a device is used to record flow, gas flow rate monitoring, measured at least every 15 minutes. Or Secure the bypass line and inspect once every month (v) Calculated monthly flow rate	X		- On 10/23/2023, there were erroneous flow readings on the thermal chart recorder due to frequent startup and shutdown during routine preventative maintenance. When the system was restarted after the completion of maintenance, the thermal chart recorder operated as designed. - During the 11/22/2023 semi-annual shutdown and inspection of the flare station panel an erroneous spike in flow was captured by the chart recorder. During this time, the LFG flow was diverted to the Gundersen LFTGE system and no landfill gas was directed to flare.
P01/S01 - Candle Stick Flare	I.A.2.b(30)	NR 407.09(4)(a)1.	HAP	(30) The **actual exit velocity of each flare shall be determined** by dividing the volumetric flowrate (in units of standard temp. and pressure), as determined as appropriate by Reference Method 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip or by other method approved by the Department such as the existing FCI flow meter.	Recordkeeping I.A.2.c.(1)(aL)(i) the flare type		X	Flare designed for maximum future LFG flow.
Landfill Gas Treatment System	I.A.2.b(31)	NR 407.09(4)(a)1.	HAP	(31) The permittee shall operate the landfill gas treatment system whenever landfill gas is routed to it.	Recordkeeping I.A.2.c.(1) (ag) Description and duration of all periods when either P01 or the landfill gas treatment system was not operating (ak) Any maintenance performed on P01 and the landfill gas treatment system		X	Landfill gas flow is measured continously

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July 1, 2023 through December 31, 2023

Emitting Unit	Permit Condition	Rule Citation	Pollutant/ Parameter	Compliance Demonstration Method	Recordkeeping and Monitoring	Any Deviations During Reporting Period? Yes	No	Notes
Startup, Shutdown, Malfunction	I.A.2.b(32)(a), I.A.2.b(32)(b), I.A.2.b(32)(c.)	NR 407.09(4)(a)1.	HAP	(32) Conditions I.A.2.b.(1)-(31) shall apply at all times, except during the periods of start-up, shutdown, or malfunction, provided that the duration of start-up, shutdown, or malfunction: (a) For the landfill gas extraction system: the duration of start-up, shutdown, or malfunction shall not exceed 5 days. (b) For process P01: the duration of start-up, shutdown, or malfunction shall not exceed 1 hour. (c) For the landfill gas treatment system: the duration of start-up, shutdown, or malfunction shall not exceed 1 hour.	Recordkeeping I.A.2.c.(1) (ag) Description and duration of all periods when either P01 or the landfill gas treatment system was not operating		**X**	No periods that LFG collection and treatment system was down exceeding 5 days. No period that LFG was allow to vent untreated through flare exceeding 1 hour.
Removal of Collection and Control Systems	I.A.2.b(33)(a), I.A.2.b(33)(b), I.A.2.b(33)(c), I.A.2.b(33)(d), I.A.2.b(33)(e), I.A.2.b(33)(f), I.A.2.b(33)(f), I.A.2.b(33)(h)	NR 407.09(4)(a)1.	HAP	(33)**(a-c)** After installation of a collection control system, the permittee shall calculate the NMOC emission rate for purposes of determining when the system can be removed as provided in I.A.2.a.(4){see permit for equations} **(d-h)** After the installation of a collection and control system, the permittee shall calculate the emission rate for each state hazardous air pollutant that is also listed in the most recent Compilation of Air Pollutant Emission Factors (AP-42) for municipal solid waste landfills, for purposes of determining when the system can be removed as provided in I.A.2.a.(4),{see permit for equations}.	Recordkeeping relevant to removal of gas collection system I.A.2.c.(1) (am)-(an)		**X**	Not applicable for this reporting period.

BLK Reviewer

2/19/2024 Date

La Crosse County Solid Waste Management Facility
Air Permit Monitoring Summary - 40 CFR Part 62 Supbart OOO
Air Permit No. 63206363A-P11
July 1, 2023 through December 31, 2023

Emitting Unit	Rule Citation	Requirements	Any Deviations		Notes
			Yes	No	
40 CFR Part 62, Subpart OOO	62.16711 Designated Facilities	La Crosse County Solid Waste Management Facility is a designated facility to which 40 CFR Part 62, Subpart OOO applies.		X	Initial Notifications submitted September 20, 2021.
40 CFR Part 62, Subpart OOO	62.16714(e)(1)(i) and (ii) Standards for municipal solid waste landfill emissions.	*Emissions.* The owner or operator must calculate an initial NMOC emission rate for the landfill using the procedures specified in § 62.16718(a). The NMOC emission rate must be recalculated annually, except as provided in § 62.16724(c)(3). (1) The owner or operator must: (i) Submit an annual NMOC emission rate report according to § 62.16724(c), except as provided in 62.16724(c)(3); and (ii) Recalculate the NMOC emission rate annually using the procedures specified in § 62.16724(a) until such time as the calculated NMOC emission rate is equal to or greater than 34 megagrams per year, or the landfill is closed. (A) If the calculated NMOC emission rate, upon initial calculation or annual recalculation required in 40 CFR s.62.16714(e)(1)(ii), is equal to or greater than 34 megagrams per year, the owner or operator must either: Comply with paragraphs 40 CFR s.62.16714(b) and (c); calculate NMOC emissions using the next higher tier in 40 CFR s. 62.16718; or conduct a surface emission monitoring demonstration using the procedures specified in 40 CFR s. 62.16718(a)(6). (B) If the landfill is permanently closed, a closure report must be submitted to the Administrator as provided in 40 CFR s. 62.16724(f).		X	NMOC Emission Rate Report submitted to WDNR in June 15, 2021. NMOC emission rate less than 34 Mg/yr. Next NMOC due June 2026.
40 CFR Part 62, Subpart OOO	62.16718 Test Methods and Procedures	Calculate the landfill NMOC emission rate and conduct a surface emission monitoring demonstration according to the provisions in this section. (see permit for details)		X	Tier 2 methodology used.
40 CFR Part 62, Subpart OOO	62.16724 Reporting Guidelines (b) Amended design capacity report	b) *Amended design capacity report.* An amended design capacity report must be submitted providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to meet or exceed 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density.		X	Not applicable for this reporting period.

La Crosse County Solid Waste Management Facility
Air Permit Monitoring Summary - 40 CFR Part 62 Supbart OOO
Air Permit No. 63206363A-P11
July 1, 2023 through December 31, 2023

Emitting Unit	Rule Citation	Requirements	Any Deviations		Notes
			Yes	No	
40 CFR Part 62, Subpart OOO	62.16724 Reporting Guidelines (c) NMOC emission rate report.	(c) *NMOC emission rate report.* The NMOC emission rate report must be submitted following the procedure specified in paragraph 40 CFR s. 62.16724(j)(2) of this section no later than 90 days after the effective date of 40 CFR Part 62 Subpart OOO. The NMOC emission rate report must be submitted to the Administrator and teh department annually following the procedure specified in paragraph 40 CFR s. 62.16724(j)(2) of this section, except as provided for in paragraph 40 CFR s. 62.16724(c)(3). The Administrator and the department may request such additional information as may be necessary to verify the reported NMOC emission rate. (1) The NMOC emission rate report must contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in 40 CFR s. 62.16718(a). (2) The NMOC emission rate report must include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions. (3) If the estimated NMOC emission rate as reported in the annual report to the Administrator is less than 34 megagrams per year in each of the next 5 consecutive years, the owner or operator may elect to submit, following the procedure specified in 40 CFR s. 62.16724(j)(2), an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate must include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based must be provided to the Administrator and the department. This estimate must be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate must be submitted to the Administrator and the department. The revised estimate must cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.			NMOC Emission Rate Report submitted to WDNR in June 15, 2021. NMOC emission rate less than 34 Mg/yr. Next NMOC due June 2026.
40 CFR Part 62, Subpart OOO	62.16724 Reporting Guidelines (j) Electronic reporting	(j) *Electronic reporting* . The owner or operator must submit reports electronically according to 40 CFR s. 62.16724(j)(1) and (2). (see permit for details)		**X**	Report was submitted via CEDRI.

La Crosse County Solid Waste Management Facility
Air Permit Monitoring Summary - 40 CFR Part 62 Supbart OOO
Air Permit No. 63206363A-P11
July 1, 2023 through December 31, 2023

Emitting Unit	Rule Citation	Requirements	Any Deviations		Notes
			Yes	No	
40 CFR Part 62, Subpart OOO	62.16724 Reporting Guidelines (l) Liquids addition	(l) Liquids addition. The owner or operator that has employed leachate recirculation or added liquids based on a Research, Development, and Demonstration permit (issued through Resource Conservation and Recovery Act (RCRA), subtitle D, part 258) within the last 10 years must submit to the Administrator, annually, following the procedure specified in paragraph 40 CFR s. 62.16724(j)(2), the following information: (1)Volume of leachate recirculated (gallons per year) and the reported basis of those estimates (records or engineering estimates). (2) Total volume of all other liquids added (gallons per year) and the reported basis of those estimates (records or engineering estimates). (3) Surface area (acres) over which the leachate is recirculated (or otherwise applied). (4) Surface area (acres) over which any other liquids are applied. (5) The total waste disposed (megagrams) in the areas with recirculated leachate and/or added liquids based on on-site records to the extent data are available, or engineering estimates and the reported basis of those estimates. (6) The annual waste acceptance rates (megagrams per year) in the areas with recirculated leachate and/or added liquids, based on on-site records to the extent data are available, or engineering estimates. (7) The initial report must contain items in paragraph (l)(1) through (6) of this section per year for the most recent 365 days as well as for each of the previous 10 years, to the extent historical data are available in on-site records, and the report must be submitted no later than June 21, 2022. (8) Subsequent annual reports must contain items in paragraph (l)(1) through (6) of this section for the 365-day period following the 365-day period included in the previous annual report, and the report must be submitted no later than 365 days after the date the previous report was submitted. (10) Landfills may cease annual reporting of items in paragraphs (l)(1) through (6) of this section once they have submitted the closure report in § 62.16724(f).	X		Report was due June 15, 2023. Report submitted February 22, 2024.

La Crosse County Solid Waste Management Facility
Air Permit Monitoring Summary - 40 CFR Part 62 Supbart OOO
Air Permit No. 63206363A-P11
July 1, 2023 through December 31, 2023

Emitting Unit	Rule Citation	Requirements	Any Deviations		Notes
			Yes	No	
40 CFR Part 62, Subpart OOO	62.16726 Recordkeeping Guidelines	(a) Except as provided in 40 CFR 62.16724(d)(2), the owner or operator must keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report that triggered 40 CFR s. 62.16714(e), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable. (i) Any records required to be maintained by this subpart that are submitted electronically via the EPA's CDX may be maintained in electronic format. (j) For each owner or operator reporting leachate or other liquids addition under 40 CFR s. 62.16724(l), keep records of any engineering calculations or company records used to estimate the quantities of leachate or liquids added, the surface areas for which the leachate or liquids were applied, and the estimates of annual waste acceptance or total waste in place in the areas where leachate or liquids were applied.		X	Records retained and available.

BLK *2/19/2024*
Reviewer Date

La Crosse County Solid Waste Management Facility
Air Permit Monitoring Summary - Malodorous Emissions
Air Permit No. 63206363A-P11
July 1, 2023 through December 31, 2023

Emitting Unit	Permit Condition	Rule Citation	Pollutant/ Parameter	Compliance Demonstration Method	Recordkeeping and Monitoring	Any Deviations During Reporting Period? Yes	No	Notes
Total Facility	I.B.1.a.(1)	NR 429.03	Malodorous Emissions	Limitation: The permittee may not cause, allow, or permit emissions into the ambient air of any substance or combination of substances in such quantities that an objectionable odor is determined to result, unless preventative measures (e.g. - operating a landfill gas collection and control systems) are taken to abate or control such emissions.				
	I.B.1.b.(1)	NR 429.03(3)		The permittee shall operate a landfill gas collection system, the landfill gas treatment system, and Process P01, to control malodorous emissions as specified in I.A.2.a.-b.			X	The facility operates a gas collection and control system.
	I.B.1.b.(2)(a), I.B.1.b.(2)(b), I.B.1.b.(2)(c),	NR 429.03(3)		The permittee shall take other appropriate actions when necessary that include, but are not limited to the following: (a) place additional cover materials within the landfill, (b) Making necessary adjustments to the landfill gas collection system and control devices, (c) Using odor suppressants or masking agents.	Recordkeeping: I.B.1.c.(1) (a) The records required in the department approved odor control plan.		X	Odor Control Plan updated in December 2017. Retained on site.
	I.B.1.b.(3)	NR 439.04(1)(d)		The permittee shall keep and maintain a copy of the most recent department approved odor control plan onsite and make available to department personnel upon request during normal business hours.	(b) A copy of the most recent department approved odor control plan.		X	Odor Control Plan updated in December 2017. Retained on site.
	I.B.1.b.(4)	NR 439.04(1)(d)		The permittee shall submit any requested changes to the odor control plan to the La Crosse Service Center Air Program Office at least 45 days prior to making any changes.	(c) Copies of all department approvals of the odor control plan and requested changes to that plan.		X	No changes requested during the reporting period.

BLK Reviewer

2/22/2024 Date

La Crosse County Solid Waste Management Facility
Air Permit Monitoring Summary - Fugitive Dust
Air Permit No. 63206363A-P11
July 1, 2023 through December 31, 2023

Emitting Unit	Permit Condition	Rule Citation	Pollutant/ Parameter	Compliance Demonstration Method	Recordkeeping and Monitoring	Any Deviations During Reporting Period? Yes	No	Notes
Total Facility	I.B.2.a.(1)	NR 415.04	Fugitive Emissions	Limitation: No person may cause, allow, or permit any materials to be handled, transported, or stored without taking precautions to prevent particulate matter from becoming airborne.				
	I.B.2.b.(1)(a), I.B.2.b.(1)(b), I.B.2.b.(1)(c), I.B.2.b.(1)(d), I.B.2.b.(1)(e)	NR 415.04(1)		The permittee shall take precautions to prevent particulate matter from becoming airborne. These precautions shall include, but not limited to, the following: (a) Use, where possible, of water or chemicals for control of dust in construction operations. (b) Application of asphalt, water, suitable chemicals or plastic covering on dirt roads, material stockpiles and other surfaces which can create airborne dust, provided such application does not create a hydrocarbon, odor or water pollution problem. (c) Installation and use of hoods, fans and air cleaning devices to enclose and vent the areas where dusty materials are handled. (d) Covering or securing of materials likely to become airborne while being moved on public roads or railroads. (e) The paving or maintenance of roadway areas so as not to create air pollution.	Recordkeeping: I.B.2.c.(1) (a) The records required in the department approved fugitive dust control plan.		X	Precautions followed to minimize airborne dust.
	I.B.2.b.(2)	NR 439.05		The permittee shall keep and maintain a copy of the most recent department approved fugitive dust control plan onsite and make available to department personnel upon request during normal business hours.	(b) A copy of the most recent department approved fugitive dust control plan.		X	Fugitive Dust Control Plan updated December 2017.
	I.B.2.b.(3)	NR 439.05		The permittee shall submit any requested changes to the fugitive dust control plan to the La Crosse Service Center Air Program Office at least 30 days prior to making any changes.	(c) Copies of all department approvals of the fugitive dust control plan and requested changes to that plan.		X	No changes requested during the reporting period.

BLK Reviewer

2/22/2024 Date

La Crosse County Solid Waste Management Facility
Air Permit Monitoring Summary - Conditions Applicable to the Operation Permit
Air Permit No. 63206363A-P11
January 1, 2023 through June 30, 2023

Emitting Unit	Permit Condition	Rule Citation	Pollutant/ Parameter	Limitation/ Condition	Compliance Demonstration Method	Any Deviations During Reporting Period? Yes	No	Notes
ZZZ. - Conditions Applicable to the Operation Permit	ZZZ.1.a.(1) ZZZ.1.b.(1)	NR 439.11, NR 439.11(1)	MPAP	A malfunction prevention and abatement plan shall be prepared and followed for the	The MPAP shall be developed to prevent, detect and correct malfunctions or equipment failures which may cause any applicable emissions limitation to be violated or which may cause air pollution.		X	MPAP reviewed and updated annually.
	ZZZ.1.a.(2) ZZZ.1.b.(2)	NR 439.11(4) NR 407.09(1)(c)1.c. NR 439.055(4)		All air pollution control equipment shall be operated and maintained in conformance with good engineering practices (i.e., operated and maintained according to manufacturer's specifications and directions) to minimize the possibility for the exceedance of any emission limitations	This MPAP shall include installation, maintenance, and routine calibration procedures for the process monitoring and control equipment instrumentation. This plan shall reqiure an instrumentation calibration at the frequency specified by the manufacturer, yearly or at a frequency based on good engineering practice as established by operational history, whichever is more frequent. Inspection and calibration shall also be conducted whenever instrumentation anomalies are noted.		X	Equipment O&M completed per MPAP.
	ZZZ.1.b.(3)	NR 407.11			The MPAP shall require a copy of the O&M manual for the control equipment to be maintained on site. The plan shall contain all of the elements of NR 439.11(1)(a)-(h).			P01 O&M manual on site. MPAP contents comply.
	ZZZ.2.a.(1)	NR 439.07	Stack Testing Requirements	See Permit	See Permit, I.ZZZ.2.b.		X	No testing performed during reporting period.
	ZZZ.2.a.(2)	NR 439.07(1)					X	
	ZZZ.2.a.(3)	NR 439.07(2)					X	
	ZZZ.3.a.(1)	NR 407.09(1)(c)3. NR 439.03(1)(b)	Compliance Report and Records	The permittee shall submit periodic monitoring reports.	See Permit I.ZZZ.3.b.(1): Semi-annual monitoring summary reports due September 1 and March 1 for the previous January-June and July-December periods, respectively.		X	Previous semi-annual monitoring summary report submitted in a timely manner.
	ZZZ.3.a.(2)	NR 407.09(4)(a)3. NR 439.03(1)(c)		The permittee shall submit periodic certification of compliance.	See Permit I.ZZZ.3.b.(2): Annual certification of compliance due March 1 for the previous calendar year.		X	Previous annual certification of compliance submitted in a timely manner.
	ZZZ.3.a.(3)	NR 439.04, NR 439.05		The records required under this permit shall be retained for at least five (5) years and shall be made available to department personnel upon request during normal business hours.			X	Records retained and available.

BLK Reviewer

2/22/2024 Date

D-4 – LFG Wellhead Balance Data

La Crosse County Solid Waste Department
3200 Berlin Drive La Crosse, Wisconsin 54601
Telephone: (608) 785-9572 • Fax: (608) 785-6160
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Gas Balance Sheet 2023

Page 1

Taken by: JD & MG | ***Date*** 1/31/2023 | Start Barometric Pressure 29.50 | Weather: 1.2 Degrees F 0 MPH Cloudy

Time 10:00 AM

Checked by: JES /SEH | 12:00 PM | End Barometric Pressure 29.47 | Weather: 7.1 Degrees F 12.3 MPH Cloudy

Sample Location (DNR ID)		Initial Pointer Setting %	End Pointer Setting %	Vacuum " of H2O Well	Flow	Temp. F	Gas Concentration Percent Methane W	Carbon Dioxide W	Oxygen W	Top of well elevation	Top of screen elevation	Depth to Leachate (feet)	Liquid elevation	Screen Length (ft)	Liquid Pumped	% Screen open	Static	Differential	Comments
Flare St (781)	781	100	100	-2.2	261	47.2	39.4	22.0	3.1								-	-	
Flare End (781)	781	100	100	-2.0	253.6	45.2	40.6	22.3	2.8								-	-	
GW-1 (800)	800	5%	5%		2	30.0	8.9	12.3	0.1	806.5	791.6	37.5	769	23.5	0	**96%**	-1.10	0.038	4
GW-2(803)	803	5%	5%		5	22.0	33.1	3.7	0.1	802.3	786.8	38.8	763.5	23.5	0	**99%**	-1.16	0.041	6
GW-3 (806)	806	5%	5%		2	26.0	31.1	7.7	0.1	797.4	781.6	38.5	758.9	23.5	0	**97%**	-1.17	0.039	10
GW-4 (809)	809	10%	5%		3	40.0	27.3	10.4	0.1	801.3	785.3	36.3	765	21.5	0	**94%**	-1.18	0.051	11
GW-5 (812)	812	5%	5%		4	22.0	17.6	13.5	0.1	804.7	789.4	39.1	765.6	24.5	0	**97%**	-1.19	0.028	50
GW-6 (815)	815	5%	5%		2	20.0	19.6	12.4	0.2	811.6	797	42.8	768.8	29	0	**97%**	-1.20	0.031	15
GW-7 (818)	818	5%	5%		5	30.0	7.3	10.3	1.6	813.5	799	37.9	775.6	27	0	**87%**	-1.27	0.023	9
GW-8 (821)	821	35%	35%		8	60.0	34.5	13.3	2.8	824.9	811	44.8	780.1	33	0	**94%**	-1.68	0.085	13
GW-9 (824)	824	100%	100%		14	26.0	74.4	25.2	0.4	860.1	838	72.8	787.3	67	0	**76%**	-1.95	0.077	26
GW-10 (827)	827	90%	90%		13	30.0	76.6	17.9	0.8	853.7	835.6	55.7	798	53	0	**71%**	-1.89	0.082	12
GW-11 (865)	865	100%	100%		16	60.0	49.7	25.7	0.4	855.8	833.1	78.8	776.99	56.5	0	**99%**	-1.74	0.066	92
GW-12 (831)	831	25%	25%		11	60.0	34.7	22.2	0.1	897.3	881.0	59.8	837.5	50.0	0	**87%**	-1.30	0.034	102
GW-13 (830)	830	100%	100%		18	50.0	78.0	21.3	0.7	855.2	836.5	61.5	793.7	53.0	0	**81%**	-1.97	0.078	14
GW-14 (833)	833	100%	100%		19	70.0	70.3	28.1	0.9	833.1	816.1	46.9	786.2	41.8	559	**72%**	-1.93	0.076	14
GW-15 (836)	836	100%	100%		12	80.0	74.4	24.9	0.6	847.7	833.4	47.1	800.6	38.0	237	**86%**	-1.81	0.073	12
GW-16 (839)	839	100%	100%		14	20.0	68.7	29.1	0.9	851.5	835.8	48.5	803.0	36.8	718	**89%**	-1.82	0.063	6
GW-17 (842)	842	100%	100%		10	21.0	65.5	33.5	1.0	882.2	856.0	91.2	791.0	79.0	103.5	**82%**	-1.80	0.063	28
GW-19 (841)	841	40%	40%		7	97.0	31.5	16.9	0.7	905.97	889.8	62.1	843.9	50.0	0	**92%**	-1.43	0.051	75
GW-20 (867)	867	30%	30%		6	70.0	42.6	30.3	3.0	856.32	837.1	67.3	789.0	49.5	0	**97%**	-1.55	0.044	164
GW-21 (869)	869	20%	20%		6	20.0	20.3	16.7	0.2	810.0	795.1	26.6	783.4	13.5	0	**87%**	-1.49	0.055	40
GW-22 (871)	871	40%	40%		11	50.0	38.2	27.5	0.2	815.62	796.0	32.6	783.0	22.5	0	**58%**	-1.30	0.039	49
GW-26 (843)	843	40%	40%		10	64.0	43.4	22.3	1.5	881.21	865.7	59.2	822.0	50.0	0	**87%**	-1.89	0.075	79
GW-27 (844)	844	15%	15%		5	32.0	51.7	32.9	0.3	857.02	841.2	46.3	810.7	31.0	0	**98%**	-1.39	0.031	25
GW-33 (873)	873	20%	20%		8	80.0	31.2	21.0	3.9	815.63	797.9	41.1	774.5	24.5	0	**95%**	-1.46	0.044	16

						Temp	CH4	CO2	O2	Static	Diff.	Comments
Phase VII (851)	851	30%	30%			70.0	24.2	21.0	2.2	-0.98	0.021	89
Phase V CO (847)	847	30%	30%			20.0	39.3	18.8	4.8	-1.6	0.06	25
Phase IV CO (845)	845	25%	25%			32.0	30.7	12.8	3.6	-1.31	0.042	10
STOC 1 (853)	853	100%	100%			26.0	66.0	33.4	0.6	-1.91	0.089	310
STOC 2 (855)	855	10%	10%			20.0	37.9	22.4	1.7	-1.79	0.082	81
STOC 3 (857)	857	10%	10%			20.0	19.4	15.3	4.5	-1.20	0.049	35
STOC 4 (859)	859	5%	5%			20.0	21.2	19.8	1.8	-1.10	0.020	6
STOC 5 (861)	861	5%	5%			31.0	8.0	15.2	4.0	-1.09	0.031	5
STOC 6 (863)	863	5%	5%			22.0	10.2	17.9	2.8	-1.10	0.023	26
STOC 7 (875)	875	5%	5%			60.0	17.2	17,9	4.1	-0.05	0.019	12
STOC 8 (854)	854	40%	40%			40.0	51.3	35.0	0.4	-0.96	0.047	809
STOC 9 (856)	856	20%	20%			26.0	50.9	33.5	0.3	-0.91	0.052	101
STOC 10		80%	80%			90.0	57.3	33.7	0.4	-0.92	0.043	1225
STOC 11		70%	70%			80.0	50.0	30.0	0.3	-0.90	0.061	542
Phase VI-E (849)	849	5%	5%			38.0	21.6	19.2	4.6	-1.63	0.049	8
STOC-PH VII LCO East		30%	30%			20.0	50.0	30.0	0.3	-1.82	0.051	68
STOC 13 (879)	879	10%	10%			20.0	18.3	15.4	3.9	-1.55	0.047	10
STOC 14 (881)	881	5%	5%			29.0	19.2	16.8	1.6	-1.39	0.077	3
STOC 15 (883)	883	2%	2%			20.0	20.6	17.1	1.0	-1.40	0.051	2
STOC 16		10%	10%			52.0	63.7	35.8	0.5	-1.85	0.069	22.0

Well #	Start	End	Gallons
14	171181	172299	559
15	240212	240686	237
16	276100	277536	718
17	458576	458783	103.5

Cycle = .5 gallons

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Gas Balance Sheet 2023

Page 1

Taken by: JD & MG | ***Date*** 2/21/2023 | Start Barometric Pressure 29.00 | Weather: 11.5 Degrees F 3.1 MPH Sunny

Time 10:00 AM

Checked by: JES /SEH | 12:00 PM | End Barometric Pressure 29.01 | Weather: 17.2 Degrees F 5.0 MPH Cloudy

Sample Location (DNR ID)	Initial Pointer Setting %	End Pointer Setting %	Vacuum " of H2O Well	Flow	Temp. F	Gas Concentration Percent Carbon Methane W	Carbon Dioxide W	Oxygen W	Top of well elevation	Top of screen elevation	Depth to Leachate (feet)	Liquid elevation	Screen Length (ft)	Liquid Pumped	% Screen open	Static	Differential	Comments
Flare St (781)	100	100	-2.2	254.5	45.6	40.4	22.7	3.2								-	-	
Flare End (781)	100	100	-2.0	247.3	46.7	41.3	22.9	2.8								-	-	
GW-1 (800)	5%	5%		2	34.0	3.5	13.7	0.2	806.5	791.6	37.5	769	23.5	0	**96%**	-1.12	0.025	
GW-2(803)	5%	5%		5	32.0	30.3	3.8	0.1	802.3	786.8	38.8	763.5	23.5	0	**99%**	-1.20	0.041	
GW-3 (806)	5%	5%		2	36.0	28.6	7.8	0.1	797.4	781.6	38.5	758.9	23.5	0	**97%**	-1.20	0.038	
GW-4 (809)	10%	5%		3	38.0	24.3	10.6	0.2	801.3	785.3	36.3	765	21.5	0	**94%**	-1.11	0.042	
GW-5 (812)	5%	5%		4	30.0	16.1	14.3	0.3	804.7	789.4	39.1	765.6	24.5	0	**97%**	-1.18	0.022	
GW-6 (815)	5%	5%		2	30.0	9.1	8.6	4.6	811.6	797	42.8	768.8	29	0	**97%**	-1.15	0.031	
GW-7 (818)	5%	5%		5	25.0	6.6	8.1	4.4	813.5	799	37.9	775.6	27	0	**87%**	-1.10	0.029	
GW-8 (821)	35%	35%		8	60.0	32.2	12.8	3.8	824.9	811	44.8	780.1	33	0	**94%**	-1.40	0.056	
GW-9 (824)	100%	100%		14	40.0	66.9	17.8	0.6	860.1	838	72.8	787.3	67	0	**76%**	-1.90	0.088	
GW-10 (827)	90%	90%		13	30.0	61.7	16.6	2.7	853.7	835.6	55.7	798	53	0	**71%**	-1.87	0.066	
GW-11 (865)	100%	100%		16	65.0	47.5	25.5	0.6	855.8	833.1	78.8	776.99	56.5	0	**99%**	-1.70	0.083	
GW-12 (831)	25%	25%		11	60.0	34.5	21.8	0.2	897.3	881.0	59.8	837.5	50.0	0	**87%**	-1.30	0.049	
GW-13 (830)	100%	100%		18	40.0	77.1	22.3	0.6	855.2	836.5	61.5	793.7	53.0	0	**81%**	-1.82	0.059	
GW-14 (833)	100%	100%		19	76.0	69.2	28.7	1.1	833.1	816.1	46.9	786.2	41.8	167.5	**72%**	-1.80	0.070	
GW-15 (836)	100%	100%		12	80.0	73.8	25.4	0.8	847.7	833.4	47.1	800.6	38.0	552	**86%**	-1.80	0.073	
GW-16 (839)	100%	100%		14	30.0	68.8	29.7	0.7	851.5	835.8	48.5	803.0	36.8	287.5	**89%**	-1.81	0.067	
GW-17 (842)	100%	100%		10	20.0	65.5	33.1	1.2	882.2	856.0	91.2	791.0	79.0	30.5	**82%**	-1.80	0.082	
GW-19 (841)	40%	40%		7	98.0	30.1	16.2	0.8	905.97	889.8	62.1	843.9	50.0	0	**92%**	-1.50	0.034	
GW-20 (867)	30%	30%		6	70.0	42.0	30.1	0.2	856.32	837.1	67.3	789.0	49.5	0	**97%**	1.75	0.042	
GW-21 (869)	20%	20%		6	20.0	22.0	16.9	0.4	810.0	795.1	26.6	783.4	13.5	0	**87%**	-1.40	0.053	
GW-22 (871)	40%	40%		11	40.0	37.6	26.9	0.2	815.62	796.0	32.6	783.0	22.5	0	**58%**	-1.50	0.078	
GW-26 (843)	40%	40%		10	70.0	48.0	24.6	1.3	881.21	865.7	59.2	822.0	50.0	0	**87%**	-1.30	0.071	
GW-27 (844)	15%	15%		5	20.0	49.9	41.3	0.4	857.02	841.2	46.3	810.7	31.0	0	**98%**	-1.30	0.031	
GW-33 (873)	20%	20%		8	90.0	29.0	20.0	4.2	815.63	797.9	41.1	774.5	24.5	0	**95%**	-1.20	0.021	

					Temp	CH4	CO2	O2	Static	Diff.	Comments
Phase VII (851)	30%	30%			64.0	27.8	22.2	1.9	-1.35	0.070	
Phase V CO (847)	30%	30%			36.0	38.9	19.6	3.6	-1.60	0.037	
Phase IV CO (845)	25%	25%			20.0	31.9	13.5	4.8	-1.52	0.044	
STOC 1 (853)	100%	100%			52.0	65.6	32.7	1.1	-1.90	0.063	
STOC 2 (855)	10%	10%			45.0	35.8	21.5	4.8	-1.87	0.052	
STOC 3 (857)	10%	10%			38.0	28.0	18.6	4.3	-1.78	0.062	
STOC 4 (859)	5%	5%			30.0	22.2	20.6	3.0	-1.85	0.047	
STOC 5 (861)	5%	5%			42.0	3.6	14.3	4.5	-1.40	0.067	
STOC 6 (863)	5%	5%			40.0	9.3	13.2	2.5	-1.40	0.044	
STOC 7 (875)	5%	5%			60.0	4.3	11.6	4.2	-1.10	0.042	
STOC 8 (854)	40%	40%			45.0	60.2	37.7	0.2	-1.38	0.064	
STOC 9 (856)	20%	20%			40.0	56.6	36.5	0.2	-1.40	0.087	
STOC 10	80%	80%			90.0	60.2	34.1	0.4	-1.38	0.029	
STOC 11	70%	70%			80.0	51.3	29.7	0.5	-1.30	0.019	
Phase VI-E (849)	5%	5%			22.0	12.4	23.8	3.4	-1.00	0.028	
STOC-PH VII LCO East	30%	30%			18.0	61.8	37.9	0.3	-1.45	0.049	
STOC 13 (879)	10%	10%			20.0	20.4	21.8	1.4	-1.65	0.052	
STOC 14 (881)	5%	5%			20.0	26.3	19.8	3.0	-1.70	0.060	
STOC 15 (883)	2%	2%			20.0	21.2	20.3	1.3	-1.40	0.072	
STOC 16	10%	10%			50.0	63.6	35.6	0.7	-1.60	0.055	

Well #	Start	End	Gallons
14	172299	172634	167.5
15	240686	241790	552
16	277536	278111	287.5
17	458783	458844	30.5

Cycle = .5 gallons

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Gas Balance Sheet 2023

Page 1

Taken by: JD | ***Date*** 3/28/2023 | Start Barometric Pressure 29.53 | Weather: 30.2 Degrees F 6.7 MPH Partly Sunny

Time 10:00 AM

Checked by: JES /SEH | 1:00 PM | End Barometric Pressure 29.50 | Weather: 36.9 Degrees F 8.8 MPH Partly Cloudy

Sample Location (DNR ID)	Initial Pointer Setting %	End Pointer Setting %	Vacuum " of H2O Well	Flow	Temp. F	Gas Concentration Percent Carbon Methane W	Carbon Dioxide W	Oxygen W	Top of well elevation	Top of screen elevation	Depth to Leachate (feet)	Liquid elevation	Screen Length (ft)	Liquid Pumped	% Screen open	Static	Differential	Comments
Flare St (781)	100	100	-2.2	276.8	44.9	38.2	22.0	3.1								-	-	
Flare End (781)	100	100	-2.0	261.5	43.6	39.4	22.4	2.7								-	-	
GW-1 (800)	5%	5%		2	42.0	8.0	11.3	0.3	806.5	791.6	37.5	769	23.5	0	**96%**	-1.30	0.041	
GW-2(803)	5%	5%		5	40.0	32.8	13.6	0.4	802.3	786.8	38.8	763.5	23.5	0	**99%**	-1.35	0.059	
GW-3 (806)	5%	5%		2	32.0	29.1	10.9	0.4	797.4	781.6	38.5	758.9	23.5	0	**97%**	-1.31	0.025	
GW-4 (809)	10%	5%		3	30.0	25.6	13.0	0.1	801.3	785.3	36.3	765	21.5	0	**94%**	-1.30	0.066	
GW-5 (812)	5%	5%		4	31.0	15.4	13.9	0.3	804.7	789.4	39.1	765.6	24.5	0	**97%**	-1.29	0.030	
GW-6 (815)	5%	5%		2	29.0	9.7	10.1	3.9	811.6	797	42.8	768.8	29	0	**97%**	-1.32	0.099	
GW-7 (818)	5%	5%		5	28.0	7.0	9.6	3.9	813.5	799	37.9	775.6	27	0	**87%**	-1.30	0.051	
GW-8 (821)	35%	35%		8	30.0	12.1	13.5	2.6	824.9	811	44.8	780.1	33	0	**94%**	-1.47	0.066	
GW-9 (824)	100%	100%		14	34.0	14.4	16.6	1.9	860.1	838	72.8	787.3	67	0	**76%**	-1.69	0.052	
GW-10 (827)	90%	90%		13	33.0	15.0	16.3	2.5	853.7	835.6	55.7	798	53	0	**71%**	-1.70	0.035	
GW-11 (865)	100%	100%		16	35.0	47.2	26.1	0.6	855.8	833.1	78.8	776.99	56.5	0	**99%**	-1.75	0.037	
GW-12 (831)	25%	25%		11	30.0	33.1	25.7	0.3	897.3	881.0	59.8	837.5	50.0	0	**87%**	-1.78	0.028	
GW-13 (830)	100%	100%		18	36.0	74.2	15.8	0.2	855.2	836.5	61.5	793.7	53.0	0	**81%**	-1.80	0.042	
GW-14 (833)	100%	100%		19	31.0	71.0	28.3	0.2	833.1	816.1	46.9	786.2	41.8	338.5	**72%**	-1.79	0.082	
GW-15 (836)	100%	100%		12	29.0	71.9	25.8	0.3	847.7	833.4	47.1	800.6	38.0	491	**86%**	-1.76	0.052	
GW-16 (839)	100%	100%		14	30.0	68.0	31.2	0.4	851.5	835.8	48.5	803.0	36.8	352	**89%**	-1.77	0.040	
GW-17 (842)	100%	100%		10	30.0	64.1	31.9	0.5	882.2	856.0	91.2	791.0	79.0	58	**82%**	-1.78	0.046	
GW-19 (841)	40%	40%		7	26.0	23.2	23.5	1.7	905.97	889.8	62.1	843.9	50.0	0	**92%**	-1.60	0.039	
GW-20 (867)	30%	30%		6	29.0	34.8	35.1	0.5	856.32	837.1	67.3	789.0	49.5	0	**97%**	-1.64	0.066	
GW-21 (869)	20%	20%		6	30.0	23.4	24.1	0.3	810.0	795.1	26.6	783.4	13.5	0	**87%**	-1.61	0.041	
GW-22 (871)	40%	40%		11	32.0	36.8	38.5	0.4	815.62	796.0	32.6	783.0	22.5	0	**58%**	-1.72	0.075	
GW-26 (843)	40%	40%		10	36.0	49.0	49.3	2.2	881.21	865.7	59.2	822.0	50.0	0	**87%**	-1.38	0.060	
GW-27 (844)	15%	15%		5	31.0	44.3	44.0	0.7	857.02	841.2	46.3	810.7	31.0	0	**98%**	-1.39	0.051	
GW-33 (873)	20%	20%		8	35.0	30.0	30.3	2.9	815.63	797.9	41.1	774.5	24.5	0	**95%**	-1.30	0.089	

					Temp	CH4	CO2	O2	Static	Diff.	Comments
Phase VII (851)	30%	30%			30.0	28.4	26.0	1.9	-1.48	0.054	
Phase V CO (847)	30%	30%			27.0	39.2	21.9	3.4	-1.49	0.084	
Phase IV CO (845)	25%	25%			22.0	20.7	17.4	4.6	-1.60	0.074	
STOC 1 (853)	100%	100%			20.0	66.0	32.9	1.1	-1.79	0.061	
STOC 2 (855)	10%	10%			36.0	37.1	23.1	4.7	-1.80	0.053	
STOC 3 (857)	10%	10%			30.0	29.8	19.5	4.8	-1.77	0.037	
STOC 4 (859)	5%	5%			34.0	24.3	21.0	2.9	-1.76	0.072	
STOC 5 (861)	5%	5%			32.0	10.0	17.6	3.4	-1.41	0.026	
STOC 6 (863)	5%	5%			30.0	11.3	16.0	2.4	-1.43	0.043	
STOC 7 (875)	5%	5%			32.0	5.1	13.1	4.1	-1.50	0.053	
STOC 8 (854)	40%	40%			32.0	61.8	37.0	0.3	-1.30	0.065	
STOC 9 (856)	20%	20%			30.0	57.7	35.7	0.2	-1.32	0.067	
STOC 10	80%	80%			30.0	63.2	33.9	0.1	-1.34	0.056	
STOC 11	70%	70%			30.0	55.4	33.0	0.2	-1.33	0.037	
Phase VI-E (849)	5%	5%			31.0	15.0	12.5	0.3	-1.30	0.049	
STOC-PH VII LCO East	30%	30%			29.0	56.4	39.6	1.7	-1.45	0.036	
STOC 13 (879)	10%	10%			27.0	12.0	10.6	0.9	-1.60	0.031	
STOC 14 (881)	5%	5%			30.0	17.1	9.6	2.7	-1.78	0.056	
STOC 15 (883)	2%	2%			31.0	15.7	6.8	3.1	-1.75	0.058	
STOC 16	10%	10%			32.0	59.8	38.8	0.4	-1.82	0.040	

Well #	Start	End	Gallons
14	172634	173311	338.5
15	241790	242772	491
16	278111	278815	352
17	458844	458960	58

Cycle = .5 gallons

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Gas Balance Sheet 2023

Page 1

Taken by: JD | ***Date*** 4/28/2023 | Start Barometric Pressure 29.03 | Weather: 69.0 Degrees F 6.6 MPH Sunny

Time 1:00 PM

Checked by: JES /SEH | 3:30 PM | End Barometric Pressure 28.99 | Weather: 71.0 Degrees F 5.6 MPH Partly Cloudy

Sample Location (DNR ID)	Initial Pointer Setting %	End Pointer Setting %	Vacuum " of H2O Well	Flow	Temp. F	Gas Concentration Percent Methane W	Carbon Dioxide W	Oxygen W	Top of well elevation	Top of screen elevation	Depth to Leachate (feet)	Liquid elevation	Screen Length (ft)	Liquid Pumped	% Screen open	Static	Differential	Comments
Flare St (781)	100	100	-2.2	267.1	56.3	38.6	22.1	2.7								-	-	
Flare End (781)	100	100	-2.0	261.9	55.3	39.5	22.8	2.6								-	-	
GW-1 (800)	5%	5%		2	71.0	8.6	10.9	0.1	806.5	791.6	37.5	769	23.5	0	**96%**	-1.25	0.064	
GW-2(803)	5%	5%		5	73.0	33.1	12.1	0.2	802.3	786.8	38.8	763.5	23.5	0	**99%**	-1.20	0.063	
GW-3 (806)	5%	5%		2	70.0	29.0	9.6	0.1	797.4	781.6	38.5	758.9	23.5	0	**97%**	-1.15	0.088	
GW-4 (809)	10%	5%		3	69.0	26.2	11.9	0.1	801.3	785.3	36.3	765	21.5	0	**94%**	-1.19	0.082	
GW-5 (812)	5%	5%		4	70.0	16.0	13.8	0.2	804.7	789.4	39.1	765.6	24.5	0	**97%**	-1.26	0.101	
GW-6 (815)	5%	5%		2	72.0	10.0	8.8	3.4	811.6	797	42.8	768.8	29	0	**97%**	-1.29	0.077	
GW-7 (818)	5%	5%		5	65.0	7.1	9.2	3.8	813.5	799	37.9	775.6	27	0	**87%**	-1.27	0.029	
GW-8 (821)	35%	35%		8	64.0	34.9	13.0	2.0	824.9	811	44.8	780.1	33	0	**94%**	-1.59	0.099	
GW-9 (824)	100%	100%		14	70.0	57.6	16.4	1.2	860.1	838	72.8	787.3	67	0	**76%**	-1.89	0.107	
GW-10 (827)	90%	90%		13	70.0	62.0	16.1	1.9	853.7	835.6	55.7	798	53	0	**71%**	-1.80	0.088	
GW-11 (865)	100%	100%		16	72.0	48.1	24.1	0.4	855.8	833.1	78.8	776.99	56.5	0	**99%**	-1.88	0.025	
GW-12 (831)	25%	25%		11	64.0	34.4	25.6	0.2	897.3	881.0	59.8	837.5	50.0	0	**87%**	-1.84	0.074	
GW-13 (830)	100%	100%		18	70.0	74.6	15.0	0.4	855.2	836.5	61.5	793.7	53.0	0	**81%**	-1.76	0.057	
GW-14 (833)	100%	100%		19	86.0	71.8	28.1	0.1	833.1	816.1	46.9	786.2	41.8	338.5	**72%**	-1.78	0.040	
GW-15 (836)	100%	100%		12	80.0	72.4	25.6	0.4	847.7	833.4	47.1	800.6	38.0	491	**86%**	-1.80	0.085	
GW-16 (839)	100%	100%		14	76.0	67.2	30.0	0.3	851.5	835.8	48.5	803.0	36.8	352	**89%**	-1.88	0.076	
GW-17 (842)	100%	100%		10	80.0	63.8	32.9	0.7	882.2	856.0	91.2	791.0	79.0	58.5	**82%**	-1.81	0.050	
GW-19 (841)	40%	40%		7	100.0	23.4	23.4	0.9	905.97	889.8	62.1	843.9	50.0	0	**92%**	-1.57	0.054	
GW-20 (867)	30%	30%		6	70.0	35.7	35.7	0.2	856.32	837.1	67.3	789.0	49.5	0	**97%**	-1.68	0.035	
GW-21 (869)	20%	20%		6	60.0	23.9	23.9	0.3	810.0	795.1	26.6	783.4	13.5	0	**87%**	-1.53	0.082	
GW-22 (871)	40%	40%		11	72.0	38.1	38.1	0.2	815.62	796.0	32.6	783.0	22.5	0	**58%**	-1.67	0.071	
GW-26 (843)	40%	40%		10	70.0	49.6	49.6	1.0	881.21	865.7	59.2	822.0	50.0	0	**87%**	-1.44	0.105	
GW-27 (844)	15%	25%		5	78.0	44.8	44.8	0.5	857.02	841.2	46.3	810.7	31.0	0	**98%**	-1.48	0.072	
GW-33 (873)	20%	20%		8	75.0	30.1	30.1	1.6	815.63	797.9	41.1	774.5	24.5	0	**95%**	-1.27	0.087	

					Temp	CH4	CO2	O2	Static	Diff.	Comments
Phase VII (851)	30%	30%			65.0	30.6	25.4	1.5	-1.40	0.031	
Phase V CO (847)	30%	30%			72.0	39.9	20.1	3.0	-1.74	0.027	
Phase IV CO (845)	25%	25%			69.0	21.0	15.2	4.1	-1.67	0.045	
STOC 1 (853)	100%	100%			71.0	66.6	29.7	0.9	-1.82	0.038	
STOC 2 (855)	10%	10%			70.0	37.7	22.0	4.5	-1.80	0.070	
STOC 3 (857)	10%	10%			63.0	30.1	18.6	4.1	-1.82	0.087	
STOC 4 (859)	5%	5%			70.0	24.6	20.3	2.4	-1.82	0.065	
STOC 5 (861)	5%	5%			70.0	10.1	15.8	3.1	-1.46	0.087	
STOC 6 (863)	5%	5%			72.0	11.1	16.2	2.1	-1.44	0.043	
STOC 7 (875)	5%	5%			68.0	5.8	13.2	4.0	-1.39	0.033	
STOC 8 (854)	40%	40%			70.0	62.4	36.9	0.1	-1.33	0.058	
STOC 9 (856)	20%	20%			71.0	58.1	35.8	0.1	-1.36	0.084	
STOC 10	80%	80%			70.0	63.4	34.2	0.2	-1.39	0.052	
STOC 11	70%	70%			78.0	55.7	33.5	0.3	-1.24	0.038	
Phase VI-E (849)	5%	5%			90.0	15.1	11.0	1.6	-1.29	0.073	
STOC-PH VII LCO East	30%	30%			80.0	56.7	43.3	0.3	-1.50	0.028	
STOC 13 (879)	10%	10%			80.0	12.6	8.1	0.9	-1.59	0.052	
STOC 14 (881)	5%	5%			90.0	17.5	7.4	2.5	-1.85	0.036	
STOC 15 (883)	2%	2%			85.0	16.1	6.0	2.8	-1.84	0.031	
STOC 16	10%	10%			90.0	60.5	39.1	0.3	-1.90	0.033	

Well #	Start	End	Gallons
14	173311	173988	338.5
15	242772	243754	491
16	278815	279519	352
17	458960	459077	58.5

Cycle = .5 gallons

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Gas Balance Sheet 2023

Page 1

Taken by: JD | ***Date*** 5/23/2023 | Start Barometric Pressure 29.33 | Weather: 77.0 Degrees F 6.1 MPH Sunny

Time 12:00 PM

Checked by: JES /SEH | 2:30 PM | End Barometric Pressure 29.30 | Weather: 79.9 Degrees F 5.4 MPH Partly Cloudy

Sample Location (DNR ID)	Initial Pointer Setting %	End Pointer Setting %	Vacuum " of H2O Well	Flow	Temp. F	Gas Concentration Percent Methane W	Carbon Dioxide W	Oxygen W	Top of well elevation	Top of screen elevation	Depth to Leachate (feet)	Liquid elevation	Screen Length (ft)	Liquid Pumped	% Screen open	Static	Differential	Comments
Flare St (781)	100	100	-2.1	272.6	63.2	37.9	23.0	2.5								-	-	
Flare End (781)	100	100	-2.2	274.1	64.4	43.6	24.1	1.9								-	-	
GW-1 (800)	5%	2%		1	70.0	11.5	8.2	0.4	806.5	791.6	37.5	769	23.5	0	**96%**	-1.10	0.022	
GW-2(803)	5%	2%		4	65.0	27.3	2.8	0.6	802.3	786.8	38.8	763.5	23.5	0	**99%**	-0.90	0.042	
GW-3 (806)	5%	4%		2	73.0	20.9	6.4	0.6	797.4	781.6	38.5	758.9	23.5	0	**97%**	-0.65	0.031	
GW-4 (809)	10%	3%		2	69.0	18.6	9.2	0.8	801.3	785.3	36.3	765	21.5	0	**94%**	-0.44	0.024	
GW-5 (812)	5%	5%		3	86.0	14.1	13.0	0.6	804.7	789.4	39.1	765.6	24.5	0	**97%**	-0.84	0.022	
GW-6 (815)	5%	5%		3	81.0	6.2	11.1	2.0	811.6	797	42.8	768.8	29	0	**97%**	-0.46	0.013	
GW-7 (818)	5%	5%		5	80.0	3.2	10.7	3.0	813.5	799	37.9	775.6	27	0	**87%**	-0.54	0.018	
GW-8 (821)	35%	15%		7	67.0	26.4	11.7	4.2	824.9	811	44.8	780.1	33	0	**94%**	-1.22	0.041	
GW-9 (824)	100%	100%		15	72.0	57.1	15.9	1.0	860.1	838	72.8	787.3	67	0	**76%**	-1.65	0.124	
GW-10 (827)	90%	100%		12	64.0	62.0	14.6	2.7	853.7	835.6	55.7	798	53	0	**71%**	-1.87	0.101	
GW-11 (865)	100%	40%		11	71.0	38.8	23.0	0.6	855.8	833.1	78.8	776.99	56.5	0	**99%**	-1.61	0.029	
GW-12 (831)	25%	10%		8	73.0	25.7	18.1	0.7	897.3	881.0	59.8	837.5	50.0	0	**87%**	-1.10	0.038	
GW-13 (830)	100%	100%		19	70.0	74.7	19.8	0.8	855.2	836.5	61.5	793.7	53.0	0	**81%**	-1.86	0.104	
GW-14 (833)	100%	100%		21	74.0	67.6	28.3	0.8	833.1	816.1	46.9	786.2	41.8	216.5	**72%**	-2.13	0.098	
GW-15 (836)	100%	100%		14	79.0	70.7	25.7	0.8	847.7	833.4	47.1	800.6	38.0	439.5	**86%**	-1.94	0.096	
GW-16 (839)	100%	100%		15	78.0	65.5	28.6	1.1	851.5	835.8	48.5	803.0	36.8	251	**89%**	-1.72	0.102	
GW-17 (842)	100%	100%		11	81.0	64.2	32.0	0.9	882.2	856.0	91.2	791.0	79.0	37.5	**82%**	-1.51	0.114	
GW-19 (841)	40%	40%		8	98.0	19.2	13.1	1.5	905.97	889.8	62.1	843.9	50.0	0	**92%**	-1.48	0.099	
GW-20 (867)	30%	30%		5	56.0	28.0	23.4	0.5	856.32	837.1	67.3	789.0	49.5	0	**97%**	-1.05	0.086	
GW-21 (869)	20%	20%		7	58.0	23.6	15.8	0.8	810.0	795.1	26.6	783.4	13.5	0	**87%**	-1.11	0.046	
GW-22 (871)	40%	25%		10	76.0	33.4	26.2	0.6	815.62	796.0	32.6	783.0	22.5	0	**58%**	-1.21	0.067	
GW-26 (843)	40%	20%		9	80.0	36.8	22.2	1.7	881.21	865.7	59.2	822.0	50.0	0	**87%**	-1.34	0.077	
GW-27 (844)	25%	15%		6	67.0	41.0	50.8	0.5	857.02	841.2	46.3	810.7	31.0	0	**98%**	-1.08	0.066	
GW-33 (873)	20%	20%		8	100.0	24.0	15.9	4.7	815.63	797.9	41.1	774.5	24.5	0	**95%**	-0.94	0.080	

					Temp	CH4	CO2	O2	Static	Diff.	Comments
Phase VII (851)	30%	30%			83.0	34.5	26.2	1.4	-1.42	0.087	
Phase V CO (847)	30%	30%			80.0	40.2	21.4	3.1	-1.61	0.079	
Phase IV CO (845)	25%	25%			72.0	24.1	16.8	4.6	-1.29	0.080	
STOC 1 (853)	100%	100%			77.0	55.7	30.1	0.7	-1.93	0.108	
STOC 2 (855)	10%	10%			71.0	38.5	21.3	4.1	-1.82	0.045	
STOC 3 (857)	10%	10%			68.5	29.8	19.1	4.4	-1.77	0.041	
STOC 4 (859)	5%	5%			80.0	25.3	21.2	1.9	-0.87	0.028	
STOC 5 (861)	5%	5%			81.0	15.4	16.7	2.9	-1.01	0.027	
STOC 6 (863)	5%	5%			79.0	19.5	16.3	3.2	-0.75	0.038	
STOC 7 (875)	5%	5%			70.0	16.9	12.9	3.9	-0.68	0.041	
STOC 8 (854)	40%	60%			65.0	59.0	35.8	0.2	-1.85	0.088	
STOC 9 (856)	20%	40%			67.0	53.9	35.9	0.1	-1.61	0.091	
STOC 10	80%	80%			90.0	54.5	33.3	0.3	-1.52	0.128	
STOC 11	70%	45%			76.0	41.3	34.2	0.1	-1.27	0.076	
Phase VI-E (849)	5%	5%			91.0	14.5	12.2	1.4	-0.86	0.014	
STOC 12A	30%	10%			70.0	39.7	42.1	0.3	-1.34	0.052	
STOC 13 (879)	10%	10%			90.0	20.1	9.8	0.8	-1.14	0.054	
STOC 14 (881)	5%	5%			90.0	24.1	8.2	2.3	-0.73	0.036	
STOC 15 (883)	2%	2%			85.0	30.6	11.0	2.1	-0.42	0.018	
STOC 16	10%	10%			92.0	48.7	38.6	0.0	-1.22	0.033	

Well #	Start	End	Gallons
14	173988	174421	216.5
15	243754	244633	439.5
16	279519	280021	251
17	459077	459152	37.5

Cycle = .5 gallons

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Gas Balance Sheet 2023

Page 1

Taken by: JD | ***Date*** 6/9/2023 | Start Barometric Pressure 29.19 | Weather: 66.5 Degrees F 1.3 MPH Sunny

Time 9:00 AM

Checked by: JES /SEH | 11:30 AM | End Barometric Pressure 29.17 | Weather: 74.5 Degrees F 4.2 MPH Partly Cloudy

Sample Location (DNR ID)	Initial Pointer Setting %	End Pointer Setting %	Vacuum " of H2O Well	Flow	Temp. F	Gas Concentration Percent Carbon Methane W	Carbon Dioxide W	Oxygen W	Top of well elevation	Top of screen elevation	Depth to Leachate (feet)	Liquid elevation	Screen Length (ft)	Liquid Pumped	% Screen open	Static	Differential	Comments
Flare St (781)	100	100	-2.7	262.8	64.2	40.0	24.6	2.0								-	-	
Flare End (781)	100	100	-2.5	242.9	66	42.5	25.8	1.7								-	-	
GW-1 (800)	2%	2%		2	68.0	31.8	17.2	0.4	806.5	791.6	37.5	769	23.5	0	**96%**	-0.22	0.014	
GW-2(803)	2%	2%		3	61.0	39.8	13.7	0.3	802.3	786.8	38.8	763.5	23.5	0	**99%**	-0.43	0.018	
GW-3 (806)	4%	4%		1	70.0	20.1	6.8	0.4	797.4	781.6	38.5	758.9	23.5	0	**97%**	-0.41	0.011	
GW-4 (809)	3%	3%		2	71.0	15.8	10.3	0.4	801.3	785.3	36.3	765	21.5	0	**94%**	-0.35	0.009	
GW-5 (812)	5%	5%		3	71.0	14.5	14.3	0.3	804.7	789.4	39.1	765.6	24.5	0	**97%**	-0.40	0.007	
GW-6 (815)	5%	5%		3	17.0	17.0	9.3	2.4	811.6	797	42.8	768.8	29	0	**97%**	-0.26	0.047	
GW-7 (818)	5%	5%		2	70.0	13.5	10.8	3.9	813.5	799	37.9	775.6	27	0	**87%**	-0.42	0.028	
GW-8 (821)	15%	5%		7	70.0	26.4	10.2	4.3	824.9	811	44.8	780.1	33	0	**94%**	-0.46	0.045	
GW-9 (824)	100%	20%		12	68.0	26.4	30.4	3.6	860.1	838	72.8	787.3	67	0	**76%**	-1.14	0.076	
GW-10 (827)	100%	80%		16	63.0	56.0	14.6	2.8	853.7	835.6	55.7	798	53	0	**71%**	-1.78	0.092	
GW-11 (865)	40%	20%		11	79.0	41.1	25.1	0.3	855.8	833.1	78.8	776.99	56.5	0	**99%**	-1.65	0.040	
GW-12 (831)	10%	35%		13	88.0	56.8	21.7	0.1	897.3	881.0	59.8	837.5	50.0	0	**87%**	-1.18	0.057	
GW-13 (830)	100%	100%		19	69.0	73.8	20.4	0.4	855.2	836.5	61.5	793.7	53.0	0	**81%**	-1.88	0.094	
GW-14 (833)	100%	100%		22	75.0	69.7	29.9	0.4	833.1	816.1	46.9	786.2	41.8	121	**72%**	-2.02	0.121	
GW-15 (836)	100%	100%		18	83.0	71.6	28.0	0.2	847.7	833.4	47.1	800.6	38.0	301	**86%**	-1.90	0.114	
GW-16 (839)	100%	100%		16	62.0	68.6	31.1	0.3	851.5	835.8	48.5	803.0	36.8	175.5	**89%**	-1.82	0.113	
GW-17 (842)	100%	100%		14	81.0	65.7	32.7	0.6	882.2	856.0	91.2	791.0	79.0	20	**82%**	-1.51	0.101	
GW-19 (841)	40%	40%		9	92.0	20.6	24.1	0.2	905.97	889.8	62.1	843.9	50.0	0	**92%**	-1.49	0.079	
GW-20 (867)	30%	30%		7	68.0	41.1	27.7	0.1	856.32	837.1	67.3	789.0	49.5	0	**97%**	-1.23	0.074	
GW-21 (869)	20%	20%		5	70.0	38.7	26.5	0.5	810.0	795.1	26.6	783.4	13.5	0	**87%**	-1.18	0.089	
GW-22 (871)	25%	40%		10	52.0	39.3	25.9	0.2	815.62	796.0	32.6	783.0	22.5	0	**58%**	-1.38	0.120	
GW-26 (843)	20%	40%		8	67.0	33.6	22.1	0.3	881.21	865.7	59.2	822.0	50.0	0	**87%**	-1.47	0.089	
GW-27 (844)	15%	15%		6	64.0	37.9	51.0	0.1	857.02	841.2	46.3	810.7	31.0	0	**98%**	-1.11	0.061	
GW-33 (873)	20%	20%		10	98.0	31.1	19.2	3.7	815.63	797.9	41.1	774.5	24.5	0	**95%**	-1.12	0.045	

					Temp	CH4	CO2	O2	Static	Diff.	Comments
Phase VII (851)	30%	30%			69.0	12.2	16.1	2.8	-1.27	0.065	
Phase V CO (847)	30%	30%			78.0	41.1	22.7	2.9	-1.34	0.059	
Phase IV CO (845)	25%	25%			73.0	23.4	17.3	4.4	-0.94	0.083	
STOC 1 (853)	100%	100%			82.0	66.2	28.7	2.4	-1.89	0.118	
STOC 2 (855)	10%	10%			92.0	38.7	23.9	4.0	-1.12	0.035	
STOC 3 (857)	10%	10%			94.0	16.1	9.4	4.3	-1.11	0.026	
STOC 4 (859)	5%	5%			82.0	24.8	22.2	1.4	-0.52	0.022	
STOC 5 (861)	5%	5%			72.0	12.6	16.9	3.3	-0.61	0.018	
STOC 6 (863)	5%	5%			93.0	15.9	13.8	3.8	-0.34	0.028	
STOC 7 (875)	5%	5%			72.0	17.6	12.7	3.8	-0.28	0.027	
STOC 8 (854)	60%	40%			72.0	45.6	31.3	0.2	-1.64	0.067	
STOC 9 (856)	40%	15%			68.0	24.6	19.0	4.2	-1.03	0.049	
STOC 10	80%	40%			74.0	48.3	31.0	0.8	-1.32	0.096	
STOC 11	45%	30%			88.0	43.3	28.6	0.4	-1.10	0.066	
Phase VI-E (849)	5%	5%			89.0	15.4	12.8	1.2	-0.46	0.021	
STOC 12A	10%	30%			71.0	40.1	43.5	0.2	-1.14	0.049	
STOC 13 (879)	10%	10%			90.0	21.0	10.1	0.9	-0.84	0.041	
STOC 14 (881)	5%	5%			89.0	25.6	8.3	2.2	-0.63	0.025	
STOC 15 (883)	2%	2%			85.0	28.0	11.3	1.9	-0.42	0.009	
STOC 16	10%	10%			89.0	45.8	28.9	0.1	-1.20	0.019	

Well #	Start	End	Gallons
14	174421	174663	121
15	244633	245235	301
16	280021	280372	175.5
17	459152	459192	20

Cycle = .5 gallons

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Gas Balance Sheet 2023

Taken by: JD | ***Date*** 7/12/2023 | Start Barometric Pressure 29.08 | Weather: 63.2 Degrees F 4.3 MPH Light Rain

Time 12:00 PM

Checked by: JES /SEH | 3:00 PM | End Barometric Pressure 29.05 | Weather: 63.5 Degrees F 8.9 MPH Cloudy

Sample Location (DNR ID)	Initial Pointer Setting %	End Pointer Setting %	Vacuum " of H2O Well	Flow	Temp. F	Gas Concentration Percent Methane W	Carbon Dioxide W	Oxygen W	Top of well elevation	Top of screen elevation	Depth to Leachate (feet)	Liquid elevation	Screen Length (ft)	Liquid Pumped	% Screen open	Static	Differential	Comments
Flare St (781)	100	100	-2.5	225.6	68.0	43.3	26.5	1.2								-	-	
Flare End (781)	100	100	-2.9	229.0	68.4	43.9	26.7	1.2								-	-	
GW-1 (800)	2%	2%		3	62.0	27.0	9.8	0.1	806.5	791.6	38	768.5	23.5	0	**98%**	-0.28	0.010	
GW-2(803)	2%	2%		1	60.0	29.1	3.8	0.2	802.3	786.8	38.9	763.4	23.5	0	**100%**	-0.13	0.004	
GW-3 (806)	4%	4%		2	67.0	20.0	6.6	0.2	797.4	781.6	38.6	758.8	23.5	0	**97%**	-0.35	0.011	
GW-4 (809)	3%	3%		2	66.0	19.8	10.6	0.2	801.3	785.3	37	764.3	21.5	0	**98%**	-0.31	0.014	
GW-5 (812)	5%	5%		3	65.0	20.4	13.4	0.2	804.7	789.4	39.4	765.3	24.5	0	**98%**	-0.44	0.012	
GW-6 (815)	5%	5%		2	58.0	10.0	10.1	0.3	811.6	797	42.2	769.4	29	0	**95%**	-0.38	0.020	
GW-7 (818)	5%	5%		3	60.0	7.5	2.8	0.3	813.5	799	38	775.5	27	0	**87%**	-0.29	0.018	
GW-8 (821)	5%	20%		9	62.0	47.2	13.5	0.7	824.9	811	45.2	779.7	33	0	**95%**	-0.58	0.041	
GW-9 (824)	20%	40%		11	64.0	57.0	16.7	0.2	860.1	838	74.5	785.6	67	0	**78%**	-1.28	0.083	
GW-10 (827)	80%	80%		14	70.0	58.2	15.5	2.4	853.7	835.6	58.9	794.8	53	0	**77%**	-2.14	0.119	
GW-11 (865)	20%	35%		15	69.0	51.1	24.9	0.2	855.8	833.1	78.7	777.09	56.5	0	**99%**	-1.55	0.070	
GW-12 (831)	35%	10%		9	71.0	25.4	19.0	0.4	897.3	881.0	60.3	837.0	50.0	0	**88%**	-0.84	0.049	
GW-13 (830)	100%	100%		20	68.0	65.7	19.7	0.1	855.2	836.5	62.4	792.8	53.0	0	**82%**	-2.59	0.212	
GW-14 (833)	100%	100%		19	73.0	69.1	30.9	0.2	833.1	816.1	49.5	783.6	41.8	253	**78%**	-2.78	0.131	
GW-15 (836)	100%	100%		21	80.0	70.0	29.7	0.2	847.7	833.4	46.8	800.9	38.0	568.5	**86%**	-2.27	0.155	
GW-16 (839)	100%	100%		18	62.0	68.2	31.6	0.3	851.5	835.8	49.9	801.6	36.8	340.5	**93%**	-2.14	0.146	
GW-17 (842)	100%	100%		16	65.0	65.8	32.9	0.5	882.2	856.0	91.5	790.7	79.0	39.5	**83%**	-1.76	0.111	
GW-19 (841)	40%	40%		12	98.0	16.7	13.5	1.4	905.97	889.8	63.4	842.6	50.0	0	**94%**	-1.35	0.108	
GW-20 (867)	30%	20%		8	74.0	37.5	28.2	1.0	856.32	837.1	67.7	788.6	49.5	0	**98%**	-0.87	0.067	
GW-21 (869)	20%	20%		6	54.0	41.2	17.0	0.3	810.0	795.1	26.6	783.4	13.5	0	**87%**	-1.02	0.097	
GW-22 (871)	40%	40%		11	51.0	46.0	28.1	0.4	815.62	796.0	36.7	778.9	22.5	0	**76%**	-1.44	0.123	
GW-26 (843)	40%	40%		9	78.0	28.4	20.6	1.3	881.21	865.7	60.3	820.9	50.0	0	**90%**	-1.31	0.097	
GW-27 (844)	15%	15%		7	58.0	38.3	52.6	0.2	857.02	841.2	45.9	811.1	31.0	0	**97%**	-0.72	0.066	
GW-33 (873)	20%	20%		5	98.0	29.7	20.6	2.9	815.63	797.9	41.4	774.2	24.5	0	**97%**	-0.45	0.056	

					Temp	CH4	CO2	O2	Static	Diff.	Comments
Phase VII (851)	30%	5%			67.0	4.9	19.5	0.7	-0.03	0.048	
Phase V CO (847)	30%	30%			62.0	39.5	21.2	2.4	-1.10	0.063	
Phase IV CO (845)	25%	25%			60.0	22.4	17.4	4.5	-0.86	0.052	
STOC 1 (853)	100%	100%			63.0	64.8	31.9	0.6	-1.97	0.107	
STOC 2 (855)	10%	10%			63.0	43.1	25.1	4.2	-0.48	0.031	
STOC 3 (857)	10%	10%			58.0	35.1	320.3	4.7	-0.51	0.041	
STOC 4 (859)	5%	5%			64.0	24.6	21.9	1.5	-0.34	0.026	
STOC 5 (861)	5%	5%			62.0	13.7	17.1	4.0	-0.28	0.018	
STOC 6 (863)	5%	5%			89.0	14.4	13.4	3.4	-0.19	0.022	
STOC 7 (875)	5%	5%			70.0	18.5	11.9	3.9	-0.22	0.018	
STOC 8 (854)	40%	40%			70.0	53.3	34.4	0.3	-1.15	0.074	
STOC 9 (856)	15%	15%			76.0	46.2	32.8	0.4	-1.03	0.036	
STOC 10	40%	40%			88.0	50.7	32.2	0.5	-1.33	0.074	
STOC 11	30%	30%			87.0	45.1	28.4	0.3	-1.04	0.059	
Phase VI-E (849)	5%	5%			81.0	16.2	13.4	1.3	-0.36	0.018	
STOC 12A	30%	30%			69.0	41.3	42.5	0.8	-0.77	0.052	
STOC 13 (879)	10%	10%			91.0	22.1	11.2	1.4	-0.53	0.033	
STOC 14 (881)	5%	5%			84.0	27.9	9.1	1.9	-0.35	0.015	
STOC 15 (883)	2%	2%			83.0	28.6	14.5	2.4	-0.09	0.011	
STOC 16	10%	10%			79.0	46.7	27.6	0.2	-0.76	0.012	

Well #	Start	End	Gallons
14	174663	175169	253
15	245235	246372	568.5
16	280372	281053	340.5
17	459192	459271	39.5

Cycle = .5 gallons

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La Crosse County Solid Waste Department
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Gas Balance Sheet 2023

Taken by: JD | ***Date*** 8/7/2023 | Start Barometric Pressure 29.13 | Weather: 76.5 Degrees F 3 MPH Fair

Time 11:00 AM

Checked by: JES /SEH | 2:30 PM | End Barometric Pressure 29.13 | Weather: 81.6 Degrees F 2 MPH Fair

Sample Location (DNR ID)	Initial Pointer Setting %	End Pointer Setting %	Vacuum " of H2O Well	Flow	Temp. F	Gas Concentration Percent Methane W	Carbon Dioxide W	Oxygen W	Top of well elevation	Top of screen elevation	Depth to Leachate (feet)	Liquid elevation	Screen Length (ft)	Liquid Pumped	% Screen open	Static	Differential	Comments
Flare St (781)	100	100	-2.8	235	68.9	42.7	25.1	1.3								-	-	
Flare End (781)	100	100	-2.7	234.0	68.4	43.5	25.6	1.1								-	-	
GW-1 (800)	2%	2%		2	63.0	25.4	10.3	0.2	806.5	791.6	38	768.5	23.5	0	**98%**	-0.30	0.012	
GW-2(803)	2%	2%		3	61.0	23.6	4.5	0.6	802.3	786.8	38.9	763.4	23.5	0	**100%**	-0.21	0.006	
GW-3 (806)	4%	4%		1	68.0	19.1	12.1	0.3	797.4	781.6	38.6	758.8	23.5	0	**97%**	-0.25	0.013	
GW-4 (809)	3%	3%		3	62.0	20.3	11.7	0.1	801.3	785.3	37	764.3	21.5	0	**98%**	-0.28	0.015	
GW-5 (812)	5%	5%		5	72.0	21.3	14.2	0.3	804.7	789.4	39.4	765.3	24.5	0	**98%**	-0.44	0.022	
GW-6 (815)	5%	5%		2	61.0	9.5	12.7	0.4	811.6	797	42.2	769.4	29	0	**95%**	-0.24	0.018	
GW-7 (818)	5%	5%		2	66.0	13.5	10.8	0.9	813.5	799	38	775.5	27	0	**87%**	-0.22	0.012	
GW-8 (821)	5%	20%		6	78.0	22.0	17.8	2.1	824.9	811	45.2	779.7	33	0	**95%**	-0.58	0.039	
GW-9 (824)	20%	40%		15	78.0	52.0	18.6	0.2	860.1	838	74.5	785.6	67	0	**78%**	-1.38	0.114	
GW-10 (827)	80%	80%		16	77.0	56.2	17.6	1.8	853.7	835.6	58.9	794.8	53	0	**77%**	-2.23	0.103	
GW-11 (865)	20%	25%		12	81.0	44.4	24.2	0.2	855.8	833.1	78.7	777.09	56.5	0	**99%**	-1.87	0.093	
GW-12 (831)	35%	10%		7	72.0	33.5	23.4	0.6	897.3	881.0	60.3	837.0	50.0	0	**88%**	-0.71	0.071	
GW-13 (830)	100%	100%		20	76.0	61.8	20.4	0.2	855.2	836.5	62.4	792.8	53.0	0	**82%**	-2.36	0.171	
GW-14 (833)	100%	100%		17	81.0	70.7	33.1	0.3	833.1	816.1	49.5	783.6	41.8	269.5	**78%**	-2.32	0.142	
GW-15 (836)	100%	100%		15	80.0	68.9	31.5	0.1	847.7	833.4	46.8	800.9	38.0	555	**86%**	-2.01	0.111	
GW-16 (839)	100%	100%		14	70.0	61.8	29.4	0.2	851.5	835.8	49.9	801.6	36.8	358.5	**93%**	-2.36	0.121	
GW-17 (842)	100%	100%		16	73.0	65.2	31.8	0.4	882.2	856.0	91.5	790.7	79.0	175.5	**83%**	-1.54	0.134	
GW-19 (841)	40%	40%		11	89.0	17.2	15.4	1.8	905.97	889.8	63.4	842.6	50.0	0	**94%**	-1.21	0.121	
GW-20 (867)	30%	10%		6	74.0	32.1	27.9	0.3	856.32	837.1	67.7	788.6	49.5	0	**98%**	-0.78	0.072	
GW-21 (869)	20%	20%		10	68.0	46.3	18.8	0.8	810.0	795.1	26.6	783.4	13.5	0	**87%**	-0.89	0.084	
GW-22 (871)	40%	40%		13	69.0	44.5	27.7	0.3	815.62	796.0	36.7	778.9	22.5	0	**76%**	-1.28	0.095	
GW-26 (843)	40%	40%		11	79.0	23.1	19.0	0.4	881.21	865.7	60.3	820.9	50.0	0	**90%**	-1.34	0.105	
GW-27 (844)	15%	15%		8	65.0	48.2	32.7	0.5	857.02	841.2	45.9	811.1	31.0	0	**97%**	-0.75	0.054	
GW-33 (873)	20%	20%		7	91.0	25.0	18.9	3.9	815.63	797.9	41.4	774.2	24.5	0	**97%**	-0.76	0.066	

					Temp	CH4	CO2	O2	Static	Diff.	Comments
Phase VII (851)	5%	5%			77.0	8.7	12.5	0.1	-0.26	0.009	
Phase V CO (847)	30%	30%			69.0	40.0	20.4	1.8	-0.85	0.055	
Phase IV CO (845)	25%	25%			71.0	20.8	16.7	2.7	-0.65	0.054	
STOC 1 (853)	100%	100%			73.0	51.3	26.5	2.2	-1.75	0.114	
STOC 2 (855)	10%	10%			72.0	47.6	25.6	3.3	-0.36	0.019	
STOC 3 (857)	10%	10%			63.0	13.3	15	4.3	-0.42	0.022	
STOC 4 (859)	5%	5%			66.0	28.6	20.8	1.7	-0.47	0.027	
STOC 5 (861)	5%	5%			78.0	19.5	17.9	3.8	-0.22	0.008	
STOC 6 (863)	5%	5%			91.0	17.8	12.3	4.2	-0.18	0.016	
STOC 7 (875)	5%	5%			76.0	20.5	12.1	3.9	-0.22	0.024	
STOC 8 (854)	40%	20%			77.0	37.6	26.7	2.1	-0.74	0.088	
STOC 9 (856)	15%	5%			78.0	13.4	16.0	3.5	-0.46	0.043	
STOC 10	40%	20%			88.0	39.7	28.8	0.7	-0.84	0.062	
STOC 11	30%	10%			86.0	33.4	26.7	0.6	-0.65	0.051	
Phase VI-E (849)	5%	5%			80.0	15.1	12.4	2.1	-0.27	0.022	
STOC 12A	30%	30%			74.0	40.1	31.5	0.9	-0.33	0.041	
STOC 13 (879)	10%	10%			92.0	19.6	11.2	1.6	-0.28	0.026	
STOC 14 (881)	5%	5%			81.0	22.4	10.2	1.8	-0.22	0.009	
STOC 15 (883)	2%	2%			86.0	27.4	16.1	2.4	-0.18	0.008	
STOC 16	10%	10%			77.0	42.5	28.3	0.3	-0.43	0.022	

Well #	Start	End	Gallons
14	175169	175708	269.5
15	246372	247482	555
16	281053	281770	358.5
17	459271	459622	175.5

Cycle = .5 gallons

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Gas Balance Sheet 2023

Taken by: JS | ***Date*** 9/22/2023 | Start Barometric Pressure 29.35 | Weather: 62.4 Degrees F 8.8 MPH Cloudy

Time 7:30 AM

Checked by: JES /SEH | 10:30 AM | End Barometric Pressure 29.34 | Weather: 66.6 Degrees F 2.8 MPH Cloudy

Sample Location (DNR ID)	Initial Pointer Setting %	End Pointer Setting %	Vacuum " of H2O Well	Flow	Temp. F	Gas Concentration Percent Methane W	Carbon Dioxide W	Oxygen W	Top of well elevation	Top of screen elevation	Depth to Leachate (feet)	Liquid elevation	Screen Length (ft)	Liquid Pumped	% Screen open	Static	Differential	Comments
Flare St (781)	100	100	-6.0	272	68.9	38.0	23.8	1.8								-	-	
Flare End (781)	100	100	-6.2	255.0	68.8	42.6	24.6	1.4								-	-	
GW-1 (800)	2%	3%		2	62.0	19.2	8.8	1.1	806.5	791.6	38	768.5	23.5	0	**98%**	-0.36	0.003	
GW-2(803)	2%	3%		2	60.0	25.6	4.9	0.6	802.3	786.8	38.9	763.4	23.5	0	**100%**	-0.29	0.003	
GW-3 (806)	4%	4%		3	66.0	18.6	7.6	0.4	797.4	781.6	38.6	758.8	23.5	0	**97%**	-0.44	0.008	
GW-4 (809)	3%	3%		2	64.0	18.4	11.1	0.7	801.3	785.3	37	764.3	21.5	0	**98%**	-0.42	0.006	
GW-5 (812)	5%	5%		4	69.0	10.7	15.2	0.6	804.7	789.4	39.4	765.3	24.5	0	**98%**	-0.65	0.010	
GW-6 (815)	5%	5%		3	59.0	6.8	12.0	3.2	811.6	797	42.2	769.4	29	0	**95%**	-0.76	0.007	
GW-7 (818)	5%	2%		2	76.0	5.5	12.7	1.7	813.5	799	38	775.5	27	0	**87%**	-0.54	0.002	
GW-8 (821)	20%	10%		7	76.0	16.5	11.2	4.1	824.9	811	45.2	779.7	33	0	**95%**	-0.83	0.022	
GW-9 (824)	40%	50%		14	70.0	42.5	13.6	2.5	860.1	838	74.5	785.6	67	0	**78%**	-2.18	0.079	
GW-10 (827)	80%	80%		19	69.0	49.8	15.4	4.1	853.7	835.6	58.9	794.8	53	0	**77%**	-3.41	0.101	
GW-11 (865)	25%	40%		14	70.0	48.2	25.5	0.3	855.8	833.1	78.7	777.09	56.5	0	**99%**	-1.84	0.084	
GW-12 (831)	10%	20%		8	66.0	46.6	21.1	0.2	897.3	881.0	60.3	837.0	50.0	0	**88%**	-1.21	0.059	
GW-13 (830)	100%	100%		19	68.0	54.9	19.5	0.9	855.2	836.5	62.4	792.8	53.0	0	**82%**	-3.89	0.108	
GW-14 (833)	100%	100%		18	69.0	58.2	27.7	2.1	833.1	816.1	49.5	783.6	41.8	317.5	**78%**	-4.41	0.147	
GW-15 (836)	100%	100%		22	79.0	67.5	29.5	0.7	847.7	833.4	46.8	800.9	38.0	602	**86%**	-4.87	0.152	
GW-16 (839)	100%	100%		16	81.0	50.5	25.5	3.1	851.5	835.8	49.9	801.6	36.8	412	**93%**	-4.59	0.167	
GW-17 (842)	100%	100%		15	63.0	62.2	31.1	1.1	882.2	856.0	91.5	790.7	79.0	665.5	**83%**	-3.87	0.123	
GW-19 (841)	40%	10%		8	77.0	34.7	20.1	0.2	905.97	889.8	63.4	842.6	50.0	0	**94%**	-1.05	0.098	
GW-20 (867)	10%	20%		7	78.0	30.1	28.4	0.5	856.32	837.1	67.7	788.6	49.5	0	**98%**	-1.21	0.088	
GW-21 (869)	20%	12%		5	56.0	28.9	18.3	0.6	810.0	795.1	26.6	783.4	13.5	0	**87%**	-0.88	0.071	
GW-22 (871)	40%	15%		10	53.0	33.5	27.5	0.5	815.62	796.0	36.7	778.9	22.5	0	**76%**	-2.46	0.112	
GW-26 (843)	40%	20%		7	72.0	46.4	23.1	0.4	881.21	865.7	60.3	820.9	50.0	0	**90%**	-2.35	0.135	
GW-27 (844)	15%	15%		6	64.0	43.1	41.6	0.2	857.02	841.2	45.9	811.1	31.0	0	**97%**	-0.77	0.061	
GW-33 (873)	20%	10%		6	67.0	22.4	16.1	1.2	815.63	797.9	41.4	774.2	24.5	0	**97%**	-0.86	0.062	

					Temp	CH4	CO2	O2	Static	Diff.	Comments
Phase VII (851)	5%	5%			60.0	9.2	20.0	1.1	-0.26	0.030	
Phase V CO (847)	30%	20%			58.0	33.6	18.7	3.1	-1.14	0.066	
Phase IV CO (845)	25%	20%			63.0	20.5	16.4	4.8	-0.86	0.043	
STOC 1 (853)	100%	100%			64.0	60.7	30.7	1.3	-2.99	0.117	
STOC 2 (855)	10%	70%			63.0	61.5	30.5	1.1	-1.84	0.055	
STOC 3 (857)	10%	20%			58.0	41.6	23.3	4.2	-1.01	0.051	
STOC 4 (859)	5%	3%			61.0	18.5	16.8	1.8	-0.23	0.012	
STOC 5 (861)	5%	3%			58.0	14.6	18.5	3.9	-0.37	0.007	
STOC 6 (863)	5%	3%			81.0	15.3	12.4	3.3	-0.24	0.008	
STOC 7 (875)	5%	3%			62.0	8.4	23.1	1.0	-0.18	0.012	
STOC 8 (854)	20%	15%			80.0	22.3	21.3	3.2	-0.75	0.064	
STOC 9 (856)	5%	5%			74.0	4.1	8.7	0.9	-0.41	0.046	
STOC 10	20%	15%			88.0	41.1	31.3	0.5	-1.03	0.074	
STOC 11	10%	5%			89.0	44.5	29.2	0.4	-0.62	0.059	
Phase VI-E (849)	5%	5%			81.0	12.8	12.6	1.4	-0.27	0.018	
STOC 12A	30%	20%			66.0	31.9	40.1	0.5	-1.15	0.052	
STOC 13 (879)	10%	5%			87.0	17.5	12.9	2.3	-0.48	0.031	
STOC 14 (881)	5%	5%			64.0	21.8	10.5	1.8	-0.29	0.018	
STOC 15 (883)	2%	2%			68.0	22.6	16.7	2.8	-0.10	0.004	
STOC 16	10%	5%			61.0	32.5	24.6	0.5	-0.88	0.014	

Well #	Start	End	Gallons
14	175708	176343	317.5
15	247482	248686	602
16	281770	282594	412
17	459622	460953	665.5

Cycle = .5 gallons

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Gas Balance Sheet 2023

Taken by: JS | ***Date*** 10/24/2023 | Start Barometric Pressure 29.08 | Weather: 68 Degrees F 6.4 MPH Clear

Time 11:30 AM

Checked by: JES /SEH | 2:30 PM | End Barometric Pressure 29.05 | Weather: 70 Degrees F 9.6 MPH Clear

Sample Location (DNR ID)	Initial Pointer Setting %	End Pointer Setting %	Vacuum " of H2O Well	Flow	Temp. F	Gas Concentration Percent Methane W	Carbon Dioxide W	Oxygen W	Top of well elevation	Top of screen elevation	Depth to Leachate (feet)	Liquid elevation	Screen Length (ft)	Liquid Pumped	% Screen open	Static	Differential	Comments
Flare St (781)	100	100	-3.7	231.6	66.2	44.4	27.3	1.0								-	-	
Flare End (781)	100	100	-4.1	221.0	66.9	46.0	27.9	1.0								-	-	
GW-1 (800)	2%	3%		2	76.0	11.1	13.9	1.0	806.5	791.6	38	768.5	23.5	0	**98%**	-0.22	0.004	
GW-2(803)	2%	3%		3	62.0	23.4	4.8	0.5	802.3	786.8	38.9	763.4	23.5	0	**100%**	-0.34	0.003	
GW-3 (806)	4%	5%		2	68.0	19.8	7.9	0.4	797.4	781.6	38.6	758.8	23.5	0	**97%**	-0.37	0.004	
GW-4 (809)	3%	3%		1	65.0	20.3	11.4	0.6	801.3	785.3	37	764.3	21.5	0	**98%**	-0.21	0.001	
GW-5 (812)	5%	5%		3	65.0	15.8	14.1	0.5	804.7	789.4	39.4	765.3	24.5	0	**98%**	-0.41	0.008	
GW-6 (815)	5%	5%		3	60.0	9.8	13.3	1.1	811.6	797	42.2	769.4	29	0	**95%**	-0.36	0.006	
GW-7 (818)	3%	3%		3	68.0	7.3	12.6	0.5	813.5	799	38	775.5	27	0	**87%**	-0.14	0.011	
GW-8 (821)	10%	5%		4	62.0	24.7	11.8	4.7	824.9	811	45.2	779.7	33	0	**95%**	-0.54	0.021	
GW-9 (824)	50%	50%		12	68.0	50.4	16.2	0.8	860.1	838	74.5	785.6	67	0	**78%**	-2.34	0.080	
GW-10 (827)	80%	80%		18	70.0	51.0	15.1	4.1	853.7	835.6	58.9	794.8	53	0	**77%**	-2.74	0.110	
GW-11 (865)	25%	30%		12	69.0	42.3	25.4	0.6	855.8	833.1	78.7	777.09	56.5	0	**99%**	-1.96	0.087	
GW-12 (831)	20%	10%		9	68.0	36.4	21.8	0.2	897.3	881.0	60.3	837.0	50.0	0	**88%**	-1.08	0.043	
GW-13 (830)	100%	100%		17	69.0	53.0	19.5	0.4	855.2	836.5	62.4	792.8	53.0	0	**82%**	-3.67	0.099	
GW-14 (833)	100%	100%		16	73.0	68.9	30.9	0.2	833.1	816.1	49.5	783.6	41.8	327	**78%**	-3.02	0.151	
GW-15 (836)	100%	100%		21	81.0	70.3	29.3	0.3	847.7	833.4	46.8	800.9	38.0	464	**86%**	-3.51	0.135	
GW-16 (839)	100%	100%		17	78.0	65.9	29.6	0.6	851.5	835.8	49.9	801.6	36.8	376.5	**93%**	-2.94	0.123	
GW-17 (842)	100%	100%		12	70.0	65.6	32.8	0.2	882.2	856.0	91.5	790.7	79.0	368.5	**83%**	-2.48	0.092	
GW-19 (841)	10%	5%		7	71.0	34.4	19.8	0.3	905.97	889.8	63.4	842.6	50.0	0	**94%**	-0.84	0.049	
GW-20 (867)	20%	20%		9	72.0	33.3	29.3	0.4	856.32	837.1	67.7	788.6	49.5	0	**98%**	-1.35	0.086	
GW-21 (869)	12%	12%		6	70.0	39.3	18.3	0.3	810.0	795.1	26.6	783.4	13.5	0	**87%**	-0.77	0.053	
GW-22 (871)	15%	15%		10	50.0	38.5	29.3	0.2	815.62	796.0	36.7	778.9	22.5	0	**76%**	-1.41	0.071	
GW-26 (843)	20%	10%		6	78.0	28.8	19.0	1.2	881.21	865.7	60.3	820.9	50.0	0	**90%**	-1.18	0.062	
GW-27 (844)	15%	15%		8	68.0	32.6	35.6	0.4	857.02	841.2	45.9	811.1	31.0	0	**97%**	-0.96	0.054	
GW-33 (873)	10%	5%		7	70.0	25.0	20.6	4.0	815.63	797.9	41.4	774.2	24.5	0	**97%**	-0.78	0.074	

					Temp	CH4	CO2	O2	Static	Diff.	Comments
Phase VII (851)	5%	10%			70.0	20.2	19.7	1.3	-0.33	0.033	
Phase V CO (847)	20%	20%			68.0	32.5	17.7	3.2	-1.15	0.046	
Phase IV CO (845)	20%	20%			67.0	19.4	15.4	4.1	-0.75	0.057	
STOC 1 (853)	100%	100%			71.0	63.1	31.4	0.9	-2.62	0.106	
STOC 2 (855)	40%	70%			78.0	42.1	22.3	4.7	-1.94	0.045	
STOC 3 (857)	20%	20%			70.0	41.2	20.7	4.0	-0.98	0.066	
STOC 4 (859)	5%	3%			60.0	16.6	15.5	1.3	-0.34	0.009	
STOC 5 (861)	5%	3%			61.0	15.4	18.6	4.2	-0.34	0.005	
STOC 6 (863)	5%	3%			64.0	18.9	13.4	3.7	-0.44	0.008	
STOC 7 (875)	5%	3%			59.0	10.5	19.2	1.4	-0.12	0.003	
STOC 8 (854)	15%	40%			64.0	55.8	33.9	0.1	-0.68	0.071	
STOC 9 (856)	5%	5%			66.0	46.2	31.3	0.3	-0.33	0.027	
STOC 10	15%	30%			91.0	42.8	30.4	0.1	-1.12	0.055	
STOC 11	10%	5%			89.0	44.6	28.7	0.3	-0.45	0.019	
Phase VI-E (849)	5%	5%			72.0	12.4	18.6	4.7	-0.23	0.011	
STOC 12A	20%	45%			69.0	62.9	37.9	0.2	-1.01	0.078	
STOC 13 (879)	5%	5%			70.0	24.9	16.2	3.9	-0.48	0.022	
STOC 14 (881)	5%	10%			68.0	61.2	38.2	0.2	-0.33	0.011	
STOC 15 (883)	2%	3%			62.0	6.9	11.6	4.2	-0.11	0.006	
STOC 16	10%	20%			82.0	61.9	38.1	0.2	-0.44	0.018	

Well #	Start	End	Gallons
14	176343	176997	327
15	248686	249614	464
16	282594	283347	376.5
17	460953	461690	368.5

Cycle = .5 gallons

La Crosse County Solid Waste Department
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Gas Balance Sheet 2023

Taken by: JS | ***Date*** 11/10/2023 | Start Barometric Pressure 29.41 | Weather: 36.8 Degrees F 6.9 MPH Partly Cloudy

Time 9:00 AM

Checked by: JES /SEH | 1:30 PM | End Barometric Pressure 29.46 | Weather: 40.1 Degrees F 6.3 MPH Partly Cloudy

Sample Location (DNR ID)	Initial Pointer Setting %	End Pointer Setting %	Vacuum " of H2O Well	Flow	Temp. F	Gas Concentration Percent Methane W	Carbon Dioxide W	Oxygen W	Top of well elevation	Top of screen elevation	Depth to Leachate (feet)	Liquid elevation	Screen Length (ft)	Liquid Pumped	% Screen open	Static	Differential	Comments
Flare St (781)	100	100	-4.2	239	58.6	46.5	29.4	1.3								-	-	
Flare End (781)	100	100	-4.4	235.0	59	46.7	29.5	0.9								-	-	
GW-1 (800)	3%	3%		2	51.0	12.3	13.8	0.9	806.5	791.6	38	768.5	23.5	0	**98%**	-0.31	0.006	
GW-2(803)	3%	3%		2	52.0	24.6	7.7	0.7	802.3	786.8	38.9	763.4	23.5	0	**100%**	-0.28	0.007	
GW-3 (806)	5%	5%		3	48.0	20.5	9.1	0.3	797.4	781.6	38.6	758.8	23.5	0	**97%**	-0.40	0.006	
GW-4 (809)	3%	3%		2	57.0	21.3	12.0	0.2	801.3	785.3	37	764.3	21.5	0	**98%**	-0.24	0.003	
GW-5 (812)	5%	5%		2	55.0	16.9	15.8	0.6	804.7	789.4	39.4	765.3	24.5	0	**98%**	-0.34	0.005	
GW-6 (815)	5%	5%		4	55.0	10.8	14.2	1.3	811.6	797	42.2	769.4	29	0	**95%**	-0.41	0.010	
GW-7 (818)	3%	3%		2	48.0	11.6	13.4	0.4	813.5	799	38	775.5	27	0	**87%**	-0.08	0.008	
GW-8 (821)	5%	5%		5	56.0	25.7	12.1	3.9	824.9	811	45.2	779.7	33	0	**95%**	-0.46	0.036	
GW-9 (824)	50%	50%		11	61.0	53.4	16.7	0.7	860.1	838	74.5	785.6	67	0	**78%**	-2.16	0.088	
GW-10 (827)	80%	80%		19	64.0	52.2	16.6	4.2	853.7	835.6	58.9	794.8	53	0	**77%**	-2.68	0.124	
GW-11 (865)	30%	30%		14	60.0	43.5	25.5	0.5	855.8	833.1	78.7	777.09	56.5	0	**99%**	-1.60	0.076	
GW-12 (831)	10%	10%		7	59.0	38.0	22.0	0.1	897.3	881.0	60.3	837.0	50.0	0	**88%**	-0.94	0.051	
GW-13 (830)	100%	100%		20	61.0	55.5	19.9	0.2	855.2	836.5	62.4	792.8	53.0	0	**82%**	-3.57	0.109	
GW-14 (833)	100%	100%		21	69.0	58.6	31.2	0.0	833.1	816.1	49.5	783.6	41.8	352	**78%**	-3.26	0.164	
GW-15 (836)	100%	100%		18	73.0	62.9	30.7	0.1	847.7	833.4	46.8	800.9	38.0	185.5	**86%**	-3.85	0.155	
GW-16 (839)	100%	100%		16	70.0	66.9	30.2	0.3	851.5	835.8	49.9	801.6	36.8	321	**93%**	-3.07	0.137	
GW-17 (842)	100%	100%		15	63.0	67.3	33.6	0.2	882.2	856.0	91.5	790.7	79.0	282	**83%**	-3.15	0.099	
GW-19 (841)	5%	5%		5	60.0	35.1	20.4	0.5	905.97	889.8	63.4	842.6	50.0	0	**94%**	-0.62	0.053	
GW-20 (867)	20%	20%		10	61.0	34.6	30.1	0.2	856.32	837.1	67.7	788.6	49.5	0	**98%**	-1.24	0.066	
GW-21 (869)	12%	12%		8	54.0	40.8	19.8	0.3	810.0	795.1	26.6	783.4	13.5	0	**87%**	-1.01	0.071	
GW-22 (871)	15%	15%		10	42.0	37.3	29.9	0.4	815.62	796.0	36.7	778.9	22.5	0	**76%**	-1.31	0.077	
GW-26 (843)	10%	10%		7	60.0	29.8	19.5	1.3	881.21	865.7	60.3	820.9	50.0	0	**90%**	-0.88	0.083	
GW-27 (844)	15%	15%		11	43.0	33.3	36.2	0.5	857.02	841.2	45.9	811.1	31.0	0	**97%**	-1.07	0.084	
GW-33 (873)	5%	5%		6	51.0	24.1	21.6	3.9	815.63	797.9	41.4	774.2	24.5	0	**97%**	-0.67	0.062	

					Temp	CH4	CO2	O2	Static	Diff.	Comments
Phase VII (851)	10%	10%			62.0	22.2	20.8	0.9	-0.02	0.027	
Phase V CO (847)	20%	20%			57.0	34.5	17.2	3.4	-1.19	0.051	
Phase IV CO (845)	20%	20%			49.0	20.6	14.6	4.4	-0.15	0.044	
STOC 1 (853)	100%	100%			66.0	62.8	32	0.7	-2.52	0.111	
STOC 2 (855)	70%	70%			62.0	45.9	22.7	4.1	-1.76	0.095	
STOC 3 (857)	20%	20%			55.0	48.3	21.9	3.9	-0.84	0.059	
STOC 4 (859)	3%	3%			49.0	17.5	16.4	1.1	-0.23	0.010	
STOC 5 (861)	3%	3%			52.0	16.8	18.2	4.3	-0.24	0.007	
STOC 6 (863)	3%	3%			51.0	20.1	14.7	2.6	-0.25	0.003	
STOC 7 (875)	3%	3%			48.0	11.0	20.2	0.9	-0.15	0.006	
STOC 8 (854)	40%	40%			58.0	58.4	34.5	0.2	-0.79	0.087	
STOC 9 (856)	5%	5%			46.0	48.6	32.1	0.0	-0.37	0.022	
STOC 10	30%	30%			89.0	44.4	31.0	0.2	-1.09	0.064	
STOC 11	5%	5%			87.0	43.7	28.4	0.4	-0.35	0.02	
Phase VI-E (849)	5%	5%			56.0	13.5	19.0	4.2	-0.28	0.009	
STOC 12A	45%	45%			61.0	64.0	38.2	0.1	-1.18	0.108	
STOC 13 (879)	5%	5%			52.0	24.5	17.8	2.7	-0.40	0.027	
STOC 14 (881)	10%	10%			56.0	62.3	36.5	0.5	-0.45	0.031	
STOC 15 (883)	3%	3%			49.0	7.9	12.4	4.6	-0.10	0.008	
STOC 16	20%	20%			76.0	59.8	37.7	0.8	-0.38	0.021	

Well #	Start	End	Gallons
14	176997	177701	352
15	249614	249985	185.5
16	283347	283989	321
17	461690	462254	282

Cycle = .5 gallons

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Gas Balance Sheet 2023

Taken by: JS | ***Date*** 12/1/2023 | Start Barometric Pressure 29.16 | Weather: 25.6 Degrees F 7.6 MPH Clear

Time 8:05 AM

Checked by: JES /SEH | 11:30 AM | End Barometric Pressure 29.16 | Weather: 25.6 Degrees F 6,5 MPH Clear

Sample Location (DNR ID)	Initial Pointer Setting %	End Pointer Setting %	Vacuum " of H2O Well	Flow	Temp. F	Gas Concentration Percent Methane W	Carbon Dioxide W	Oxygen W	Top of well elevation	Top of screen elevation	Depth to Leachate (feet)	Liquid elevation	Screen Length (ft)	Liquid Pumped	% Screen open	Static	Differential	Comments
Flare St (781)	100	100	-4.6	250.2	51.8	40.3	24.4	2.6								-	-	
Flare End (781)	100	100	-4.7	249.8	52.2	40.8	24.8	2.6								-	-	
GW-1 (800)	3%	3%		1	43.0	10.3	13.7	1.3	806.5	791.6	38	768.5	23.5	0	**98%**	-0.18	0.002	
GW-2(803)	3%	3%		2	44.0	20.7	7.6	0.8	802.3	786.8	38.9	763.4	23.5	0	**100%**	-0.26	0.008	
GW-3 (806)	5%	5%		2	49.0	18.4	8.5	0.6	797.4	781.6	38.6	758.8	23.5	0	**97%**	-0.32	0.005	
GW-4 (809)	3%	3%		3	26.0	19.2	12.5	1.1	801.3	785.3	37	764.3	21.5	0	**98%**	-0.24	0.006	
GW-5 (812)	5%	5%		2	31.0	13.3	13.7	0.8	804.7	789.4	39.4	765.3	24.5	0	**98%**	-0.37	0.010	
GW-6 (815)	5%	5%		2	29.0	10.7	10.8	1.4	811.6	797	42.2	769.4	29	0	**95%**	-0.39	0.008	
GW-7 (818)	3%	3%		1	37.0	9.1	11.9	0.9	813.5	799	38	775.5	27	0	**87%**	-0.21	0.013	
GW-8 (821)	5%	5%		3	38.0	22.3	13.9	4.1	824.9	811	45.2	779.7	33	0	**95%**	-0.63	0.016	
GW-9 (824)	50%	50%		11	53.0	47.6	15.4	1.3	860.1	838	74.5	785.6	67	0	**78%**	-2.49	0.071	
GW-10 (827)	80%	80%		16	51.0	50.5	15.3	3.9	853.7	835.6	58.9	794.8	53	0	**77%**	-2.96	0.091	
GW-11 (865)	30%	30%		12	44.0	40.3	25.4	0.9	855.8	833.1	78.7	777.09	56.5	0	**99%**	-2.22	0.078	
GW-12 (831)	10%	10%		7	47.0	35.8	22.3	0.4	897.3	881.0	60.3	837.0	50.0	0	**88%**	-1.36	0.038	
GW-13 (830)	100%	100%		19	59.0	50.2	18.4	0.6	855.2	836.5	62.4	792.8	53.0	0	**82%**	-3.45	0.095	
GW-14 (833)	100%	100%		18	62.0	63.8	29.1	0.7	833.1	816.1	49.5	783.6	41.8	431	**78%**	-3.13	0.160	
GW-15 (836)	100%	100%		22	70.0	69.9	26.5	0.3	847.7	833.4	46.8	800.9	38.0	369	**86%**	-3.51	0.145	
GW-16 (839)	100%	100%		16	61.0	61.3	28.8	0.8	851.5	835.8	49.9	801.6	36.8	248.5	**93%**	-2.80	0.139	
GW-17 (842)	100%	100%		15	64.0	62.2	31.4	0.3	882.2	856.0	91.5	790.7	79.0	402.5	**83%**	-2.67	0.098	
GW-19 (841)	5%	5%		6	50.0	31.5	18.5	0.6	905.97	889.8	63.4	842.6	50.0	0	**94%**	-0.81	0.041	
GW-20 (867)	20%	20%		8	51.0	32.8	26.1	0.6	856.32	837.1	67.7	788.6	49.5	0	**98%**	-1.43	0.072	
GW-21 (869)	12%	12%		8	49.0	40.7	17.0	0.5	810.0	795.1	26.6	783.4	13.5	0	**87%**	-0.63	0.050	
GW-22 (871)	15%	15%		11	36.0	34.9	26.7	0.8	815.62	796.0	36.7	778.9	22.5	0	**76%**	-1.02	0.077	
GW-26 (843)	10%	10%		6	58.0	27.6	18.5	1.7	881.21	865.7	60.3	820.9	50.0	0	**90%**	-0.95	0.053	
GW-27 (844)	15%	15%		9	55.0	31.8	32.8	0.9	857.02	841.2	45.9	811.1	31.0	0	**97%**	-0.73	0.048	
GW-33 (873)	5%	5%		4	56.0	24.4	19.8	3.9	815.63	797.9	41.4	774.2	24.5	0	**97%**	-0.46	0.044	

					Temp	CH4	CO2	O2	Static	Diff.	Comments
Phase VII (851)	10%	10%			39.0	19.2	17.0	2.2	-0.25	0.028	
Phase V CO (847)	20%	20%			41.0	31.4	16.3	3.7	-1.14	0.034	
Phase IV CO (845)	20%	20%			27.0	17.7	14.5	4.4	-0.66	0.052	
STOC 1 (853)	100%	100%			63.0	59.0	29.7	1.4	-2.51	0.111	
STOC 2 (855)	70%	70%			66.0	39.8	19.6	3.9	-1.73	0.037	
STOC 3 (857)	20%	20%			53.0	40.4	19	4.3	-0.88	0.060	
STOC 4 (859)	3%	3%			37.0	15.7	14.7	1.2	-0.30	0.011	
STOC 5 (861)	3%	3%			39.0	14.4	16.4	4.6	-0.27	0.009	
STOC 6 (863)	3%	3%			32.0	18.1	12.8	4.3	-0.39	0.012	
STOC 7 (875)	3%	3%			28.0	11.1	17.5	2.7	-0.11	0.005	
STOC 8 (854)	40%	40%			55.0	50.2	27.6	0.8	-0.55	0.046	
STOC 9 (856)	5%	5%			41.0	40.5	29.3	1.1	-0.29	0.032	
STOC 10	30%	30%			88.0	39.6	27.8	0.9	-1.26	0.061	
STOC 11	5%	5%			81.0	33.3	26.2	0.6	-0.37	0.014	
Phase VI-E (849)	5%	5%			60.0	12.1	14.1	4.2	-0.20	0.018	
STOC 12A	45%	45%			58.0	57.3	33.0	0.5	-1.15	0.087	
STOC 13 (879)	5%	5%			47.0	22.2	15.9	3.8	-0.44	0.015	
STOC 14 (881)	10%	10%			41.0	44.7	30.5	0.8	-0.32	0.011	
STOC 15 (883)	3%	3%			33.0	9.4	12.3	4.4	-0.10	0.005	
STOC 16	20%	15%			65.0	48.5	31.2	0.8	-0.46	0.027	

Well #	Start	End	Gallons
14	177701	178563	431
15	249985	250723	369
16	283989	284486	248.5
17	462254	463059	402.5

Cycle = .5 gallons

Appendix E

Groundwater and Environmental Monitoring

E-1 – Exceedance Summary
E-2 – Trend Summary
E-3 – Groundwater Elevation Contour Map
E-4 – Environmental Monitoring Device Condition Report
E-5 – Gas Probe Monitoring Data

E-1 – Exceedance Summary

2023 Exceedance Summary
La Crosse County Solid Waste
WDNR Lic No. 3253

Sample Point (DNR I.D./Well No./Date)	Date	Parameter Name	Test Results	Current PAL/ACL	Proposed PAL/ACL[1]	Trend Summary (2020-2023)	Historical Trend Summary
MW-3(006)	5/4/2023	Specific Conductivity	1844 umhos/cm	1800 umhos/cm	--	Increasing	
	11/3/2023		1898 umhos/cm				
	5/4/2023	Chloride, Dissolved	255 mg/L	125 mg/L	130 mg/L	Increasing	Increasing
	11/3/2023		277 mg/L				
	11/3/2023	Benzene	0.95 ug/L	0.5 ug/L	--	Increasing	Increasing
MW-3A (032)	5/4/2023	Specific Conductivity	1473 umhos/cm	1400 umhos/cm	--	Increasing	
	11/3/2023		1740 umhos/cm				
	5/4/2023	Benzene	0.74 ug/L	0.5 ug/L	--	Decreasing	Increasing
	5/4/2023	Chloride, Dissolved	145 mg/L	125 mg/L	--	Increasing	Increasing
	11/3/2023		213 mg/L				
MW-5R (019)	11/2/2023	Boron	255 ug/L	200 ug/L	--	Insufficent data	Increasing
MW-20 (039)	5/4/2023	Tetrachloroethene	1.8 ug/L	0.5 ug/L	--	Decreasing	Decreasing
MW-20A (072)	5/5/2023	1, 2-Dichloropropane	1.1 ug/L	0.5 ug/L	--	Increasing	Decreasing
	5/5/2023	Benzene	2 ug/L	0.5 ug/L	--	Increasing	Seasonally Stable
	5/5/2023	cis-1, 2-Dichloroethene	8.8 ug/L	7 ug/L	--	Increasing	Decreasing
	5/5/2023	Tetrahydrofuran	29.5 ug/L	10 ug/L	--	Increasing	Increasing
	5/5/2023	Trichloroethene	4.8 ug/L	0.5 ug/L	--	Increasing	Decreasing
	5/5/2023	Vinyl chloride	1.4 ug/L	0.02 ug/L	--	Increasing	Decreasing
	11/7/2023	Chloride	134 mg/L	125 mg/L	--	Increasing	Increasing
MW-32 (043)	5/4/2023	Specific Conductivity	1193 umhos/cm	970 umhos/cm	--	Increasing	
	11/7/2023		1230 umhos/cm				
	5/4/2023	Alkalinity	623 mg/L	490 mg/L	--	Increasing	
	11/7/2023		563 mg/L				
	5/4/2023	Hardness	675 mg/L	500 mg/L	--	Slightly Increasing	
	11/7/2023		660 mg/L				
MW-32P (044)	5/4/2023	Specific Conductivity	1212 umhos/cm	890 umhos/cm	--	Increasing	
	11/7/2023		1312 umhos/cm				
	5/4/2023	Alkalinity	565 mg/L	510 mg/L	--	Increasing	
	11/7/2023		560 mg/L				
	5/4/2023	Hardness	649 mg/L	490 mg/L	--	Decreasing	
	11/7/2023		652 mg/L				
	5/4/2023	Benzene	0.63 ug/L	0.5 ug/L	--	Decreasing	Decreasing
MW-33 (045)	5/4/2023	Specific Conductivity	868.9 umhos/cm	760 umhos/cm	--	Increasing	
	11/7/2023		850.3 umhos/cm				
MW-33P (046)	5/4/2023	Tetrachloroethene	0.66 ug/L	0.5 ug/L	--	Decreasing	Decreasing
	5/4/2023	Trichloroethene	0.76 ug/L	0.5 ug/L	--	Decreasing	Decreasing
MW-42R (052)	5/4/2023	Trichloroethene	0.54 ug/L	0.5 ug/L	--	Increasing	Decreasing
	11/7/2023		0.64 ug/L				
	11/7/2023	Benzene	1.5 ug/L	0.5 ug/L	--	Increasing	Decreasing
MW-42P (051)	5/4/2023	Trichloroethene	0.78 ug/L	0.5 ug/L	--	Decreasing	Decreasing
MW-54 (092)	5/3/2023	Boron, Dissolved	493 ug/L	200 ug/L	1000 ug/L	Increasing	Decreasing
	11/7/2023		378 ug/L				
MW-55 (024)	11/3/2023	Boron, Dissolved	256 ug/L	200 ug/L	--	Insufficent data	Insufficient data
MW-55B (025)	5/4/2023	Specific Conductivity	1526 umhos/cm	810umhos/cm	--	Increasing	
	11/3/2023		1638 umhos/cm				
	5/4/2023	Alkalinity	603 mg/L	440 mg/L	--	Decreasing	
	11/3/2023		583 mg/L		--		
	5/4/2023	Hardness	764 mg/L	430 mg/L	--	Decreasing	
	11/3/2023		782 mg/L		--		
	5/4/2023	Chloride, Dissolved	164 mg/L	125 mg/L	--	Decreasing	Increasing
	11/3/2023		161 mg/L				
MW-56 (026)	5/4/2023	Specific Conductivity	1052 umhos/cm	860 umhos/cm	--	Increasing	
	11/7/2023		1123 umhos/cm				
	5/4/2023	Alkalinity	554 mg/L	470 mg/L	--	Increasing	
	11/7/2023		558 mg/L				
	5/4/2023	Hardness	575 mg/L	470 mg/L	--	Slightly Decreasing	
	11/7/2023		584 mg/L				
MW-56B (027)	5/4/2023	Specific Conductivity	905.1 umhos/cm	700 umhos/cm	--	Increasing	
	11/7/2023		1123 umhos/cm				
	5/4/2023	Alkalinity	408 mg/L	390 mg/L	--	Decreasing	
	11/7/2023		558 mg/L				
	5/4/2023	Hardness	415 mg/L	380 mg/L	--	Decreasing	
	11/7/2023		584 mg/L				
	5/4/2023	Benzene	0.61 ug/L	0.5 ug/L	--	Increasing	Increasing
MW-57A (068)	5/4/2023	Specific Conductivity	1614 umhos/cm	1600 umhos/cm	--	Increasing	
	11/7/2023		1766 umhos/cm				
MW-58 (069)	5/4/2023	Specific Conductivity	769.9 umhos/cm	580 umhos/cm	--	Increasing	
	11/7/2023		792.8 umhos/cm				
	5/4/2023	Alkalinity	349 mg/L	320 mg/L	--	Increasing	
	11/7/2023		336 mg/L				
	5/4/2023	Hardness	371mg/L	320 mg/L	--	Increasing	
	11/7/2023		383 mg/L				
MW-58A (070)	5/4/2023	Specific Conductivity	1460 umhos/cm	1100 umhos/cm	--	Seasonally Stable	
	11/7/2023		1517 umhos/cm				
	5/4/2023	Alkalinity	543 mg/L	540 mg/L	--	Increasing	
	11/7/2023		576 mg/L				
	5/4/2023	Hardness	645 mg/L	600 mg/L	--	Slightly Decreasing	
	11/7/2023		660 mg/L				
	5/4/2023	Chloride, Dissolved	162 mg/L	125 mg/L	180 mg/L	Decreasing	Increasing
	11/7/2023		150 mg/L				
	5/4/2023	Tetrahydrofuran	16 ug/L	10 ug/L	--	Increasing	Decreasing

2023 Exceedance Summary
La Crosse County Solid Waste
WDNR Lic No. 3253

Sample Point (DNR I.D./Well No./Date)	Date	Parameter Name	Test Results	Current PAL/ACL	Proposed PAL/ACL[1]	Trend Summary (2020-2023)	Historical Trend Summary
MW-64 (073)	11/2/2023	Boron	3020 ug/L	200 ug/L	5000 ug/L	Increasing	Decreasing
MW-75 (218)	5/5/2023	1, 2, Dichloroethane	0.52 ug/L	0.5 ug/L	--	Decreasing	Increasing
	5/5/2023	Tetrachloroethene	1 ug/L	0.5 ug/L	--	Decreasing	Decreasing
	5/5/2023	Tetrahydrofuran	10.3 ug/L	10 ug/L	--	Decreasing	Increasing
	5/5/2023	Trichloroethene	2.7 ug/L	0.5 ug/L	--	Decreasing	Increasing
	11/7/2023	Selenium	17.3 ug/L	10 ug/L	--	Insufficent data	Insufficent data
MW-76 (222)	5/3/2023	Tetrachloroethene	2.1 ug/L	0.5 ug/L	--	Increasing	Slightly Decreasing
	5/3/2023	Trichloroethene	4.1 ug/L	0.5 ug/L	--	Decreasing	Increasing
MW-76A (224)	11/1/2023	Alkalinity	676 mg/L	400 mg/L	--	Increasing	
MW-77 (079)	5/4/2023	Tetrachloroethene	0.5 ug/L	0.5 ug/L	--	Decreasing	Decreasing
MW-77A (081)	5/4/2023	Benzene	0.58 ug/L	0.5 ug/L	--	Increasing	Decreasing
	5/4/2023	Tetrahydrofuran	10 ug/L	10 ug/L	--	Decreasing	Decreasing
	11/7/2023	Specific Conductivity	1371 umhos/cm	1200 umhos/cm	--	Decreasing	
	11/7/2023	Chloride	129 mg/L	125 mg/L	220 mg/L	Decreasing	Increasing
MW-82A (228)	11/3/2023	Boron	1200 ug/L	200 ug/L	--	Insufficent data	Insufficent data
	11/3/2023	Sulfate	184 mg/L	125 mg/L	--	Insufficent data	Decreasing
MW-118 (090)	5/3/2023	Specific Conductivity	863.6 umhos/cm	840 umhos/cm	--	Decreasing	
	11/2/2023		1010 umhos/cm		--		
	11/2/2023	Boron	216 ug/L	200 ug/L	--	Increasing	Decreasing

[1]Proposed values listed in the 'Plan of Operations Report+' dated November 7, 2022, and the 'Supplemental Letter for Proposed PALs and ACLs' dated July 12, 2023.

[2]Result values would remain or would no longer be considered as an exceedance if proposed ACL/PAL values were accepted in the Plan of Operations Report dated November 7, 2022, and the Supplemental Letter for Proposed PALs and ACLs dated July 12, 2023.

-- No alternative PAL/ACL proposed.

Notes: No ACLs were calculated for Volatile Organic Compound (VOC) per NR 140.28 Wis. Adm. Code.

Groundwater 2021 Feasibility Determination Exemptions Summary Table
La Crosse County Landfill

Substance	Monitoring Wells
PAL Exemptions	
Chloride	MW-3, MW-42P, MW-57A, MW-58A, MW-77A
Sulfate	MW-5R, MW-64
Nitrate plus Nitrite (as N)	MW-5R, MW-24, MW-30, MW-55, MW-64, MW-76A, MW-119, MW-120, MW-121
Arsenic	MW-55B, MW-56B, MW-75A, MW-76, MW-77A
Boron	MW-54
Manganese	MW-120, MW-121
1,2-Dichloroethane(1)	MW-76
1,2-Dichloropropane(1)	MW-20A, MW-75, MW-76
Benzene(1)	MW-20A, MW-75
cis-1,2-Dichloroethene(1)	MW-75, MW-76
Tetrachloroethene(1)	MW-3, MW-3A, MW-20, MW-24, MW-24P, MW-33P, MW-75, MW-120
Tetrahydrofuran(1)	MW-33P, MW-42P, MW-55B, MW-56B, MW-57A, MW-58A, MW-75, MW-76, MW-77A
Trichloroethene(1)	MW-20A, MW-33P, MW-42P, MW-56B, MW-57A, MW-75
ES Exemptions	
Chloride	MW-78
Nitrate plus Nitrite (as N)	MW-65, MW-65R, MW-75, MW-120A
Barium	MW-77A
Boron	MW-64
Manganese	MW-64, MW-82, MW-82A, MW-119
Benzene(1)	MW-76
Tetrachloroethene(1)	MW-75, MW-76, MW-121
Tetrahydrofuran(1)	MW-20A
Trichloroethene(1)	MW-76
Vinyl Chloride(1)	MW-20A, MW-33P, MW-75

Note:
(1) - Substance is a Volatile Organic Compound (VOC) and therefore, no ACLs were calculated per NR 140.28 Wis. Adm. Code.
BLUE - ACL proposed within the Plan of Operation Report submitted November 7, 2022.
RED - No ACL proposed within the Plan of Operation Report and therefore, is being proposed as part of the Supplemental Letter for Proposed PALs and ACLs.

Summary of Existing PALs and ACLs
WDNR License No. 3253
La Crosse County, Wisconsin

Facility ID #03253			Preventive Action Limit (PAL)							Alterative Concenration Limit (ACL)							
Well Name	WDNR ID	TOC Elevation	Conductivity	pH	Alkalinity (mg/L)	Hardness (mg/l)	Temp_C	Sodium (mg/L)	COD (mg/L)	Arsenic (ug/l)	Boron (mg/l)	Manganese (ug/l)	N+N (mg/l)	Calcium (ug/l)	Sulfate (mg/l)	Barium (ug/l)	Nickel (ug/l)
MW-3	006	817.23	1800	5.7-7.7	880	1100	4-16	--	72	--	0.22	--	--	--	--	--	--
MW-3A	032	765.55	1400	5.8-7.8	800	860	4.1-16	--	--	--	--	--	--	--	--	--	--
MW-5R	019	776.18	1300	5.9-7.9	710	790	4.6-16	18	30	--	--	--	11	--	--	--	--
MW-8	033	729.43	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-9	034	733.17	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-20	039	819.27	1400	5.4-7.4	760	790	4.8-16	--	99	--	--	--	--	--	--	--	--
MW-20A	072	820.31	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-24	040	778.03	1300	5.5-7.5	770	840	4.3-16	--	41	--	--	--	5.3	--	--	--	--
MW-24P	041	778.15	1400	5.9-7.9	670	810	4.4-16	--	36	--	--	--	--	--	--	--	--
MW-30	042	739.7	980	6.1-8.1	470	610	4.2-16	--	30	--	--	--	9.2	--	--	--	--
MW-32	043	751.1	970	5.6-7.6	490	500	5.3-17	--	31	--	--	--	--	--	--	--	--
MW-32P	044	751.11	890	6.0-8.0	510	490	5.3-17	--	32	--	--	--	--	--	--	--	--
MW-33	045	777.81	760	6.1-8.1	390	420	4.4-16	--	30	--	--	--	2.6	--	--	--	--
MW-33P	046	777.92	1300	6.0-8.0	590	640	4.4-16	--	32	--	--	--	--	--	--	--	--
MW-38	049	755.23	1100	6.0-8.0	640	650	4.5-18	--	43	--	--	--	--	--	--	--	--
MW-42	050	--	720	--	380	420	--	--	32	--	--	2600	--	--	--	--	--
MW-42R	052	808.76	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-42P	051	810.11	1400	6.1-8.1	720	790	4.4-16	--	36	--	--	--	--	--	--	--	--
MW-47	054		960	--	810	790	--	--	36	--	--	1300	--	--	--	--	46
MW-55	024	752.24	1400	5.9-7.9	700	900	6.8-18	--	33	--	--	--	17	--	--	--	--
MW-55B	025	752.71	810	6.1-8.1	440	430	6.1-18	--	32	8.2	--	--	--	--	--	--	--
MW-56	026	761.89	860	5.9-7.9	470	470	4.8-16	--	31	--	--	--	--	--	--	--	--
MW-56B	027	761.92	700	6.1-8.1	390	380	4.9-17	--	32	12	--	190	--	--	--	--	--
MW-57	067	790.89	1100	6.0-8.0	590	640	0-21	--	32	--	--	--	--	--	--	--	--
MW-57A	068	791.02	1600	6.0-8.0	920	990	4.3-16	--	48	--	--	--	--	--	--	--	--
MW-58	069	779.7	580	6.0-8.0	320	320	4.6-16	--	34	--	--	--	--	--	--	--	--
MW-58A	070	779.62	1100	6.2-8.2	540	600	4.2-16	--	54	--	--	--	--	--	--	--	--
MW-64	073	776.78	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-65	075	765.08	870	6.2-8.2	330	460	4.2-16	15	30	--	--	--	43	--	--	--	--
MW-75	218	848.22	1200	5.6-7.6	910	820	2.1-16	--	35	--	--	--	--	--	--	--	--
MW-75P	220	848.37	1100	6.2-8.2	700	590	3.9-16	--	69	12	--	--	--	--	--	--	--
MW-76	222	839.36	1500	5.6-7.6	900	870	4.5-16	--	52	31	--	--	--	--	--	--	--
MW-76P	224	837.15	800	6.1-8.1	400	440	4.6-16	--	33	--	--	--	6.4	--	--	--	--
MW-77	079	806.87	1500	5.6-7.6	730	750	--	--	43	--	--	--	--	--	--	--	--
MW-77A	081	806.69	1200	6.1-8.1	680	720	4.6-16	--	340	6.9	--	--	--	--	--	3400	--
MW-78	096	781.18	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-78A	098	780.9	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-82	226	760.91	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-82A	228	760.86	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-83	230	758.37	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-84	232	781.16	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-84A	234	780.23	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
MW-118	090	748.27	840	6.0-8.0	460	480	4.4-16	--	--	--	--	--	--	--	--	--	--

Facility ID #04317			Preventive Action Limit (PAL)							Alterative Concenration Limit (ACL)							
Well Name	WDNR ID	TOC Elevation	Conductivity	pH	Alkalinity (mg/L)	Hardness (mg/l)	Temp_C	Sodium (mg/L)	COD (mg/L)	Arsenic (ug/l)	Boron (mg/l)	Manganese (ug/l)	N+N (mg/l)	Calcium (ug/l)	Sulfate (mg/l)	Barium (ug/l)	Barium (ug/l)
MW-4	007	774.55	1700	6.1-8.1	950	1000	4.9-17	68	53	--	--	--	--	--	--	--	--
MW-4A	009	776.54	1500	5.6-7.6	880	1100	5.3-17	--	51	--	--	130	13	--	--	--	--
MW-54	092	758.59	2000	5.6-7.6	970	1400	5.4-17	--	54	--	1.1	99	--	0.76	240	--	--
MW-54A	094	760.46	900	6.0-8.0	430	460	4.2-17	--	35	--	--	--	--	--	--	--	--
MW-71	210	744.86	720	6.3-8.3	400	420	4.2-16	--	32	--	--	--	--	--	--	--	--
MW-115	084	753.23	1100	6.1-8.1	500	570	6.1-18	--	44	--	--	--	22	--	--	--	--
MW-116	086	758.77	1700	6.0-8.0	750	950	5.1-19	--	72	--	--	--	17	--	--	--	--
MW-117	088	761.02	1600	5.7-7.7	850	890	5.8-17	--	37	--	--	--	--	--	--	--	--
MW-118	090	748.27	840	6.0-8.0	460	480	4.4-16	--	--	--	--	--	--	--	--	--	--

Notes:
-- indicates a PAL or ACL has not been proposed or approved. For ACL parameters, please utilize PAL listed in s. NR 140 Wis. Admin Code

E-2 – Trend Summary

2023 Exceedance Trend Summary
La Crosse County Solid Waste
WDNR Lic No. 3253

Sample Point (DNR I.D./Well No./Date)	Parameter Name	Trend Summary (2020-2023)	Historical Trend Summary	Cause/Significance
MW-3(006)	Specific Conductivity	Increasing		Down gradient of former unlined LF
	Chloride, Dissolved	Increasing	Increasing	Down gradient of former unlined LF
	Benzene	Increasing	Increasing	ND since 2002-detected in 2023, potential anomolous
MW-3A (032)	Specific Conductivity	Increasing		Down gradient of former unlined LF
	Benzene	Decreasing	Increasing	Anomolous detect in may 2023- similar situation in 2009
	Chloride, Dissolved	Increasing	Increasing	Down gradient of former unlined LF
MW-5R (019)	Boron	Insufficent data	Increasing	Proximity to C&D landfill
MW-20A (072)	Trichloroethene	Increasing	Decreasing	Shows decreasing trend with consideration of historical concentrations
	Vinyl chloride	Increasing	Decreasing	Shows decreasing trend with consideration of historical concentrations
	Chloride	Increasing	Increasing	Down gradient of former unlined LF
MW-32 (043)	Specific Conductivity	Increasing		Down gradient of former unlined LF
	Alkalinity	Increasing		Down gradient of former unlined LF
	Hardness	Slightly Increasing		Down gradient of former unlined LF
MW-32P (044) 05/04/2023	Specific Conductivity	Increasing		Down gradient of former unlined LF
	Alkalinity	Increasing		Down gradient of former unlined LF
MW-33 (045)	Specific Conductivity	Increasing		Down gradient of former unlined LF
MW-55B (025)	Specific Conductivity	Increasing		Down gradient of former unlined LF
	Chloride, Dissolved	Decreasing	Increasing	Down gradient of former unlined LF
MW-56 (026)	Specific Conductivity	Increasing		Down gradient of former unlined LF
	Alkalinity	Increasing		Down gradient of former unlined LF
MW-56B (027)	Specific Conductivity	Increasing		Down gradient of former unlined LF
	Benzene	Increasing	Increasing	peaked in 2013-decreasing since then
MW-57A (068)	Specific Conductivity	Increasing		Down gradient of former unlined LF
MW-58 (069)	Specific Conductivity	Increasing		Down gradient of former unlined LF
	Alkalinity	Increasing		Down gradient of former unlined LF
	Hardness	Increasing		Down gradient of former unlined LF
MW-58A (070)	Alkalinity	Increasing		Down gradient of former unlined LF
	Chloride, Dissolved	Decreasing	Increasing	Down gradient of former unlined LF
MW-75 (218)	1, 2, Dichloroethane	Decreasing	Increasing	2009 detection- all detects just slightly above PAL
	Tetrahydrofuran	Decreasing	Increasing	peaked in 2019-decreasing since
	Trichloroethene	Decreasing	Increasing	peaked in 2021-decreasing since
MW-76 (222)	Trichloroethene	Decreasing	Increasing	peaked in 2014-decreasing since
MW-76A (224)	Alkalinity	Increasing		Down gradient of former unlined LF
MW-77A (081)	Chloride	Decreasing	Increasing	Down gradient of former unlined LF

Note that site has historical groundwater quality impacts associated with former, exhumed natural attenuation landfill. Common cause and significance for all points include:

Recent increase of surface water infiltration in area of former exhumed landfill during cell construction preparation; significant increase and reductions in groundwater elevations past 8 years;

E-3 – Groundwater Elevation Contour Map

NOTES:

1. CONTOUR INTERVAL IS 2-FOOT.
2. EXISTING GRADE CONTOURS PRODUCED BY MOST RECENT SURVEY BY PARAGON ASSOCIATES ON DECEMBER 27, 2023.
3. GROUNDWATER CONTOURS ARE BASED ON MONITORING WELL STATIC WATER ELEVATIONS SAMPLED BY LA CROSSE COUNTY BETWEEN NOVEMBER 1-7, 2023.

LEGEND:

- 870 — MAJOR GROUND CONTOUR
- MINOR GROUND CONTOUR
- PHASE BOUNDARY
- LIMITS OF WASTE
- PROPERTY LINE
- MW-121 — GROUNDWATER MONITORING WELL
- FLOW DIRECTION
- MW-75 727.53 — STATIC WATER ELEVATION - FT NOVEMBER 1-7, 2023 (PARENTHESIS WHEN INFERRED)
- 728 — MAJOR GROUNDWATER CONTOUR (DASHED WHEN INFERRED)

N

200 0 200 400
scale 100 feet

Save: 4/8/2024 12:23 PM hpeterson Plot: 4/8/2024 1:32 PM X:\KOI\LLACSW\176666\5-final-dsgn\51-drawings\85-HeavyCiv\2023 ANNUAL REPORT\SHEETS\LA176666_GWC MAP.dwg

SEH Project	LACSW 176666	Rev.#	Revision Issue Description	Date	Rev.#	Revision Issue Description	Date
Drawn By	NRP						
Designed By	MAL						
Checked By	BLK						

SEH
PHONE: 608.782.3161
329 JAY STREET, SUITE 301
LA CROSSE, WI 54601-4034
www.sehinc.com

PLANS PREPARED FOR:
LA CROSSE SOLID WASTE DEPT
3200 BERLIN DRIVE
LA CROSSE, WI 54601

LA CROSSE COUNTY LANDFILL
2023 ANNUAL REPORT

WATER TABLE CONTOUR MAP (NOVEMBER 2023)

1
of 1

E-4 – Environmental Monitoring Device Condition Report

Monitoring Well, Gas Probe, Leachate/Lysimeter, and Leachate Head Well Condition Report - 2023
WDNR License No 3253 - La Crosse County Landfill - La Crosse, WI

Common Point Name	WDNR Well ID	Point Association	Point Labeled Common Name	Point Labeled WDNR ID	Well Cap Present	Well Casing Condition	Protective Casing Condition	Locked	Key Number	Access/Trail condition
Groundwater Monitoring Wells										
MW-3	006	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-3A	032	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-8	033	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-9	034	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-20	039	3253	YES	YES	YES	GOOD	GOOD	YES	A212	GOOD
MW-20A	072	3253	YES	YES	YES	GOOD	GOOD	YES	A212	GOOD
MW-24	040	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-24P	041	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-30	042	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-32	043	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-32P	044	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-33	045	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-33P	046	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-38	049	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-42P	051	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-42R	052	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-54	092	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-54A	094	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-55	024	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-55B	025	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-56	026	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-56B	027	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-57	067	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-57A	068	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-58	069	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-58A	070	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-75	218	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-75A	220	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-76	222	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-76A	224	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-77	079	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-77A	081	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-78	096	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-78A	098	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-82	226	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-82A	228	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-83	230	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-83A	231	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-84	232	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-84A	234	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-118	090	3253	YES	YES	NO	GOOD	GOOD	YES	2121	GOOD
MW-119	236	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-120	238	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-120A	239	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-121	241	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-5R	019	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-64	073	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-65	075	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MW-65R	076	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
Leachate/Lysimeters										
FM-2	451	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
PB-4	456	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
PB-5	458	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
PB-6	460	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
PB-7	462	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
PB-8	464	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MH-7	557	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
MH-8	558	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
L-3	555	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
Gas Probes										
GP-4S	717	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
GP-4D	718	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
GP-7	707	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
GP-8R	709	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
GMW-1	751	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
GMW-2	752	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
GMW-3	753	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
GMW-4	754	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
GMW-5	755	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
Leachate Head Wells										
LHW-8A	658	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
LHW-9A	659	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
LHW-10A	660	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
LHW-1B	670	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
LHW-2B	671	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
LHW-3B	672	3253	YES	NO	YES	GOOD	GOOD	YES	2121	GOOD
LHW-4B	673	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
LHW-5B	674	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
LHW-6B	675	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
LHW-7B	676	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
LHW-8B	677	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
LHW-9B	678	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD
LHW-10B	679	3253	YES	YES	YES	GOOD	GOOD	YES	2121	GOOD

E-5 – Gas Probe Monitoring Data

La Crosse County Solid Waste Department
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Gas Probe Monitoring Data
2023

Date:	2/23/2023
Barometric Pressure	29.07
(MM of Mercury) Inches X	25.4
Barometric Trend	Steady
Weather Conditions	Partly Cloudy

Gas Probe ID	GP-4		GP-7	GP-8
DNR ID	717	718	707	709
Pressure (Inches of H20)	-0.74	-0.74	0.00	-0.25
Methane Gas %	0.0	0.0	0.0	0.0
CO2 %	0.1	0.1	0.1	3.5
Oxygen %	21.4	21.5	21.7	17.7
Sample Depth	**12**	**60**	**12**	**12**
Sample Time	1:55 PM	2:00 PM	2:30PM	2:35PM

Gas Probe ID	GP-1 (Demo)	GP-2 (Demo)	GP-3 (Demo)	GP-4 (Demo)	GP-5 (Demo)
DNR ID	700	702	704	706	708
Pressure (Inches of H20)	-1.4	-0.48	-0.30	0.00	0.00
Methane Gas %	0.0	0.0	0.0	0.0	0.0
CO2 %	0.1	4.9	0.5	2.2	4.0
Oxygen %	21.5	17.2	21.2	19.9	17.7
Sample Depth	Top of Well	Top of Well	Top of Well	Top of Well	Top of Well
Sample Time	2:40PM	2:45PM	3:00PM	2:55PM	2:50PM

Gas Probe ID	GMW - 1	GMW - 2	GMW - 3	GMW - 4	GMW - 5R
DNR ID	751	752	753	754	755
Pressure (Inches of H20)	0.00	-0.03	-0.34	-0.43	-0.82
Methane Gas %	0.0	0.0	0.0	0.0	0.0
CO2 %	0.2	0.1	0.1	0.1	0.1
Oxygen %	21.6	21.6	21.5	21.5	21.3
Sample Depth	Top of Well	Top of Well	Top of Well	Top of Well	Top of Well
Sample Time	2:25PM	2:20PM	2:15PM	2:10PM	1:50PM

Sampled by Jackie Davis and Melisa Goergen
Comments

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Gas Probe Monitoring Data
2023

Date:	5/19/2023
Barometric Pressure	29.13
(MM of Mercury) Inches X	25.4
Barometric Trend	Steady
Weather Conditions	Cloudy

Gas Probe ID	GP-4		GP-7	GP-8
DNR ID	717	718	707	709
Pressure (Inches of H20)	-0.30	-0.30	0.00	-0.04
Methane Gas %	0.0	0.0	0.0	0.2
CO2 %	0.1	0.2	0.2	0.2
Oxygen %	20.9	20.9	20.7	20.8
Sample Depth	**12**	**60**	**12**	**12**
Sample Time	12:55 PM	1:00 PM	1:25 PM	1:30 PM

Gas Probe ID	GP-1 (Demo)	GP-2 (Demo)	GP-3 (Demo)	GP-4 (Demo)	GP-5 (Demo)
DNR ID	700	702	704	706	708
Pressure (Inches of H20)	-0.51	0.00	-0.07	0.00	0.00
Methane Gas %	0.0	0.0	0.0	0.0	0.0
CO2 %	0.1	3.2	2.4	2.6	2.8
Oxygen %	20.8	17.2	17.0	17.4	17.7
Sample Depth	Top of Well	Top of Well	Top of Well	Top of Well	Top of Well
Sample Time	1:35 PM	1:40 AM	1:55 PM	1:50 PM	1:45 PM

Gas Probe ID	GMW - 1	GMW - 2	GMW - 3	GMW - 4	GMW - 5R
DNR ID	751	752	753	754	755
Pressure (Inches of H20)	0.00	0.00	-0.13	-0.19	-0.41
Methane Gas %	0.0	0.0	0.0	0.0	0.0
CO2 %	0.1	0.1	0.1	0.1	0.1
Oxygen %	20.9	20.9	20.9	20.9	20.9
Sample Depth	Top of Well	Top of Well	Top of Well	Top of Well	Top of Well
Sample Time	1:20 PM	1:15 PM	1:10 PM	1:05 PM	12:50 PM

Sampled by Jackie Davis
Comments

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Gas Probe Monitoring Data
2023

Date:	8/10/2023
Barometric Pressure	28.95
(MM of Mercury) Inches X	25.4
Barometric Trend	Rising
Weather Conditions	Fair

Gas Probe ID	GP-4		GP-7	GP-8
DNR ID	717	718	707	709
Pressure (Inches of H20)	-0.17	-0.17	0.00	-0.01
Methane Gas %	0.0	0.0	0.0	0.0
CO2 %	0.1	1.1	0.7	3.4
Oxygen %	20.5	19.5	20.5	16.4
Sample Depth	**12**	**60**	**12**	**12**
Sample Time	8:50 AM	8:55 AM	9:40 AM	9:45 AM

Gas Probe ID	GP-1 (Demo)	GP-2 (Demo)	GP-3 (Demo)	GP-4 (Demo)	GP-5 (Demo)
DNR ID	700	702	704	706	708
Pressure (Inches of H20)	-0.26	-0.01	0.03	0.00	0.00
Methane Gas %	0.0	0.0	0.0	0.0	0.0
CO2 %	1.4	4.5	6.1	4.4	4.2
Oxygen %	17.2	15.6	13.5	14.1	15.5
Sample Depth	Top of Well	Top of Well	Top of Well	Top of Well	Top of Well
Sample Time	9:55 AM	10:00 AM	10:30 AM	10:10 AM	10:05 AM

Gas Probe ID	GMW - 1	GMW - 2	GMW - 3	GMW - 4	GMW - 5R
DNR ID	751	752	753	754	755
Pressure (Inches of H20)	-0.01	0.00	-0.06	-0.05	-0.08
Methane Gas %	0.0	0.0	0.0	0.0	0.0
CO2 %	0.0	0.1	0.3	0.0	0.3
Oxygen %	20.6	20.7	20.3	20.7	20.1
Sample Depth	Top of Well	Top of Well	Top of Well	Top of Well	Top of Well
Sample Time	9:30 AM	9:25 AM	9:15 AM	9:10 AM	8:40 AM

Sampled by Jackie Davis and Kirk Hackbarth
Comments

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Gas Probe Monitoring Data
2023

Date:	11/9/2023
Barometric Pressure	29.09
(MM of Mercury) Inches X	25.4
Barometric Trend	Rising
Weather Conditions	Clear/Sunny

Gas Probe ID	GP-4		GP-7	GP-8
DNR ID	717	718	707	709
Pressure (Inches of H20)	-0.52	-0.52	-0.32	-0.34
Methane Gas %	0.0	0.0	0.0	0.0
CO2 %	0.1	0.1	0.1	4.2
Oxygen %	20.9	21.1	21.7	17.2
Sample Depth	**12**	**60**	**12**	**12**
Sample Time	8:45AM	8:45AM	9:20AM	9:25 AM

Gas Probe ID	GP-1 (Demo)	GP-2 (Demo)	GP-3 (Demo)	GP-4 (Demo)	GP-5 (Demo)
DNR ID	700	702	704	706	708
Pressure (Inches of H20)	-0.42	-0.32	-0.33	-0.30	-0.31
Methane Gas %	0.0	0.0	0.0	0.0	0.0
CO2 %	0.1	5.7	6.9	5.3	5.1
Oxygen %	21.8	16.5	14.5	16.0	16
Sample Depth	Top of Well	Top of Well	Top of Well	Top of Well	Top of Well
Sample Time	9:30AM	9:35AM	9:50AM	9:45AM	9:40AM

Gas Probe ID	GMW - 1	GMW - 2	GMW - 3	GMW - 4	GMW - 5R
DNR ID	751	752	753	754	755
Pressure (Inches of H20)	-0.33	-0.31	-0.31	-0.47	-0.34
Methane Gas %	0.0	0.0	0.0	0.0	0.0
CO2 %	0.0	0.1	0.1	0.1	0.1
Oxygen %	21.6	21.5	21.4	21.4	20.5
Sample Depth	Top of Well	Top of Well	Top of Well	Top of Well	Top of Well
Sample Time	9:11AM	9:06AM	9:02AM	8:57AM	8:35AM

Sampled by Jackie Davis, John Warnecke, Bryce Gerke
Comments

Appendix F

Leachate Collection and Recirculation

F-1 – Leachate Jetting Report
F-2 – Annual Manhole Inspections

F-1 – Leachate Jetting Report

La Crosse County Landfill 2023
MSW Leachate Lines

Contractor: Speedy Clean Inc.
Crew Size: 5
Equipment Used: Trailer jet, jet cam, pickup w/ water tank

From	To	Date Jetted	Pipe Size	Pipe Length (ft)	Water Jet (ft.)	TV Length (ft)	Comments:
CO 8B	CO 8A	7/17/2023	6	1415	800	610	Passed through without issue
CO 7B	CO 7A	7/17/2023	6	1370	800		Passed through without issue
CO 6B	CO 6A	7/17/2023	6	1352	800		Passed through without issue
CO 5A	CO 5C	7/17/2023	6	975	975		Passed through without issue
CO 5G	CO 5D	7/17/2023	6	705	750		Passed through without issue
CO 5L	MH-10	7/17/2023	6	455	500		Passed through without issue
CO 5B	CO 5F	7/17/2023	6	450	450		Passed through without issue
CO 4B	CO 4A	7/17/2023	6	1070	800		Passed through without issue
MH-9, CO 3B	CO 3A	7/17/2023	6	1092	800		Passed through without issue
MH-9, CO 3L	MH-10	7/17/2023	6	240	600		Passed through without issue
MH-8, CO 5E	JMH-3, CO 7E	7/17/2023	6	458	435		Hit a blockage at 435'.
MH-8, CO 4E	CO 2E	7/17/2023	6	1355	800		Passed through without issue
MH-8, CO 2B	CO 2A	7/17/2023	6	1083	120		Hit blockage at 120'. Couldn't pass through pipe.

MH-7, CO 3E	CO 1E	7/17/2023	6	1100	700		Passed through without issue
MH-13, CO 1C	CO 1B	7/17/2023	6	1100	600		Passed through without issue
MH-13, CO 1D	CO 1A	7/17/2023	6	1100	600		Passed through without issue
CO 1A	MH-13, CO 1D	7/17/2023	6	1100	600		Passed through without issue
CO 1E	MH-7, CO 3E	7/17/2023	6	1100	600		Passed through without issue
CO 2E	MH-8, CO 4E	7/17/2023	6	1355	600		Passed through without issue
CO 1B	MH-13, CO 1C	7/17/2023	6	1100	600		Passed through without issue
CO 6A	CO 6B	7/17/2023	6	1352	700		Passed through without issue
LD-3	JMH-1	7/17/2023	6	667	675		Jetted starting at LD-3 through LD-2 & LD-1 ending at JMH-1. Passed through without issue
CO 7A	CO 7B	7/17/2023	6	1370	700		Passed through without issue
CO 8A	CO 8B	7/17/2023	6	1415	750	625	Passed through without issue
CO 4A	CO 4B	7/17/2023	6	1070	450		Passed through without issue
CO 3A	MH-9, CO 3B	7/17/2023	6	1092	600		Passed through without issue
CO 2A	MH-8, CO 2B	7/17/2023	6	1083	570		Hit blockage at 570'
CO 1F	MH 13	7/17/2023	6	205	205		Very heavy mineral buildup. Used 1000 gallons of water to pass through.
JMH-3, CO 6E	MH 7	7/18/2023	6	265	265		Passed through without issue
JMH-3, CO 7E	MH 8	7/18/2023	6	402	400		Passed through without issue

JMH 4D	Through JMH 2 to CO 1F	7/18/2023	6	50	60		Passed through without issue
JMH-1	LD 4	7/18/2023	6	500	550		Passed through without issue
JMH 2, CO FM-1	LD 4	7/18/2023	6	653	700		Passed through without issue
JMH 4B	Through MH-8 to MH-9	7/18/2023	6	668	700		Passed through without issue
JMH 4C	JMH 3	7/18/2023	6	100	100		Passed through without issue
FM 2	JMH 4	7/18/2023	6	100	125		Passed through without issue
MH 11	FM 2	7/18/2023	6	75	75		Passed through without issue
Load out Pad	JMH-4	7/18/2023	6	100	100		Passed through without issue

La Crosse County Landfill 2023
Ash Mono Leachate Lines

Contractor: Speedy Clean Inc.
Crew Size: 5
Equipment Used: Trailer jet, jet cam, pickup w/ water tank

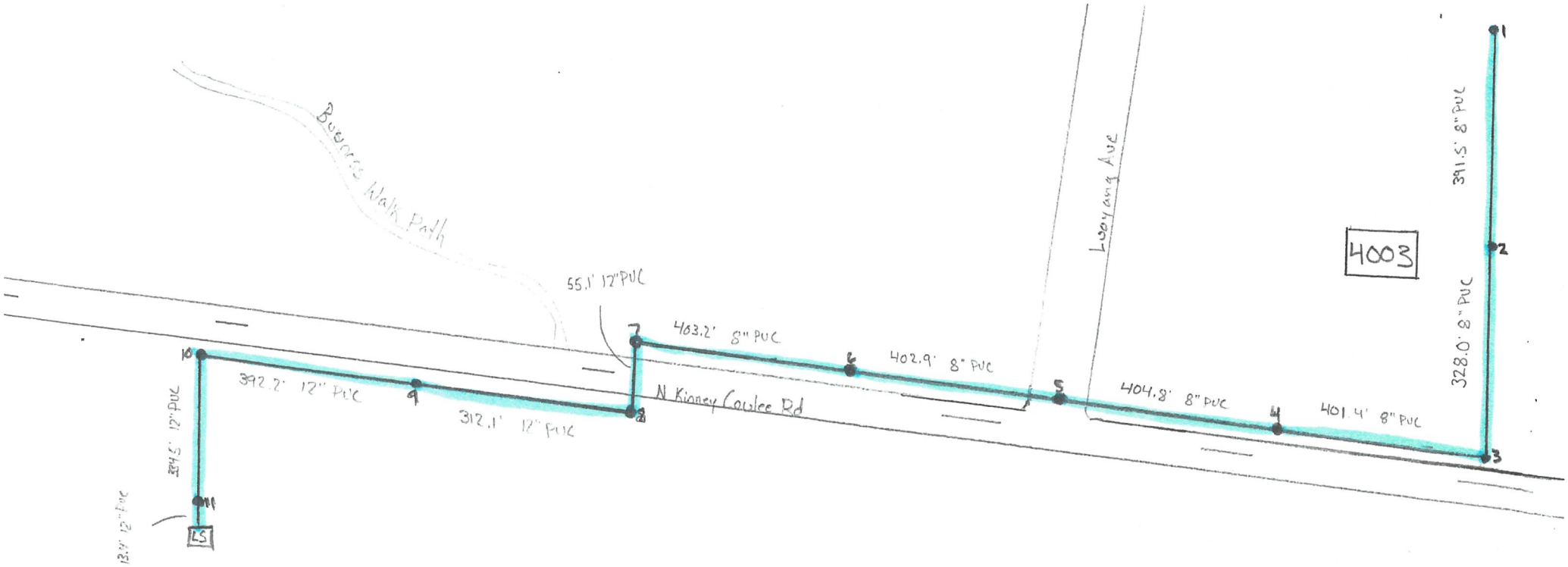
From	To	Date Jetted	Pipe Size	Pipe Length (ft)	Jetted Length (ft)	Comments:
CO 4B	CO 5B	7/17/2023	6	575	450	Passed through without issue
CO 1B	CO 2B	7/17/2023	6	460	300	Passed through without issue
CO 3B	CO 6B	7/17/2023	6	405	405	Passed through without issue
CO 2B	CO 1B	7/17/2023	6	460	455	Passed through without issue
CO 5B	CO 4B	7/17/2023	6	575	400	Passed through without issue

La Crosse County Landfill 2023
Ash Demo Leachate Lines

Contractor: Speedy Clean Inc.
Crew Size: 5
Equipment Used: Trailer jet, jet cam, pickup w/ water tank

From	To	Date Jetted	Pipe Size	Pipe Length (ft)	TV Length (ft)	Comments:
CO 3L	CO 2L	7/17/2023	6	150	200	Passed through without issue
CO 3A	CO 3B	7/17/2023	6	635	635	Passed through without issue
CO 2L	CO 1L	7/17/2023	6	150	200	Passed through without issue
CO 2A	CO 2B	7/17/2023	6	635	635	Passed through without issue
CO 1L	LS	7/17/2023	6	65	65	Passed through without issue
CO 1A	CO 1B	7/17/2023	6	635	635	Passed through without issue

7/17/23



Cut Times

Segment	Time
1-2	20 min
2-3	30 min
3-4	3hrs 45min
4-5	1 hour
5-6	20 min
6-7	20 min
7-8	5 min
8-9	30 min
9-10	55 min

F-2 – Annual Manhole Inspections

La Crosse County Solid Waste Department
3200 Berlin Drive La Crosse, Wisconsin 54601
Telephone: (608) 785-9572 • Fax: (608) 785-6160
www.lacrossecounty.org/solidwaste

Monthly Landfill Inspections
2023

LA CROSSE COUNTY
Exceptional services. Extraordinary place.

Date	Capped Surface *Condition	MH Inspections	Scale Inspection	Others/ Comments
1/31/2023	Good	Ok	Good	
2/21/2023	Good	Ok	Good	
3/28/2023	Good	Ok	Good	
4/28/2023	Good	Ok	Good	
5/19/2023	Good	Ok	Good	
6/9/2023	Good	Ok	Good	
7/12/2023	Good	Ok	Good	
8/8/2023	Good	Ok	Good	
9/22/2023	Good	Ok	Good	
10/24/2023	Good	Ok	Good	
11/29/2023	Good	Ok	Good	Manholes: LD3 needs lid repair, JMH3 needs a new lock
12/28/2023	Good	Ok	Good	

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Annual Manhole Inspection
10/11/2023

Name	Valves (conditon)	Piping	Hardware	Latch and Lock*	Signage	Liquid*	Other	
Demo MH-3	Ok	Good	Ok	Ok	Ok	No		
Demo MH-2	Ok	Good	Ok	Ok	Ok	Yes		
Demo MH-1	Valve stem rusty	Good	Ok	Ok	OK	Yes	Needs new valve dial	Needs WD40
Demo Lift Station	N/A	Good	Good	Ok	Ok	N/A		
Demo CO-MH	N/A	Good	Ok	Ok	Ok	No	Remove Old Sticker	
LD-1	N/A	Good	Slightly Corroded	Ok	Ok	No		
JMH-1	N/A	Good	Ok	Ok	Needs Replacing	Yes		
Condensate MH by Flare	N/A	Good	Medium corrosion	Ok	Ok	No		
VMH	Good	Good	Ok	Ok	Ok	Yes		
DL-2	N/A	Good	Ok	Ok	Ok	Yes		
LD-4	N/A	Good	Ok	Ok	Needs Replacing	Yes		
JMH-2	N/A	Good	Medium corrosion	Ok	Ok	Yes		3
JMH-3	N/A	Good	Ok	Ok	Ok	Yes	Needs pumping	
FM-1	N/A	Good	Ok	Ok	Ok	No		
MH -13	Ok	Good	Ok	Ok	Ok	Yes	Needs pumping	
MH -7	Good	Good	Ok	Ok	Ok	Yes		Spray adhesive for sticker
MH-8	Good	Good	Medium corrosion	Ok	Ok	Yes	Remove Old Sticker	
MH-9	Ok	Good	Heavy corrosion	Needs Latch Bolt	Ok	Yes		4
MH-10	N/A	Good	Medium corrosion	Ok	Needs Replacing	Yes		5
MH-11	N/A	Good	Ok	Ok	Ok	No		
Loadout Drop Inlet manhole	N/A	Good	Ok	N/A	N/A	No		
FM-2	N/A	Good	Ok	Ok	Ok	Yes		
JMH-4	Good	Good	Ok	Ok	Ok	Yes	Needs pumping	
LD2	N/A	Good	Heavy Corrosion	Ok	Needs Replacing	Yes		2
LD3	N/A	Good	Heavy Corrosion	Ok	Needs Replacing	Yes		1

Notes:
Almost all secondary gaskets are gone or were removed

Appendix G

Research, Development and Demonstration

G-1 – RDD Annual Report Memorandum

G-1 – RDD Annual Report Memorandum

Building a Better World for All of Us®

MEMORANDUM

TO: Jadd Stilwell, Solid Waste Director
Jackie Davies, Operations Manager

FROM: Ryan Shimko, PE (Lic. IN, KY, WI)

DATE: April 5, 2024

RE: Annual Reporting for the RD&D Plan, Leachate Recirculation Plan, & Organic Stability Plan – La Crosse County Landfill (Lic. #3253)
SEH No. 176663 14.00

This memorandum and the attached tables and figures are provided to address the approval conditions summarized in the table below. These approval conditions are related to the approved Research Development and Demonstration Plan (RD&D) latest renewal, Leachate Recirculation Plan (LRP), and Organic Stability Plan (OSP). Since the OSP, RD&D Plan, and LRP utilize the same general methods and share the same goal of increasing the moisture content of the waste to promote organic stability, evaluation of the progress for each are monitored in conjunction with one another.

Cond. No.	Condition Description
May 24, 2023 Conditional Plan of Operation Approval for the La Crosse County Landfill Phase 2 North Expansion	
41u	The annual report for leachate recirculation in accordance with s. NR 506.135(5), Wis. Adm. Code including a summary and tabulation of monitoring required within ss. NR 507.215(1) – (4), Wis. Adm. Code.
41v	An evaluation of the performance and a report of the implemented landfill organic stability plan as required by s. NR 514.07(9)(d), Wis. Adm. Code.
41x	An annual report in accordance with the approved research, development, and demonstration plan and s. NR 514.10(1)(f), Wis. Adm. Code.
August 2, 2022 Conditional Plan of Operation Modification Request for RD&D Plan Renewal (2nd Renewal)	
5	Waste samples shall be removed at 20-foot intervals from gas extraction well boreholes in areas subject to liquid addition or leachate recirculation. The waste samples shall be analyzed for moisture content on a wet weight basis, wet and dry weight. The elevation of any standing leachate levels in the borings shall be recorded. Results of the testing shall be included in the construction documentation report for the gas well installation and reported in the RD&D annual report(s).
8b	The geotechnical stability analysis as required by s. NR 514.10(2)(h); Wis. Adm. Code shall be submitted as part of the final 3-year report for each testing period. The updated geotechnical stability analysis shall use data gathered during the RD&D test period to include updated estimates of waste density, moisture content date for the waste and the volume/weight of liquids added to the waste.
8c	Annual and final reports shall include data for samples taken from borings conducted in areas subject to liquids addition.

8d	Annual and final reports shall include the monthly amount of liquids addition and the liquid mass balance for each phase, including leachate extracted, leachate recirculated, liquids added, and precipitation.
8e	Annual and final reports shall include graphs showing the volumes of leachate extracted and recirculated, liquids addition, and precipitation received for each leachate drainage basin.

The table below summarizes the pertinent chapters and sections of NR 500 referenced in the above conditions and the location in this memorandum where the data/information can be found.

Code Reference	Requirement	Location in Memo
NR 506.135(5)(a) NR 507.215(1)	Liquid Mass Balance	"Liquid Mass Balance Data" Table G-1 & Figure G-1
NR 506.135(5)(b) NR 507.215(2)	Leachate Head Levels	"Monthly Leachate Head Levels" Table G-2
NR 506.135(5)(c)	Liquid Mass Balance Graphs	Figure G-1
NR 506.135(5)(d) NR 507.215(3)	Leachate chemistry data	"Leachate Quality Monitoring Data" Figures G-2 through G-9
NR 506.135(5)(e)	Summary of warning symptoms, terminations, failure thresholds	"Summary of Warning Symptoms and Terminations"
NR 507.215(4) NR 507.215(4)(a)	Landfill gas data Assessment of liquid in each gas well	"Landfill Gas" "Landfill Gas Extraction Well Assessment"
NR 506.135(5)(f)	Leachate collection and conveyance system modifications	"Leachate Collection and Conveyance System Modifications"
NR 514.10(1)(f)	RD&D Plan	"Leachate Recirculation and RD&D Reporting"
NR 514.07(9)(d)	OSP Evaluation	"Organic Stability Plan Evaluation"

BACKGROUND

In 2012, the La Crosse County (County) began leachate recirculation in response to the OSP rule legislation. During 2016, the County developed and received approval for implementation of a RD&D Plan to apply additional liquids other than leachate generated onsite to the waste mass. Application of additional liquids enables the County to improve efficiency, reduce cost, and increase moisture content of the waste to help achieve organic stability. Additionally, acceptance of Vernon County leachate provides a low-cost leachate management alternative for Vernon County. No other liquid wastes besides Vernon County Landfill leachate are accepted for additional liquids application under the RD&D Plan. For reporting purposes, reference to "leachate recirculation" is used to describe application of leachate generated from onsite to the waste whereas "RD&D liquid" is used to describe application of Vernon County Landfill leachate, and "liquid application" refers generally to both liquid sources.

LEACHATE RECIRCULATION AND RD&D REPORTING

This section addresses the annual reporting requirements for leachate recirculation and RD&D liquid application per NR 506.135(5) and NR 507.215(1) through (4).

Liquid Mass Balance Data

During 2023, RD&D liquids accounted for all the additional liquids (leachate recirculation and RD&D liquids) added to the waste mass. No leachate generated from onsite was recirculated. RD&D liquid added continues to consist only of Vernon County Landfill leachate. RD&D liquid application continues to be by surface application only.

Currently, liquid application is only approved to occur in Phases VI, VII, and VIII within the required setbacks and where a minimum 20-feet thick layer of waste exists. Although liquid application is approved for Phase VI, most of the liquid application occurs in Phases VII and VIII. In 2023, liquid application occurred exclusively in Phase VIII Module 2. Table G-1 contains the liquid mass balance for each drainage basin where liquid application is approved to occur, and Figures G-1A through G-1D graphically illustrate the liquid mass balance for each drainage basin.

Monthly Leachate Head Levels

Table G-2 summarizes the monthly leachate head measurements collected from the leachate headwells in each drainage basin where leachate recirculation and/or RD&D liquid application are approved. During 2023, leachate head elevations in these drainage basins were maintained at 1-foot or less except in Phase VI between August to December at LHW-1B (low end of Phase VI) where leachate head measurements ranged from 1.7-ft to 1.9-feet in depth, and Phase VII in September at LHW-3B (low end of Phase VII) where leachate head was measured at 1.4-feet but returned to less than 1-foot the following month. These slight exceedances in Phase VI are due to malfunction of the Phase VI pump station requiring the pump to be operated manually for approximately two to three months until it was repaired. Leachate extracted volumes during this period were significantly less due to the pump maintenance issue as can be seen in Table G-1. The Phase VI pump has since been repaired and leachate head levels have returned to compliance in the first quarter of 2024.

Leachate Quality Monitoring Data

Graphs over the time period since leachate recirculation was initiated for each parameter required to be sampled in NR 507.215(3) are provided in Figures G-2 through G-9. Figures G-2 through G-9 contain the laboratory analytical data over time since 2012 for parameters VOC, BOD, COD, ammonia nitrogen, field pH, field specific conductance, alkalinity, and hardness. The leachate sampling location presented on these figures is GEMS Point ID 451 which represents the former leachate collection tank location and the present-day flow monitoring manhole FM-2. This sampling location includes leachate from all phases of the landfill prior to its discharge to the direct connection with the sanitary sewer.

Except for COD, ammonia nitrogen, and alkalinity, concentrations for most parameters are within typical ranges experienced since leachate recirculation began. COD, ammonia nitrogen, and alkalinity appear to have a slight increasing trend beginning around 2018 to 2019. More recently, however, alkalinity has experienced a downward trend. VOC concentrations have been relatively stable with less data fluctuation occurring since approximately 2019 compared to the initial years of liquids application. BOD appears to maintain a consistent cyclical variability each quarter. Hardness, pH, and specific conductance have remained relatively steady within typical ranges.

Landfill Gas

LFG monitoring within the liquids application area has been conducted almost exclusively at horizontal supplemental temporary odor control (STOC) wells. LFG wells are monitored monthly. Additionally, the bulk of liquids addition occurs in Phases VII and VIII. This has resulted in the LFG quality being greatest (i.e., ≥40% methane by volume) for combustion at STOCs within Phases VII and VIII (STOC 7 through STOC 16), with a few exceptions. STOC 7, 13, and 15 had low gas quality in 2023. It's difficult to discern cause for lower gas quality at these wells. Several factors could influence these wells including age of waste, waste type (i.e., C&D and other inert wastes), etc. that may be causes for lower gas quality. STOC's 1, 2, and Phase VII leachate cleanout (LCO) east have also experienced high gas quality in 2023. Figure G-10 contains the average methane concentration by volume and the maximum/minimum

range of methane measured for each well within the liquid application area in 2023. The total volume of LFG collected and converted to energy or combusted onsite in the flare is provided in Section 5.5.

Landfill Gas Extraction Well Assessment

Currently, there are 24 vertical landfill gas extraction wells installed in the landfill (GW-1 through GW-17, GW-19 through GW-22, GW-26, GW-27, and GW-33). Of which, only two (GW-22 and GW-33) are installed within the area where liquid application is approved. As part of monthly gas well monitoring, liquid levels are assessed to evaluate if well screens are blocked and may require leachate pumping. Refer to section 5.4 and Appendix D for an assessment of vertical gas extraction wells.

Waste Sampling Data from Gas Extraction Well Installation

No waste samples were collected in 2023 as no vertical gas extraction wells were installed.

Geotechnical Stability Analysis

A geotechnical stability analysis will be conducted as part of the final 3-year report for the RD&D Plan's current test period which is anticipated to occur in 2025.

Summary of Warning Symptoms and Terminations

No warning symptoms, failure thresholds, or terminations were observed/performed due to liquids application in 2023.

Leachate Collection and Conveyance System Modifications

No modifications to the leachate collection and conveyance system occurred in 2023.

ORGANIC STABILITY PLAN EVALUATION

NR 514.07(9)(d) requires a landfill owner or operator to continually evaluate the performance of the implemented landfill OSP, and report progress, results, changes in waste composition and problems to the WDNR no less frequently than annually. The following includes an annual evaluation of the April 2022 OSP approved as part of the Phase 2 North Expansion Plan of Operation. The 5-year update as required by NR 514.07(9)(e) is anticipated to be completed as part of the 2027 annual report.

Progress Report

The approach outlined in the April 2022 OSP to decrease the time required for the landfill to achieve organic stability involves:

- Increase the moisture content in the waste mass to increase the waste degradation rate.
- Evaluate the potential to divert additional organics from the landfill.
- Controlled placement and waste type segregation.

Moisture Addition

The County implements moisture addition using leachate recirculation and RD&D liquid application. In recent years, use of RD&D liquids comprises 100% of the additional liquids added to the waste for purposes of increasing waste moisture content and waste degradation rate. The County received approval of its 2nd renewal for the RD&D Plan in August 2022. RD&D liquids are applied using the methods outlined in the LRP.

Since implementation of the RD&D Plan, nearly 3 million gallons of additional liquids have been added to the waste mass in Phases VII and VIII. Table G-3 summarizes the quantity of additional liquids added to

the waste mass and precipitation experienced since approval of the initial RD&D plan. The amount of liquids that can be added to the waste are dictated by a variety of factors including the amount of precipitation received, area available for liquids application that meets setback and waste depth requirements, suitable slopes and conditions of the active working face, odor concerns, moisture content of incoming waste, leachate head level compliance, access issues, and other operational constraints. Overall, liquids application continues to be a feasible means to add moisture to the waste mass. Moisture levels of the waste mass are monitored during vertical gas extraction well installation. However, none were installed in 2023. Overall, the quantity of additional liquids added to the waste is small compared to precipitation.

Organics Diversion

The County implements the following practices to reduce the amount of degradable organic materials in the waste stream.

- Diversion of MSW to Xcel Energy's refuse derived fuel (RDF) plant
- Yard waste composting
- Wood waste recycling
- Sources separated organics (SSO) composting pilot program.

Xcel Energy RDF Plant

In 2023, diversion of MSW collected from the La Crosse County Solid Waste system to the Xcel Energy RDF plant at French Island resulted in 59,480 tons of MSW converted to electricity. This accounts for approximately 50% of the La Crosse County MSW that would otherwise be placed in the landfill. Waste delivered to the RDF plant is processed prior to production into RDF. During processing, ferrous and non-ferrous metals are recovered for recycling and items not suitable for RDF are separated for later transport to the landfill. Typically, rejected material consists of bulky items and the heavy fraction of MSW (glass, rocks, wet organics). Although the rejected MSW material contains degradable organic material, its organic content is presumably less than MSW that has not undergone processing and would otherwise be directly landfilled.

Yard Waste Composting

The County collects yard waste to divert from landfilling and assist its users in maintaining compliance with the yard waste disposal ban. In 2023, approximately 172 tons of yard waste were diverted from landfilling. Yard waste is later transported to Green Earth composting where it is mixed with other organics to produce a soil amendment.

Wood Waste Recycling

Wood waste continues to be diverted from landfilling and processed into wood chips for a fuel supplement at Xcel Energy RDF plant or is used for operations at the MSW facility. Wood waste accepted includes pallets, crates, tree trunks and branches from storm debris cleanup or trimming operations. In 2023, approximately 2,633 tons of brush, wood, and wood chips were received and diverted at the facility.

SSO Composting Program

In 2020, the City of La Crosse partnered with Recycling Connections and ordered fifty home composting bins to be available for local municipalities to purchase and distribute. These home composting bins allow residents to make compost in their own backyard. Composting at the residential level has many benefits including minimizing contamination with non-compostable material as compared to the commercially

scaled operations, environmentally friendly way to replenish soil, and provides a way for residents to manage yard waste, which is banned from landfill disposal, in a beneficial manner. The City of La Crosse has engaged the County for support in developing the program and discussions are ongoing how to expand the program. Generally, interest and reception of the pilot program has been positive, and residents continue to push for access to composting. Since the County's involvement in April 2023, 15 home composting bins have been distributed to residents of varying municipalities.

The County continues to evaluate opportunities to increase diversion of organics including food waste which would further promote organic stability of the landfill. Continuation of these efforts when feasible is recommended.

Controlled Placement & Waste Type Segregation

As feasible, the County segregates C&D waste, MSW, combustor ash and asbestos waste into separate disposal areas within the MSW landfill. The purpose of segregating waste disposal areas by waste type is to concentrate organic stability efforts and optimize LFG collection. Wastes that are inert or contain little to no organic content (i.e., ash, asbestos, C&D) are placed in the older landfill phases above the relocated waste that is aged and largely degraded. The majority of the MSW portion is placed in Phases VII and VIII which contain a stone drainage layer to support additional liquids application.

Waste Composition

No significant changes to the composition of incoming waste have been experienced. In 2023, the major waste streams continue to be MSW including Xcel reject material (30% Cat 1 and 18% Cat 31), C&D (22%), combustor ash residue (8%), and high volume industrial waste (8%). Wastes considered degradable and thus targeted by the OSP make up between 50% to 60% of the incoming waste. This has consistently been the case since 2005. Over the past three years, the composition of degradable waste has been in the middle of this range at 55% on average. Table G-4 contains a waste composition summary dating back to 1992. Waste data originates from WDNR tonnage reports and internal La Crosse County records for the current reporting year. The quantity of wastes such as POTW sludges and treated contaminated soils fluctuate year to year, but still make up only a minor component of the overall waste stream.

Problems and Proposed Changes

No significant problems associated with organic stability implementation occurred in 2023. Additionally, no changes to the OSP approach are proposed at this time. Odors are an operational side effect that require attention particularly if noticeable offsite. The County continues to implement STOC wells in the active filling areas, inject STOC wells with an odor control agent as needed to reduce odors, and maintain adequate daily and intermediate cover.

rjs
Attachments
Table G-1 Liquid Mass Balance
Table G-2 Monthly Leachate Headwell Measurements
Table G-3 Leachate Application Summary
Table G-4 Waste Composition
Figure G-1A Liquid Mass Balance for Calendar Year 2023 – Phase VI
Figure G-1B Liquid Mass Balance for Calendar Year 2023 – Phase VII
Figure G-1C Liquid Mass Balance for Calendar Year 2023 – Phase VIII
Figure G-1D Liquid Mass Balance for Calendar Year 2023 – Total Phases VI through VIII
Figure G-2 NR 507 VOC Appendix III – GEMS Point ID 451

Figure G-3 Biochemical Oxygen Demand (mg/L, 5 Day – 20 Deg. C) – GEMS Point ID 451
Figure G-4 Chemical Oxygen Demand, Unfiltered (mg/L) – GEMS Point ID 451
Figure G-5 Nitrogen, Ammonia, Total (mg/L as N) – GEMS Point ID 451
Figure G-6 pH, Field (Standard Units) – GEMS Point ID 451
Figure G-7 Specific Conductance, Field (umho/cm @ 25 C) – GEMS Point ID 451
Figure G-8 Alkalinity, Total (mg/L as CaCO3) – GEMS Point ID 451
Figure G-9 Hardness, Total (mg/L as CaCO3) – GEMS Point ID 451
Figure G-10 Methane Concentration of Wells in Liquid Application Area in 2023

Tables

Table G-1
Liquid Mass Balance
2023 Annual Report
La Crosse County Landfill (Lic. #3253)

Drainage Basin[1]:	Phase VI					Phase VII				
Basin Area Open[2] (acres):	7.09					6.98				
GEMS Point ID[3]	460 PB-6 (P6 Pump)					462 PB-7 (P7 Pump)				
Inflows & Outflows:	Leachate Extracted	Leachate Recirculated[4]	RD&D Liquids Added	Precipitation		Leachate Extracted	Leachate Recirculated[4]	RD&D Liquids Added	Precipitation	
Date	Gallons	Gallons	Gallons	Inches	Gallons	Gallons	Gallons	Gallons	Inches	Gallons
Jan-23	55,660	0	0	2.17	417,748	67,770	0	0	2.17	411,267
Feb-23	58,090	0	0	2.19	421,598	70,113	0	0	2.19	415,057
Mar-23	93,169	0	0	3.48	669,937	130,048	0	0	3.48	659,543
Apr-23	109,236	0	0	3.12	600,633	142,978	0	0	3.12	591,314
May-23	131,986	0	0	1.75	336,893	116,353	0	0	1.75	331,667
Jun-23	82,396	0	0	2.4	462,025	90,888	0	0	2.4	454,857
Jul-23	2,452	0	0	4.44	854,747	129,727	0	0	4.44	841,485
Aug-23	935	0	0	1.38	265,665	120,839	0	0	1.38	261,543
Sep-23	1,141	0	0	2.26	435,074	97,324	0	0	2.26	428,324
Oct-23	3,587	0	0	3.38	650,686	97,342	0	0	3.38	640,590
Nov-23	69,600	0	0	0.14	26,951	74,702	0	0	0.14	26,533
Dec-23	81,817	0	0	0.96	184,810	47,357	0	0	0.96	181,943
2023 Total	**690,069**	**0**	**0**	**27.67**	**5,326,766**	**1,185,441**	**0**	**0**	**27.67**	**5,244,122**

Notes:

(1) Drainage basin reflects the areas where leachate recirculation and/or RD&D liquids application occurs. Basins where these activities do not occur are not listed.

(2) Basin area open reflects the amount of basin (or phase) area open for waste filling and not under final cover. This area does not take into account intermediate cover.

(3) Represents the point where leachate extraction is measured (i.e., pump building of each phase). GEMS Point ID and description provided.

(4) Leachate recirculation represents amount of leachate generated from onsite that is recirculated back into the waste mass.

(5) Precipitation volume represents the monthly total of rain multipled by the basin area open. No runoff, evaporation, evapotranspiration, or waste absorption assumptions are applied. Precipitation data obtained from the National Weather Service: https://www.weather.gov/wrh/Climate?wfo=arx

Table G-1
Liquid Mass Balance
2023 Annual Report
La Crosse County Landfill (Lic. #3253)

Drainage Basin[1]:	Phase VIII					Phase VI, VII, VIII				
Basin Area Open[2] (acres):	9.58					23.65				
GEMS Point ID[3]	464 PB-8 (P8 Pump)					Total Leachate Extracted	Total Leachate Recirculated[4]	Total RD&D Liquids Added	Total Precipitation[5]	
Inflows & Outflows:	Leachate Extracted	Leachate Recirculated[4]	RD&D Liquids Added	Precipitation						
Date	Gallons	Gallons	Gallons	Inches	Gallons	Gallons	Gallons	Gallons	Inches	Gallons
Jan-23	179,151	0	0	2.17	564,460	302,581	0	0	2.17	1,393,475
Feb-23	138,436	0	0	2.19	569,663	266,639	0	0	2.19	1,406,318
Mar-23	254,053	0	10,740	3.48	905,218	477,270	0	10,740	3.48	2,234,697
Apr-23	305,968	0	0	3.12	811,574	558,182	0	0	3.12	2,003,521
May-23	289,942	0	13,286	1.75	455,210	538,281	0	13,286	1.75	1,123,770
Jun-23	182,767	0	13,286	2.4	624,288	356,051	0	13,286	2.4	1,541,170
Jul-23	152,645	0	0	4.44	1,154,933	284,824	0	0	4.44	2,851,165
Aug-23	123,917	0	0	1.38	358,966	245,691	0	0	1.38	886,173
Sep-23	105,499	0	10,642	2.26	587,871	203,964	0	10,642	2.26	1,451,269
Oct-23	147,145	0	0	3.38	879,206	248,074	0	0	3.38	2,170,481
Nov-23	110,042	0	0	0.14	36,417	254,344	0	0	0.14	89,902
Dec-23	90,426	0	0	0.96	249,715	219,600	0	0	0.96	616,468
2023 Total	**2,079,991**	**0**	**47,954**	**27.67**	**7,197,520**	**3,955,501**	**0**	**47,954**	**27.67**	**17,768,408**

Notes:

(1) Drainage basin reflects the areas where leachate recirculation and/or RD&D liquids application occurs. Basins where these activities do not occur are not listed.

(2) Basin area open reflects the amount of basin (or phase) area open for waste filling and not under final cover. This area does not take into account intermediate cover.

(3) Represents the point where leachate extraction is measured (i.e., pump building of each phase). GEMS Point ID and description provided.

(4) Leachate recirculation represents amount of leachate generated from onsite that is recirculated back into the waste mass.

(5) Precipitation volume represents the monthly total of rain multipled by the basin area open. No runoff, evaporation, evapotranspiration, or waste absorption assumptions are applied. Precipitation data obtained from the National Weather Service: https://www.weather.gov/wrh/Climate?wfo=arx

Table G-2
Monthly Leachate Headwell Measurements
2023 Annual Report
La Crosse County Landfill (Lic. #3253)

January

Facility ID/WDNR Point and Well No.	Monitoring Location Description	Northing	Easting	Top of Well Casing Elevation ft	Elevation at Screen ft	Length of Well Casing to Floor of Landfill ft	Date Measured	Depth to Liquid, ft	Liquid Elevation ft	Leachate Head ft
#3253 / 670 LHW-1B	Phase VI - Low End	156,239	469,493	782.8	761.7	67	1/18/2023	66	762	**0.3**
#3253 / 671 LHW-2B	Phase VI - High End	156,357	470,843	823.8	773.4	165	1/18/2023	165	773.4	**0**
#3253 / 672 LHW-3B	Phase VII - Low End	156,605	469,483	782.3	761.8	66	1/18/2023	66	761.8	**0**
#3253 / 673 LHW-4B	Phase VII - High End	156,446	470,834	821.8	773.3	154.7	1/18/2023	154.7	773.3	**0**
#3253 / 674 LHW-5B	Phase VIII - Low End	156,868	469,477	783.8	746.8	118.9	1/18/2023	118.9	746.8	**0**
#3253 / 675 LHW-6B	Phase VIII - High End	156,740	470,837	823.8	756.9	210.1	1/18/2023	210.1	756.9	**0**

February

Facility ID/WDNR Point and Well No.	Monitoring Location Description	Northing	Easting	Top of Well Casing Elevation ft	Elevation at Screen ft	Length of Well Casing to Floor of Landfill ft	Date Measured	Depth to Liquid, ft	Liquid Elevation ft	Leachate Head ft
#3253 / 670 LHW-1B	Phase VI - Low End	156,239	469,493	782.8	761.7	67	2/23/2023	65.5	762.2	**0.5**
#3253 / 671 LHW-2B	Phase VI - High End	156,357	470,843	823.8	773.4	165	2/23/2023	165	773.4	**0**
#3253 / 672 LHW-3B	Phase VII - Low End	156,605	469,483	782.3	761.8	66	2/23/2023	66	761.8	**0**
#3253 / 673 LHW-4B	Phase VII - High End	156,446	470,834	821.8	773.3	154.7	2/23/2023	154.7	773.3	**0**
#3253 / 674 LHW-5B	Phase VIII - Low End	156,868	469,477	783.8	746.8	118.9	2/23/2023	118.9	746.8	**0**
#3253 / 675 LHW-6B	Phase VIII - High End	156,740	470,837	823.8	756.9	210.1	2/23/2023	210.1	756.9	**0**

Table G-2
Monthly Leachate Headwell Measurements
2023 Annual Report
La Crosse County Landfill (Lic. #3253)

March

Facility ID/WDNR Point and Well No.	Monitoring Location Description	Northing	Easting	Top of Well Casing Elevation ft	Elevation at Screen ft	Length of Well Casing to Floor of Landfill ft	Date Measured	Depth to Liquid, ft	Liquid Elevation ft	Leachate Head ft
#3253 / 670 LHW-1B	Phase VI - Low End	156,239	469,493	782.8	761.7	67	3/23/2023	67	761.7	**0**
#3253 / 671 LHW-2B	Phase VI - High End	156,357	470,843	823.8	773.4	165	3/23/2023	165	773.4	**0**
#3253 / 672 LHW-3B	Phase VII - Low End	156,605	469,483	782.3	761.8	66	3/23/2023	66	761.8	**0**
#3253 / 673 LHW-4B	Phase VII - High End	156,446	470,834	821.8	773.3	154.7	3/23/2023	154.7	773.3	**0**
#3253 / 674 LHW-5B	Phase VIII - Low End	156,868	469,477	783.8	746.8	118.9	3/23/2023	118.9	746.8	**0**
#3253 / 675 LHW-6B	Phase VIII - High End	156,740	470,837	823.8	756.9	210.1	3/23/2023	210.1	756.9	**0**

April

Facility ID/WDNR Point and Well No.	Monitoring Location Description	Northing	Easting	Top of Well Casing Elevation ft	Elevation at Screen ft	Length of Well Casing to Floor of Landfill ft	Date Measured	Depth to Liquid, ft	Liquid Elevation ft	Leachate Head ft
#3253 / 670 LHW-1B	Phase VI - Low End	156,239	469,493	782.8	761.7	67	4/26/2023	66.4	761.9	**0.2**
#3253 / 671 LHW-2B	Phase VI - High End	156,357	470,843	823.8	773.4	165	4/26/2023	165	773.4	**0**
#3253 / 672 LHW-3B	Phase VII - Low End	156,605	469,483	782.3	761.8	66	4/26/2023	66	761.8	**0**
#3253 / 673 LHW-4B	Phase VII - High End	156,446	470,834	821.8	773.3	154.7	4/26/2023	154.7	773.3	**0**
#3253 / 674 LHW-5B	Phase VIII - Low End	156,868	469,477	783.8	746.8	118.9	4/26/2023	118.9	746.8	**0**
#3253 / 675 LHW-6B	Phase VIII - High End	156,740	470,837	823.8	756.9	210.1	4/26/2023	210.1	756.9	**0**

Table G-2
Monthly Leachate Headwell Measurements
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La Crosse County Landfill (Lic. #3253)

May

Facility ID/WDNR Point and Well No.	Monitoring Location Description	Northing	Easting	Top of Well Casing Elevation ft	Elevation at Screen ft	Length of Well Casing to Floor of Landfill ft	Date Measured	Depth to Liquid, ft	Liquid Elevation ft	Leachate Head ft
#3253 / 670 LHW-1B	Phase VI - Low End	156,239	469,493	782.8	761.7	67	5/19/2023	66	762	**0.3**
#3253 / 671 LHW-2B	Phase VI - High End	156,357	470,843	823.8	773.4	165	5/19/2023	165	773.4	**0**
#3253 / 672 LHW-3B	Phase VII - Low End	156,605	469,483	782.3	761.8	66	5/19/2023	66	761.8	**0**
#3253 / 673 LHW-4B	Phase VII - High End	156,446	470,834	821.8	773.3	154.7	5/19/2023	154.7	773.3	**0**
#3253 / 674 LHW-5B	Phase VIII - Low End	156,868	469,477	783.8	746.8	118.9	5/19/2023	118.9	746.8	**0**
#3253 / 675 LHW-6B	Phase VIII - High End	156,740	470,837	823.8	756.9	210.1	5/19/2023	210.1	756.9	**0**

June

Facility ID/WDNR Point and Well No.	Monitoring Location Description	Northing	Easting	Top of Well Casing Elevation ft	Elevation at Screen ft	Length of Well Casing to Floor of Landfill ft	Date Measured	Depth to Liquid, ft	Liquid Elevation ft	Leachate Head ft
#3253 / 670 LHW-1B	Phase VI - Low End	156,239	469,493	782.8	761.7	67	6/8/2023	64	762.6	**0.9**
#3253 / 671 LHW-2B	Phase VI - High End	156,357	470,843	823.8	773.4	165	6/8/2023	165	773.4	**0**
#3253 / 672 LHW-3B	Phase VII - Low End	156,605	469,483	782.3	761.8	66	6/8/2023	66	761.8	**0**
#3253 / 673 LHW-4B	Phase VII - High End	156,446	470,834	821.8	773.3	154.7	6/8/2023	154.7	773.3	**0**
#3253 / 674 LHW-5B	Phase VIII - Low End	156,868	469,477	783.8	746.8	118.9	6/8/2023	118.9	746.8	**0**
#3253 / 675 LHW-6B	Phase VIII - High End	156,740	470,837	823.8	756.9	210.1	6/8/2023	210.1	756.9	**0**

Table G-2
Monthly Leachate Headwell Measurements
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La Crosse County Landfill (Lic. #3253)

July

Facility ID/WDNR Point and Well No.	Monitoring Location Description	Northing	Easting	Top of Well Casing Elevation ft	Elevation at Screen ft	Length of Well Casing to Floor of Landfill ft	Date Measured	Depth to Liquid, ft	Liquid Elevation ft	Leachate Head ft
#3253 / 670 LHW-1B	Phase VI - Low End	156,239	469,493	782.8	761.7	67	7/28/2023	66.3	761.9	**0.2**
#3253 / 671 LHW-2B	Phase VI - High End	156,357	470,843	823.8	773.4	165	7/28/2023	165	773.4	**0**
#3253 / 672 LHW-3B	Phase VII - Low End	156,605	469,483	782.3	761.8	66	7/28/2023	66	761.8	**0**
#3253 / 673 LHW-4B	Phase VII - High End	156,446	470,834	821.8	773.3	154.7	7/28/2023	154.6	773.3	**0**
#3253 / 674 LHW-5B	Phase VIII - Low End	156,868	469,477	783.8	746.8	118.9	7/28/2023	118.8	746.8	**0**
#3253 / 675 LHW-6B	Phase VIII - High End	156,740	470,837	823.8	756.9	210.1	7/28/2023	209.9	757	**0.1**

August

Facility ID/WDNR Point and Well No.	Monitoring Location Description	Northing	Easting	Top of Well Casing Elevation ft	Elevation at Screen ft	Length of Well Casing to Floor of Landfill ft	Date Measured	Depth to Liquid, ft	Liquid Elevation ft	Leachate Head ft
#3253 / 670 LHW-1B	Phase VI - Low End	156,239	469,493	782.8	761.7	67	8/17/2023	61	763.6	**1.9**
#3253 / 671 LHW-2B	Phase VI - High End	156,357	470,843	823.8	773.4	165	8/17/2023	165	773.4	**0**
#3253 / 672 LHW-3B	Phase VII - Low End	156,605	469,483	782.3	761.8	66	8/17/2023	66	761.8	**0**
#3253 / 673 LHW-4B	Phase VII - High End	156,446	470,834	821.8	773.3	154.7	8/17/2023	154.7	773.3	**0**
#3253 / 674 LHW-5B	Phase VIII - Low End	156,868	469,477	783.8	746.8	118.9	8/17/2023	118.9	746.8	**0**
#3253 / 675 LHW-6B	Phase VIII - High End	156,740	470,837	823.8	756.9	210.1	8/17/2023	210.1	756.9	**0**

Table G-2
Monthly Leachate Headwell Measurements
2023 Annual Report
La Crosse County Landfill (Lic. #3253)

September

Facility ID/WDNR Point and Well No.	Monitoring Location Description	Northing	Easting	Top of Well Casing Elevation ft	Elevation at Screen ft	Length of Well Casing to Floor of Landfill ft	Date Measured	Depth to Liquid, ft	Liquid Elevation ft	Leachate Head ft
#3253 / 670 LHW-1B	Phase VI - Low End	156,239	469,493	782.8	761.7	67	9/21/2023	61.5	763.4	**1.7**
#3253 / 671 LHW-2B	Phase VI - High End	156,357	470,843	823.8	773.4	165	9/21/2023	165	773.4	**0**
#3253 / 672 LHW-3B	Phase VII - Low End	156,605	469,483	782.3	761.8	66	9/21/2023	61.5	763.2	**1.4**
#3253 / 673 LHW-4B	Phase VII - High End	156,446	470,834	821.8	773.3	154.7	9/21/2023	154.7	773.3	**0**
#3253 / 674 LHW-5B	Phase VIII - Low End	156,868	469,477	783.8	746.8	118.9	9/21/2023	118.9	746.8	**0**
#3253 / 675 LHW-6B	Phase VIII - High End	156,740	470,837	823.8	756.9	210.1	9/21/2023	210.1	756.9	**0**

October

Facility ID/WDNR Point and Well No.	Monitoring Location Description	Northing	Easting	Top of Well Casing Elevation ft	Elevation at Screen ft	Length of Well Casing to Floor of Landfill ft	Date Measured	Depth to Liquid, ft	Liquid Elevation ft	Leachate Head ft
#3253 / 670 LHW-1B	Phase VI - Low End	156,239	469,493	782.8	761.7	67	10/20/2023	61	763.6	**1.9**
#3253 / 671 LHW-2B	Phase VI - High End	156,357	470,843	823.8	773.4	165	10/20/2023	165	773.4	**0**
#3253 / 672 LHW-3B	Phase VII - Low End	156,605	469,483	782.3	761.8	66	10/20/2023	66	761.8	**0**
#3253 / 673 LHW-4B	Phase VII - High End	156,446	470,834	821.8	773.3	154.7	10/20/2023	154.7	773.3	**0**
#3253 / 674 LHW-5B	Phase VIII - Low End	156,868	469,477	783.8	746.8	118.9	10/20/2023	118.9	746.8	**0**
#3253 / 675 LHW-6B	Phase VIII - High End	156,740	470,837	823.8	756.9	210.1	10/20/2023	210.1	756.9	**0**

Table G-2
Monthly Leachate Headwell Measurements
2023 Annual Report
La Crosse County Landfill (Lic. #3253)

November

Facility ID/WDNR Point and Well No.	Monitoring Location Description	Northing	Easting	Top of Well Casing Elevation ft	Elevation at Screen ft	Length of Well Casing to Floor of Landfill ft	Date Measured	Depth to Liquid, ft	Liquid Elevation ft	Leachate Head ft
#3253 / 670 LHW-1B	Phase VI - Low End	156,239	469,493	782.8	761.7	67	11/17/2023	62	763.3	**1.6**
#3253 / 671 LHW-2B	Phase VI - High End	156,357	470,843	823.8	773.4	165	11/17/2023	165	773.4	**0**
#3253 / 672 LHW-3B	Phase VII - Low End	156,605	469,483	782.3	761.8	66	11/17/2023	66	761.8	**0**
#3253 / 673 LHW-4B	Phase VII - High End	156,446	470,834	821.8	773.3	154.7	11/17/2023	154.7	773.3	**0**
#3253 / 674 LHW-5B	Phase VIII - Low End	156,868	469,477	783.8	746.8	118.9	11/17/2023	118.9	746.8	**0**
#3253 / 675 LHW-6B	Phase VIII - High End	156,740	470,837	823.8	756.9	210.1	11/17/2023	210.1	756.9	**0**

December

Facility ID/WDNR Point and Well No.	Monitoring Location Description	Northing	Easting	Top of Well Casing Elevation ft	Elevation at Screen ft	Length of Well Casing to Floor of Landfill ft	Date Measured	Depth to Liquid, ft	Liquid Elevation ft	Leachate Head ft
#3253 / 670 LHW-1B	Phase VI - Low End	156,239	469,493	782.8	761.7	67	12/8/2023	61	763.6	**1.9**
#3253 / 671 LHW-2B	Phase VI - High End	156,357	470,843	823.8	773.4	165	12/8/2023	165	773.4	**0**
#3253 / 672 LHW-3B	Phase VII - Low End	156,605	469,483	782.3	761.8	66	12/8/2023	66	761.8	**0**
#3253 / 673 LHW-4B	Phase VII - High End	156,446	470,834	821.8	773.3	154.7	12/8/2023	154.7	773.3	**0**
#3253 / 674 LHW-5B	Phase VIII - Low End	156,868	469,477	783.8	746.8	118.9	12/8/2023	118.9	746.8	**0**
#3253 / 675 LHW-6B	Phase VIII - High End	156,740	470,837	823.8	756.9	210.1	12/8/2023	210	756.9	**0**

Table G-3
Leachate Application Summary
2023 Annual Report
La Crosse County Landfill (Lic. #3252)

Year	Volume of RD&D Leachate Applied from Vernon County (gallons)	Volume of Leachate Recirculated from La Crosse County (gallons)	Annual Precipitation (inches)	Application Location
2016	204,360	0	44.76	Phase VIII Module 1
2017	960,852	0	39.6	Phase VIII Module 1
2018	254,904	0	42.59	Phase VIII Module 1
2019	62,289	0	44.67	Phase VII Module's 1 & 2
2020	777,923	0	30.82	Phase VII Module's 1 & 2 Phase VIII Module's 1 & 2
2021	382,180	0	37.34	Phase VII Module's 1 & 2
2022	148,081	0	29.92	Phase VII Module's 1 & 2 Phase VIII Module 1
2023	47,954	0	27.67	Phase VIII Module 2
Total	**2,838,543**	**0**	**297.37**	--

Table G-4
Waste Composition
2023 Annual Report
La Crosse County Landfill Lic. #3253

Year	WDNR Waste Category																												Cat. 1-31 Total[3]	Total Degradable (Cat. 1,3,5,6, 27, 31)	
	1		2		3		4		5		6		19		20		21		23		25		27		28		30		31				
	Municipal Solid Waste		Utility Ash /Sludges		Cat. 3 Papermill Sludge		Foundry Waste		Cat. 5 POTW Sludge		All Other SW		Fee Exempt Waste Used for Dikes, Berms		Energy Recovery Incinerator Ash		High Volume Industrial ADC		Treated Contaminated Soil		C/D Waste[4]		Cat. 27 MSW Non-Profit		Cat. 28 Natual Disaster		Cat. 30 MRF Rejects		Cat. 31 Xcel Rejects[5]				
	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Tons	%	Tons	Tons	(%)
1992	33,119	77%	9,956	23%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	43,075	33,119	77%
1993	33,256	77%	9,840	23%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	43,096	33,256	77%
1994	37,173	78%	10,285	22%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	47,458	37,173	78%
1995	34,080	79%	9,205	21%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	43,285	34,080	79%
1996	34,960	77%	10,410	23%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	45,370	34,960	77%
1997	34,689	77%	10,377	23%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	45,066	34,689	77%
1998	40,329	80%	10,042	20%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	50,371	40,329	80%
1999	40,503	79%	10,731	21%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	51,234	40,503	79%
2000	46,365	75%	11,469	19%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	4,017	6%	0	0%	0	0%	0	0%	0	0%	0	0%	61,851	46,365	75%
2001	40,861	63%	11,890	18%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	11,890	18%	0	0%	0	0%	0	0%	0	0%	0	0%	64,641	40,861	63%
2002	44,402	78%	8,957	16%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	3,689	6%	0	0%	0	0%	0	0%	0	0%	0	0%	57,048	44,402	78%
2003	38,660	64%	12,974	21%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	9,033	15%	0	0%	0	0%	0	0%	0	0%	0	0%	60,667	38,660	64%
2004	41,591	68%	13,931	23%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	5,573	9%	0	0%	0	0%	0	0%	0	0%	0	0%	61,095	41,591	68%
2005	40,967	58%	12,052	17%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	0	0%	17,663	25%	0	0%	0	0%	0	0%	0	0%	0	0%	70,682	40,967	58%
2006	44,102	58%	9,792	13%	0	0%	4,075	9%	0	0%	0	0%	0	0%	0	0%	0	0%	17,512	23%	0	0%	0	0%	0	0%	0	0%	0	0%	75,481	44,102	58%
2007	45,262	54%	525	1%	0	0%	0	0%	0	0%	2,594	3%	2,730	3%	9,100	11%	8,503	10%	15,270	18%	0	0%	0	0%	0	0%	0	0%	0	0%	83,985	47,856	57%
2008	45,450	48%	781	1%	0	0%	616	1%	0	0%	2,189	2%	16,275	17%	9,261	10%	8,862	9%	10,319	11%	0	0%	0	0%	0	0%	0	0%	0	0%	93,754	47,639	51%
2009	35,926	42%	448	1%	0	0%	170	0%	0	0%	4,041	5%	16,797	20%	0	0%	7,142	8%	5,677	7%	14,388	17%	0	0%	0	0%	0	0%	0	0%	84,590	39,968	47%
2010	34,317	45%	621	1%	0	0%	461	1%	0	0%	3,500	5%	8,049	10%	10,183	13%	7,078	9%	1,439	2%	11,379	15%	0	0%	0	0%	0	0%	0	0%	77,027	37,817	49%
2011	41,706	47%	316	0%	0	0%	257	1%	638	1%	2,704	3%	7,409	8%	9,657	11%	9,833	11%	1,313	1%	14,494	16%	0	0%	0	0%	0	0%	0	0%	88,327	45,048	51%
2012	37,991	52%	6	0%	0	0%	295	1%	337	0%	1,347	2%	973	1%	9,606	13%	8,895	12%	482	1%	13,251	18%	0	0%	0	0%	0	0%	0	0%	73,183	39,675	54%
2013	53,606	51%	404	0%	0	0%	0	0%	435	0%	1,622	2%	18,013	17%	9,326	9%	8,461	8%	671	1%	12,976	12%	0	0%	0	0%	0	0%	0	0%	105,514	55,663	53%
2014	56,545	53%	211	0%	0	0%	0	0%	27	0%	1,854	2%	13,894	13%	9,483	9%	9,113	9%	826	1%	14,005	13%	0	0%	0	0%	0	0%	0	0%	105,958	58,426	55%
2015	49,534	43%	303	0%	0	0%	0	0%	104	0%	2,295	2%	21,454	19%	11,030	10%	6,580	6%	103	0%	22,504	20%	421	0%	0	0%	1	0.00%	0	0%	114,329	52,354	46%
2016	55,091	47%	429	0%	0	0%	0	0%	83	0%	4,718	4%	21,226	18%	9,561	8%	3,661	3%	1,827	2%	21,026	18%	488	0%	0	0%	0	0%	0	0%	118,110	60,380	51%
2017	59,123	53%	427	0%	0	0%	0	0%	90	0%	2,503	2%	12,688	11%	9,044	8%	4,370	4%	651	1%	22,744	20%	146	0%	185	0.2%	0	0%	0	0%	111,971	61,862	55%
2018	61,924	57%	394	0%	0	0%	0	0%	47	0%	2,691	2%	7,367	7%	8,680	8%	5,554	5%	408	0%	21,130	19%	40	0%	163	0.2%	1	0.00%	0	0%	108,399	64,702	60%
2019	59,072	49%	340	0%	0	0%	0	0%	2,395	2%	4,041	3%	9,392	8%	9,475	8%	11,696	10%	713	1%	22,610	19%	55	0%	89	0.1%	11	0.01%	0	0%	119,889	65,563	55%
2020	60,880	52%	283	0%	0	0%	0	0%	502	0%	2,148	2%	6,909	6%	9,520	8%	5,676	5%	234	0%	29,565	25%	380	0%	0	0%	2	0.00%	0	0%	116,099	63,910	55%
2021	36,476	34%	79	0%	0	0%	0	0%	2,453	2%	2,382	2%	2,413	2%	12,061	11%	5,693	5%	51	0%	25,285	24%	715	1%	0	0%	8	0.01%	19,137	18%	106,752	61,163	57%
2022	38,106	34%	68	0%	0	0%	0	0%	0	0%	1,752	2%	8,211	7%	9,737	9%	7,779	7%	2,942	3%	24,062	21%	677	1%	0	0%	16	0.01%	18,720	17%	112,070	59,255	53%
2023	37,299	30%	92	0%	0	0%	0	0%	444	0%	5,685	5%	7,332	6%	9,946	8%	9,920	8%	1,536	1%	26,722	22%	614	1%	0	0%	19	0.02%	23,093	19%	122,702	67,135	55%
Average Last 3 Years	**37,294**	**33%**	**79**	**0%**	**0**	**0%**	**0**	**0%**	**966**	**1%**	**3,273**	**3%**	**5,985**	**5%**	**10,581**	**9%**	**7,797**	**7%**	**1,510**	**1%**	**25,356**	**22%**	**669**	**1%**	**0**	**0%**	**14**	**0%**	**20,317**	**18%**	**113,841**	**62,518**	**55%**

Notes:

1 - Waste tonnages by category taken from WDNR Landfill Annual Tonnage-Capacity Reports, except for 2023 where the La Crosse County Tonnage Report was used.

2 - Categories not received from 1992-2023 were not included in table, except for Category 3 since it is considered degradable.

3 - Total tonnage reported in WDNR annual tonnage report includes both MSW Landfill and Ash Monofill.

4 - Up to 2009 CD material was placed in separate CD landfill.

5- Category 31 includes RDF Plant reject and residue MSW material sent back to the Landfill. This waste is considered degradable, and therefore is included in 2021-2023 degradable tonnage.

Figures

Figure G-1A
Liquid Mass Balance for Calendar Year 2023 - Phase VI
La Crosse County Landfill Lic. #3253

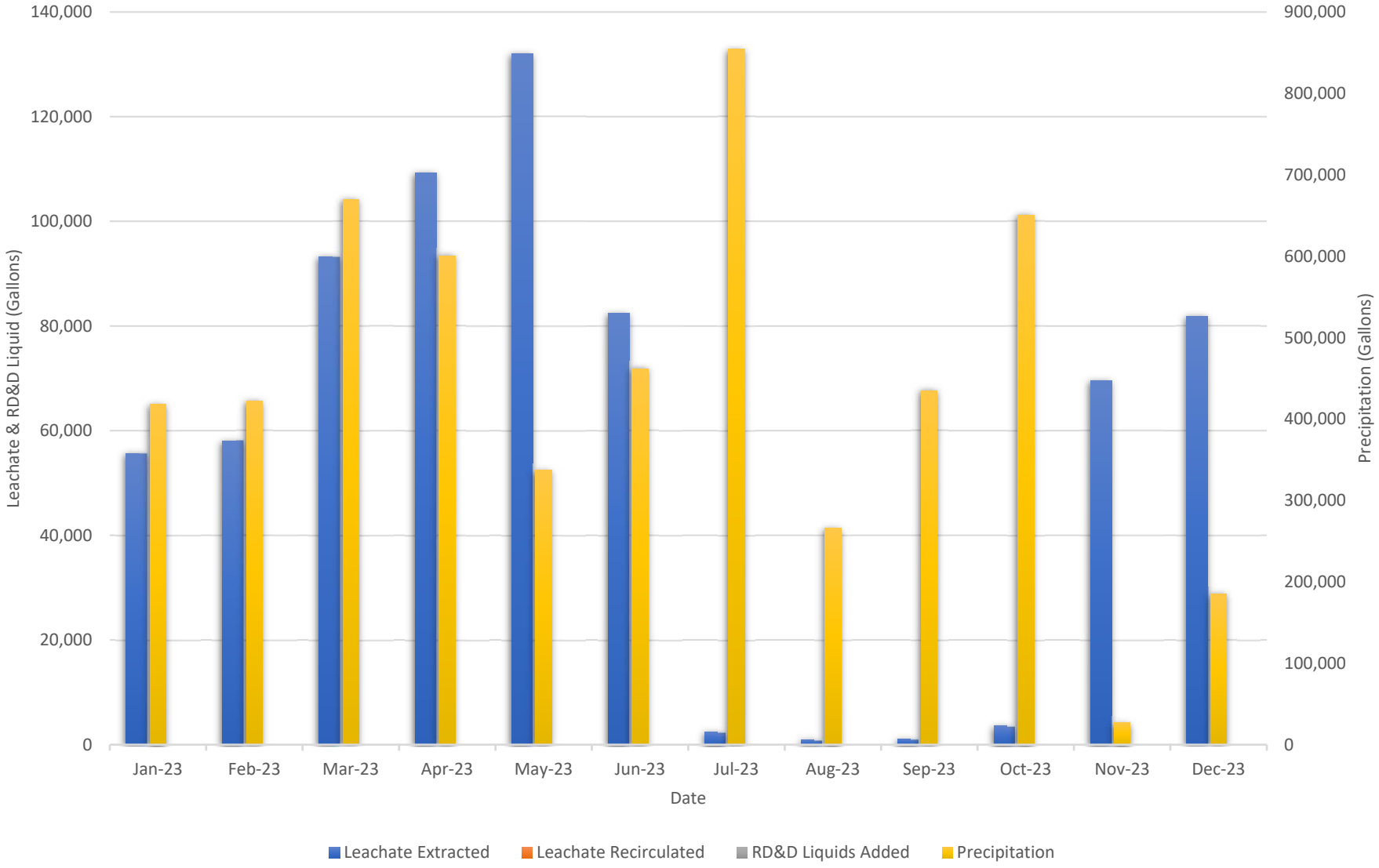


Figure G-1B
Liquid Mass Balance for Calendar Year 2023 - Phase VII
La Crosse County Landfill Lic. #3253

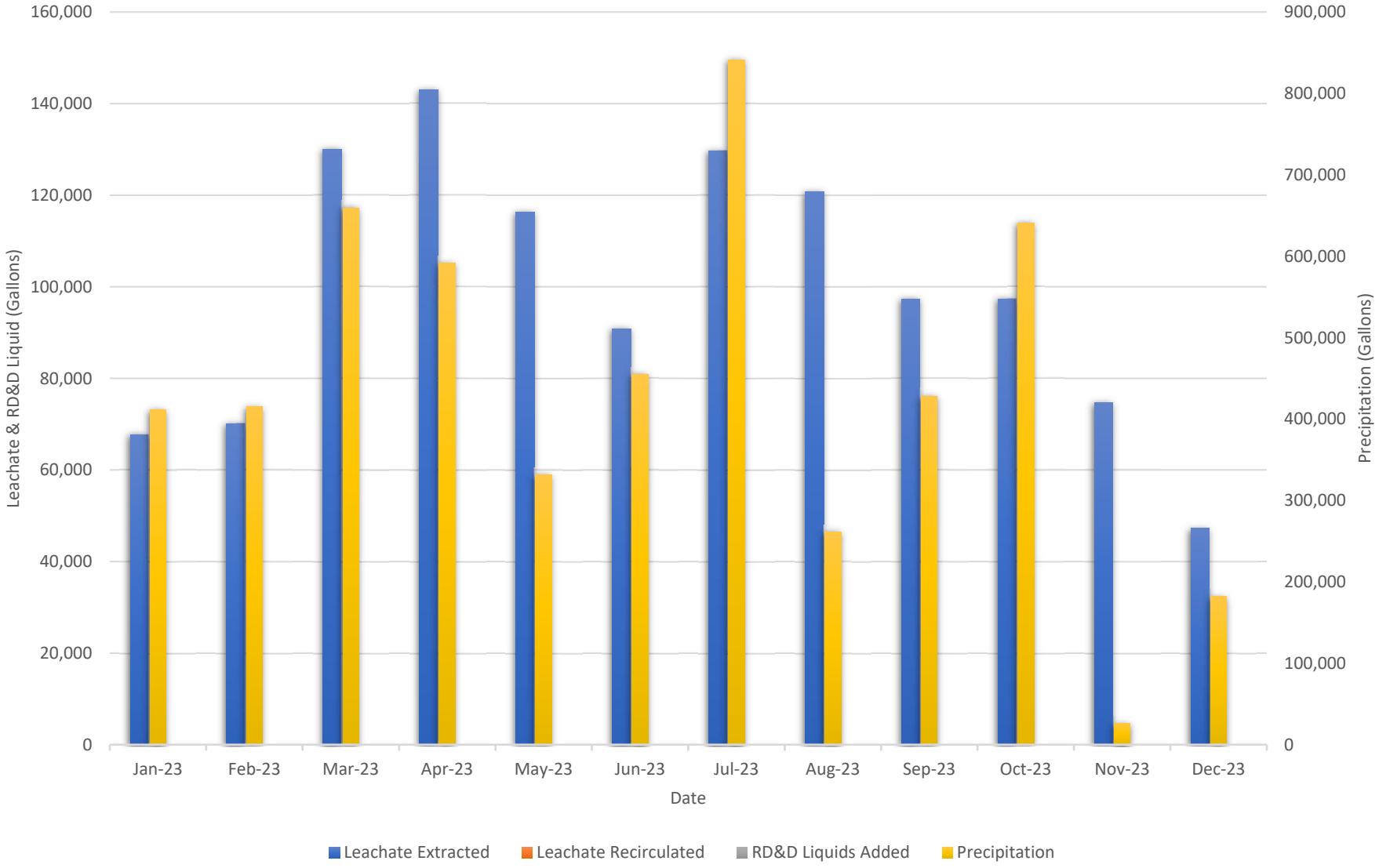


Figure G-1C
Liquid Mass Balance for Calendar Year 2023 - Phase VIII
La Crosse County Landfill Lic. #3253

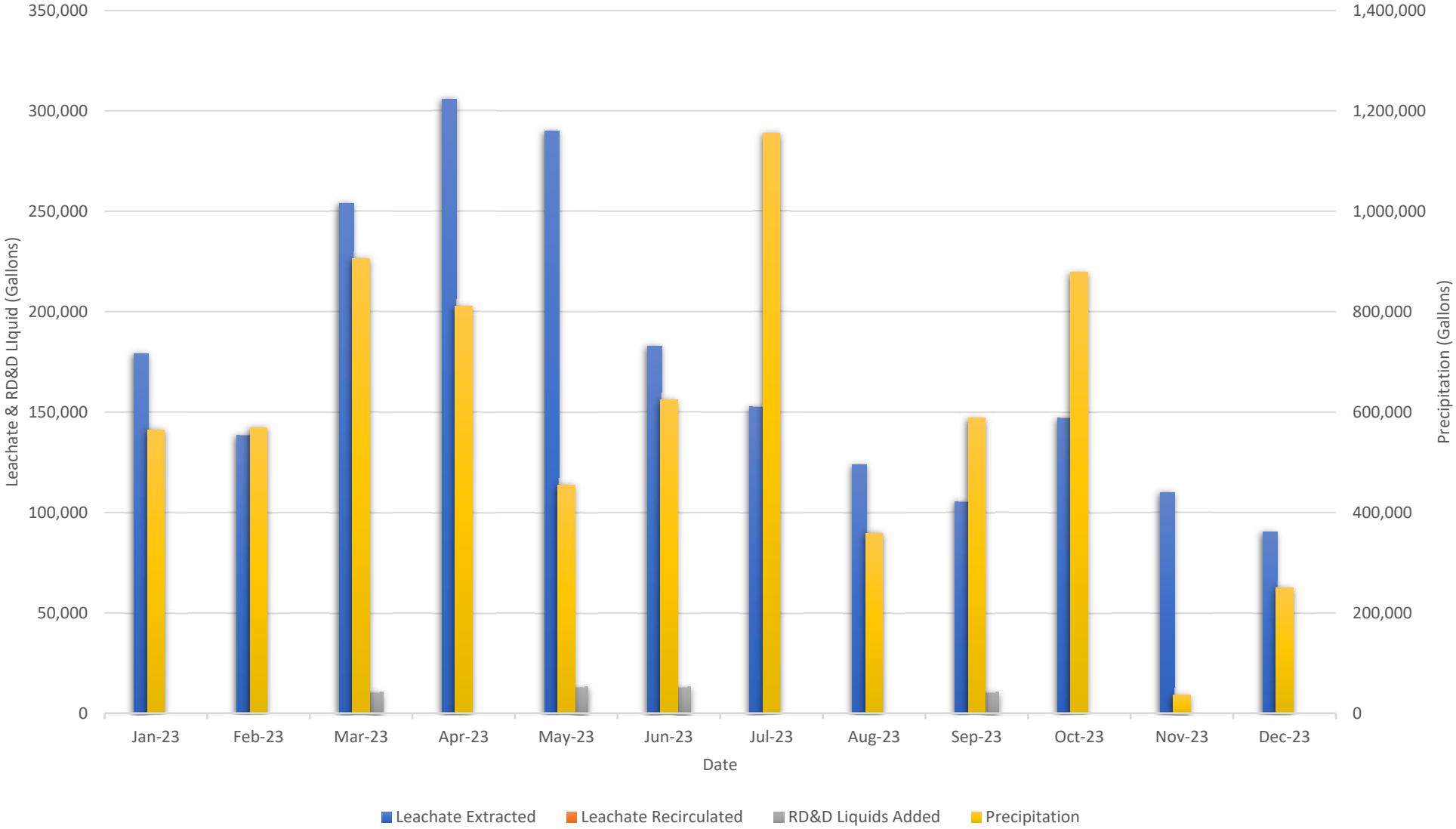


Figure G-1D
Liquid Mass Balance for Calendar Year 2023 - Total Phases VI through VIII
La Crosse County Landfill Lic. #3253

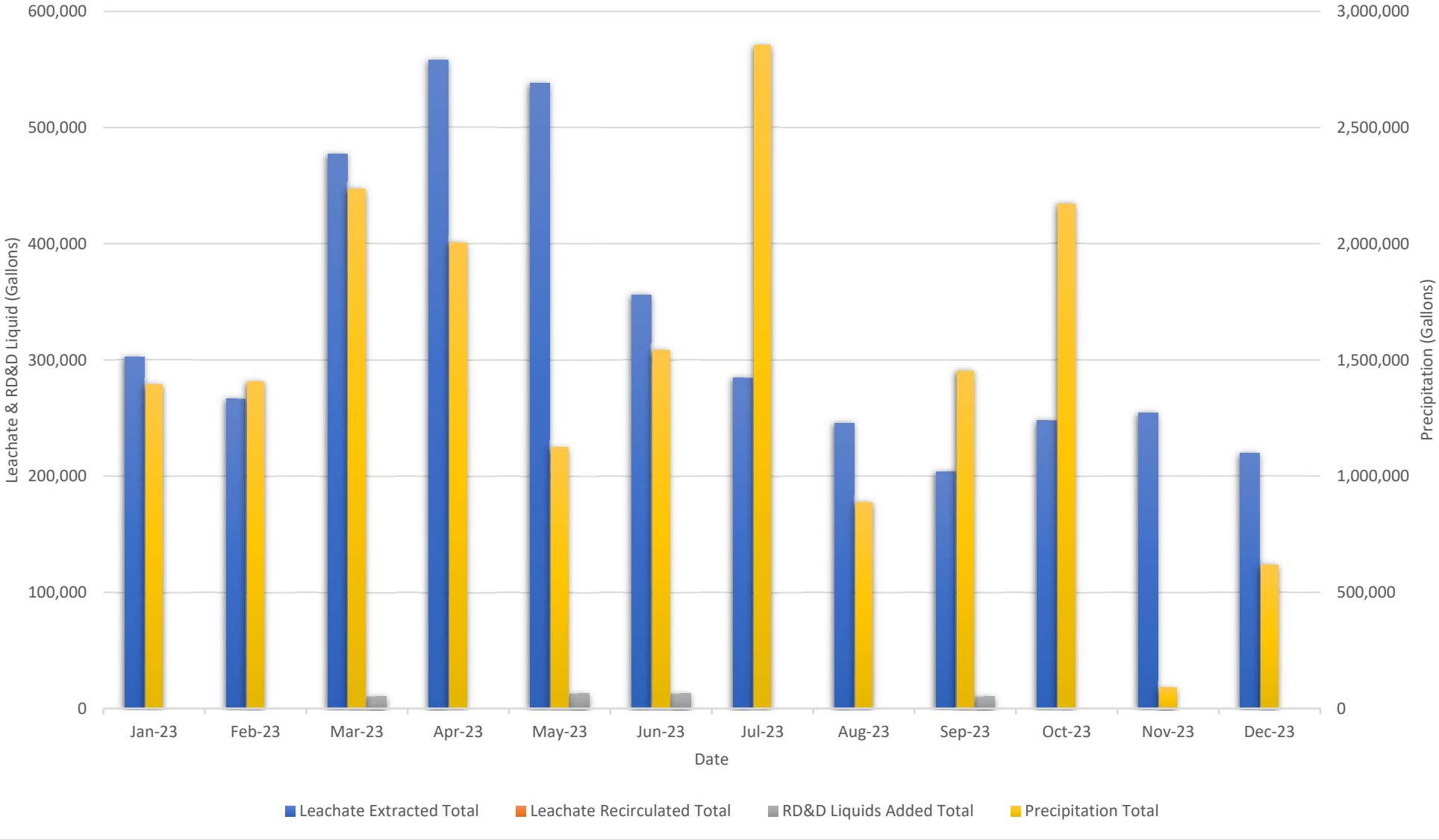


Figure G-2
NR 507 VOC Appendix III - GEMS Point ID 451
La Crosse County Landfill Lic. #3253

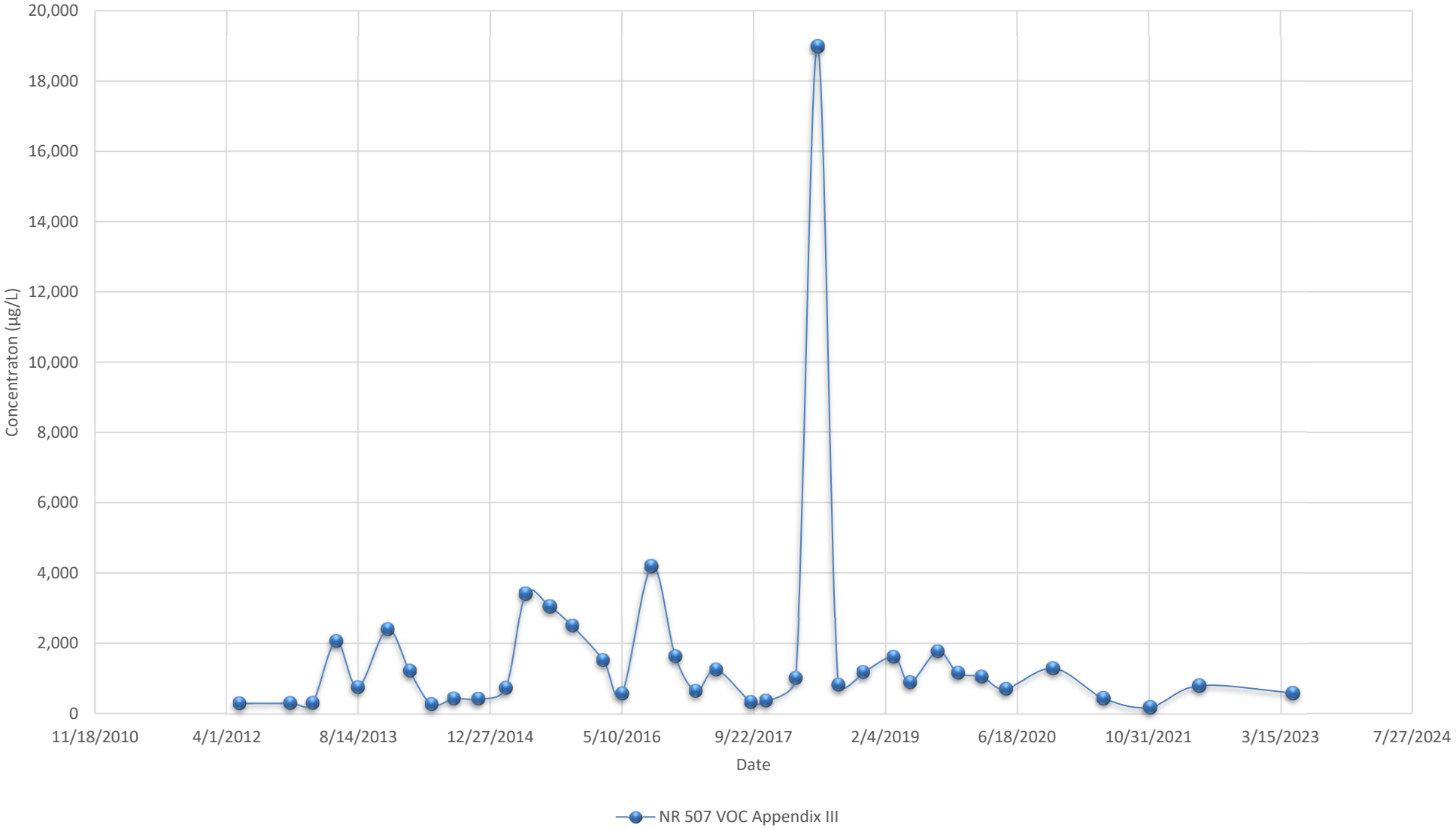


FIGURE G-3
BIOCHEMICAL OXYGEN DEMAND (MG/L, 5 DAY - 20DEG C) - GEMS POINT ID 451
LA CROSSE COUNTY LANDFILL LIC. #3253

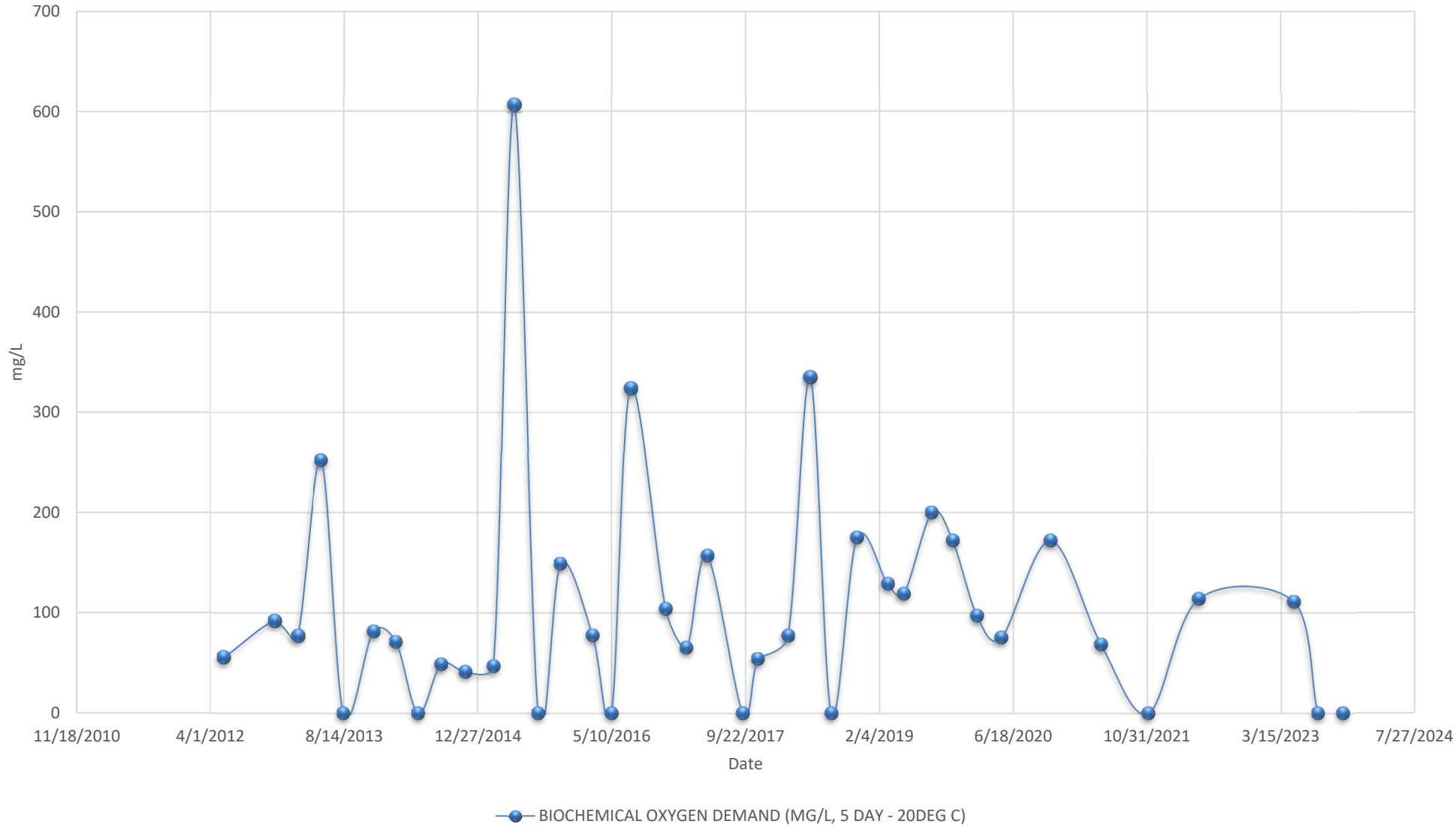


FIGURE G-4
CHEMICAL OXYGEN DEMAND, UNFILTERED (MG/L) - GEMS POINT ID 451
LA CROSSE COUNTY LANDFILL LIC. #3253

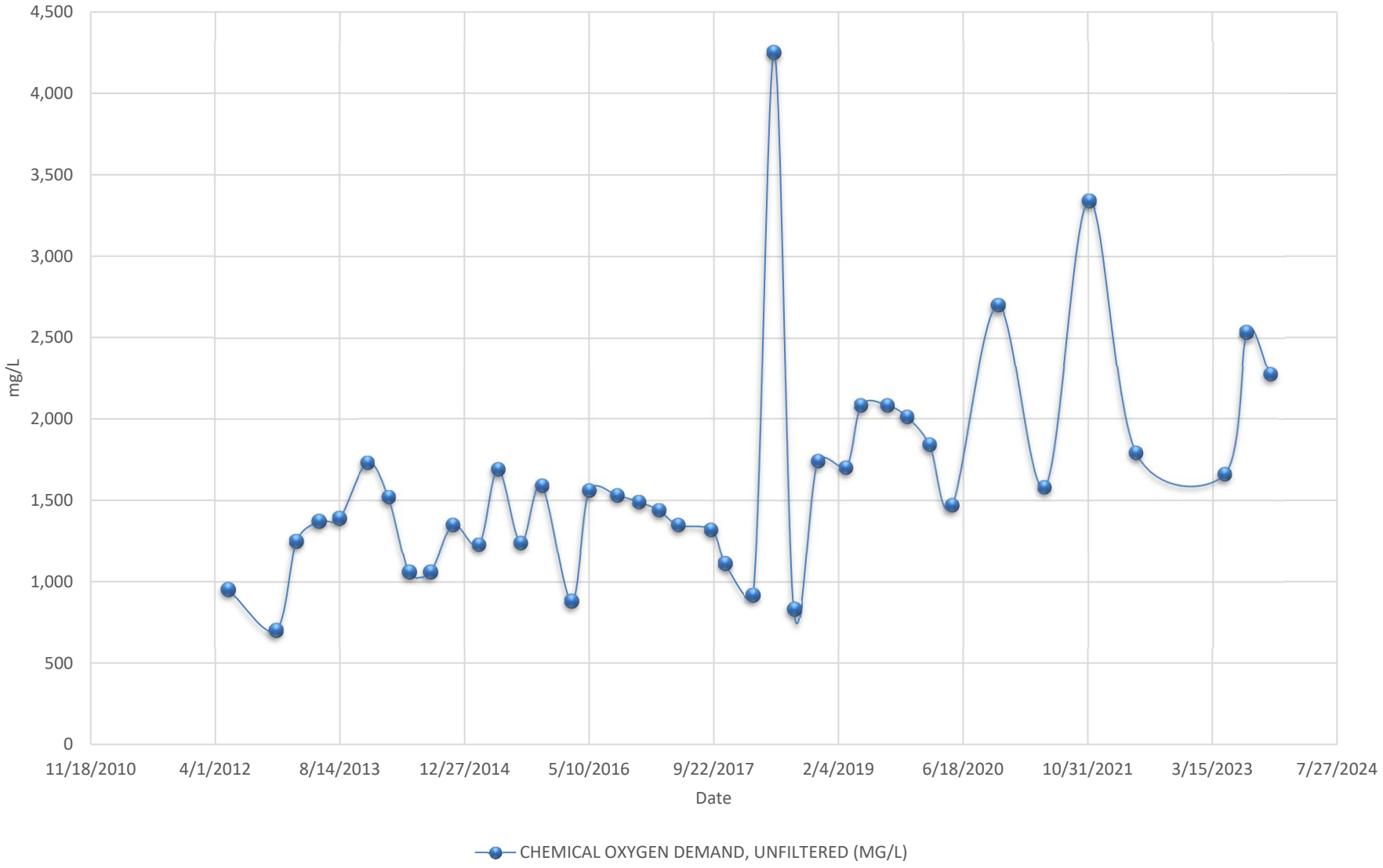


FIGURE G-5
NITROGEN, AMMONIA, TOTAL (MG/L AS N) - GEMS POINT ID 451
LA CROSSE COUNTY LANDFILL LIC. #3253

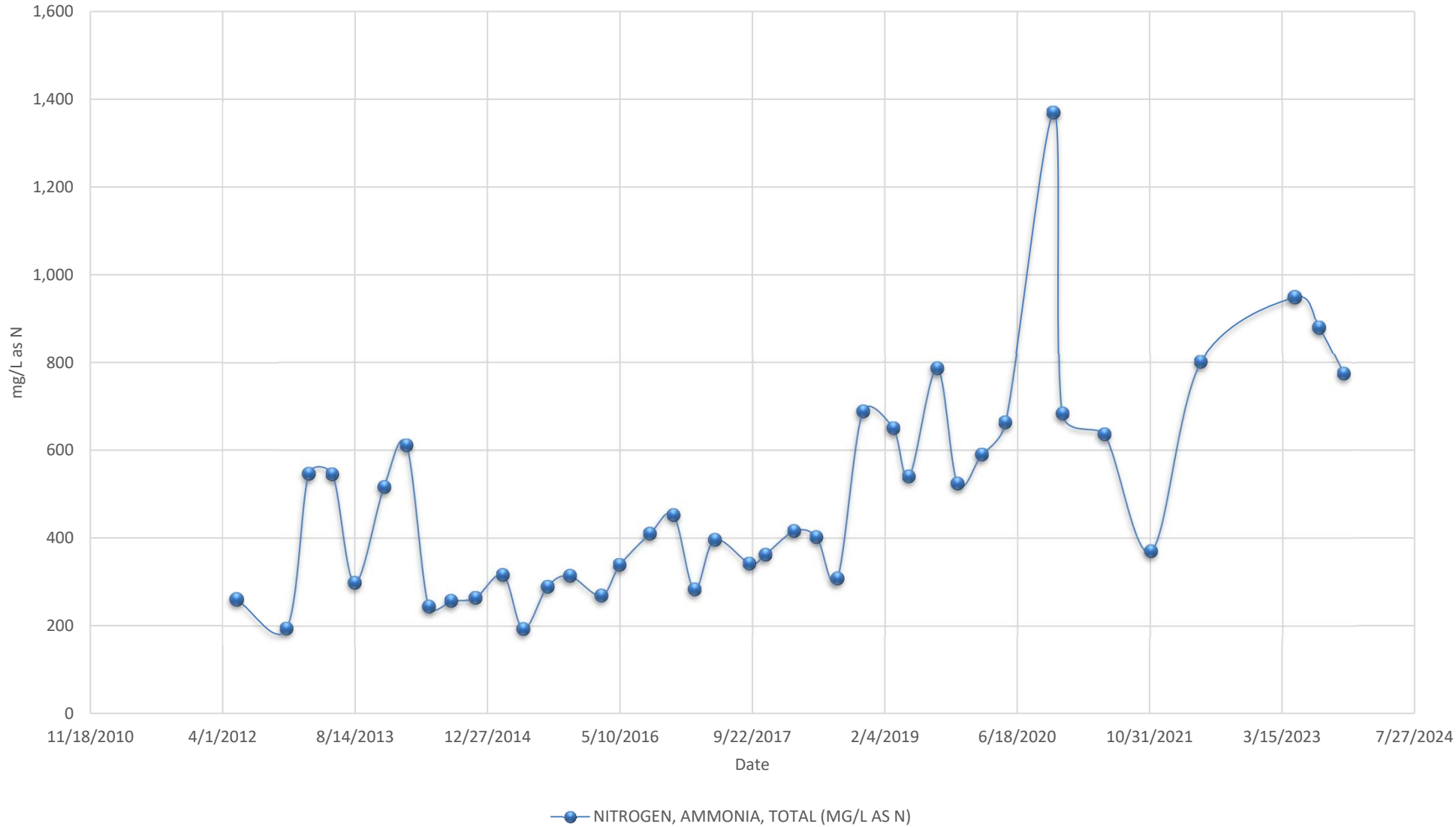


FIGURE G-6
PH, FIELD (STANDARD UNITS) - GEMS POINT ID 451
LA CROSSE COUNTY LANDFILL LIC. #3253

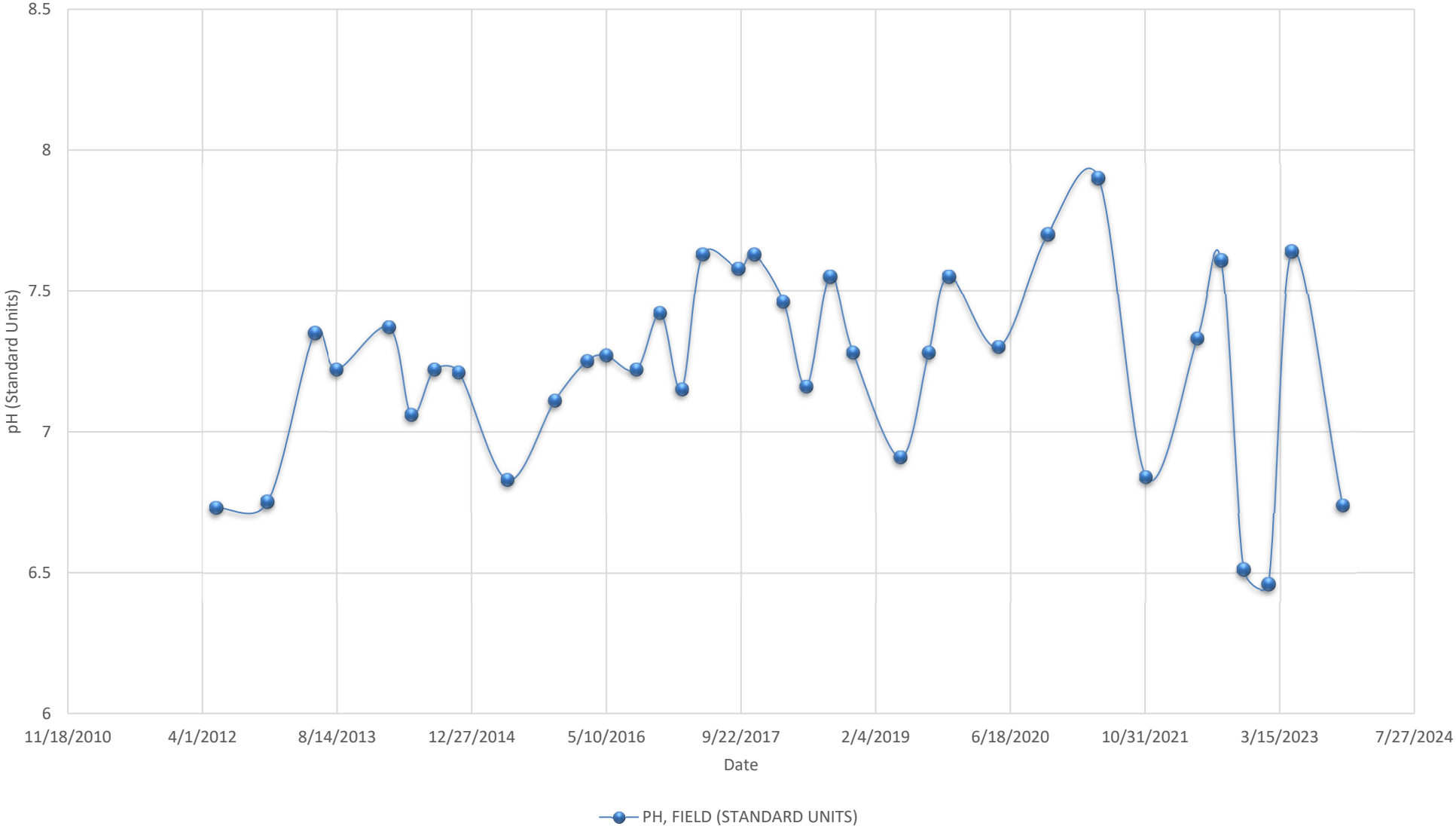


FIGURE G-7
SPECIFIC CONDUCTANCE, FIELD (UMHO/CM @ 25C) - GEMS POINT ID 451
LA CROSSE COUNTY LANDFILL LIC. #3253

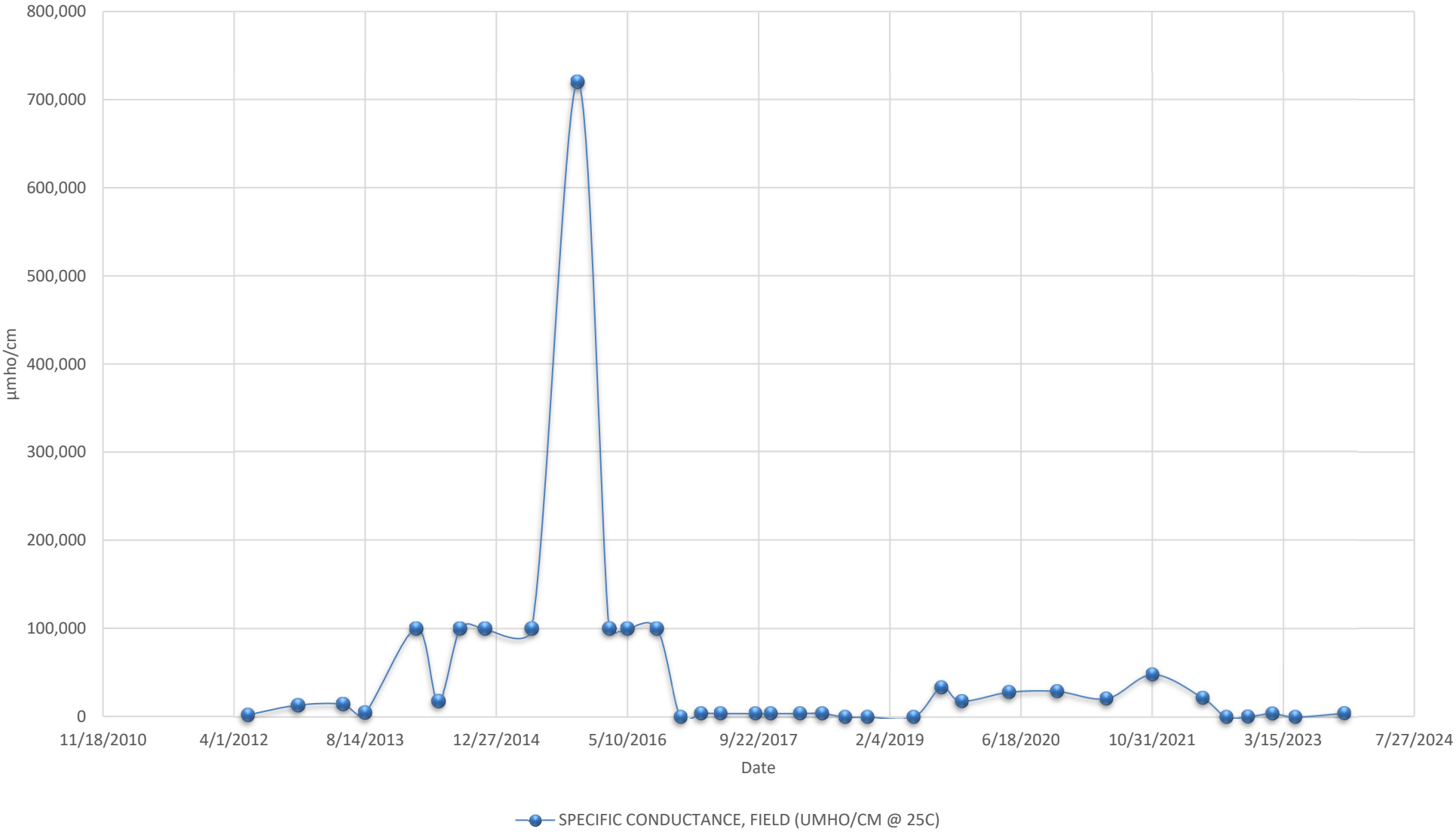


FIGURE G-8
ALKALINITY, TOTAL (MG/L AS CACO3) - GEMS POINT ID 451
LA CROSSE COUNTY LANDFILL LIC. #3253

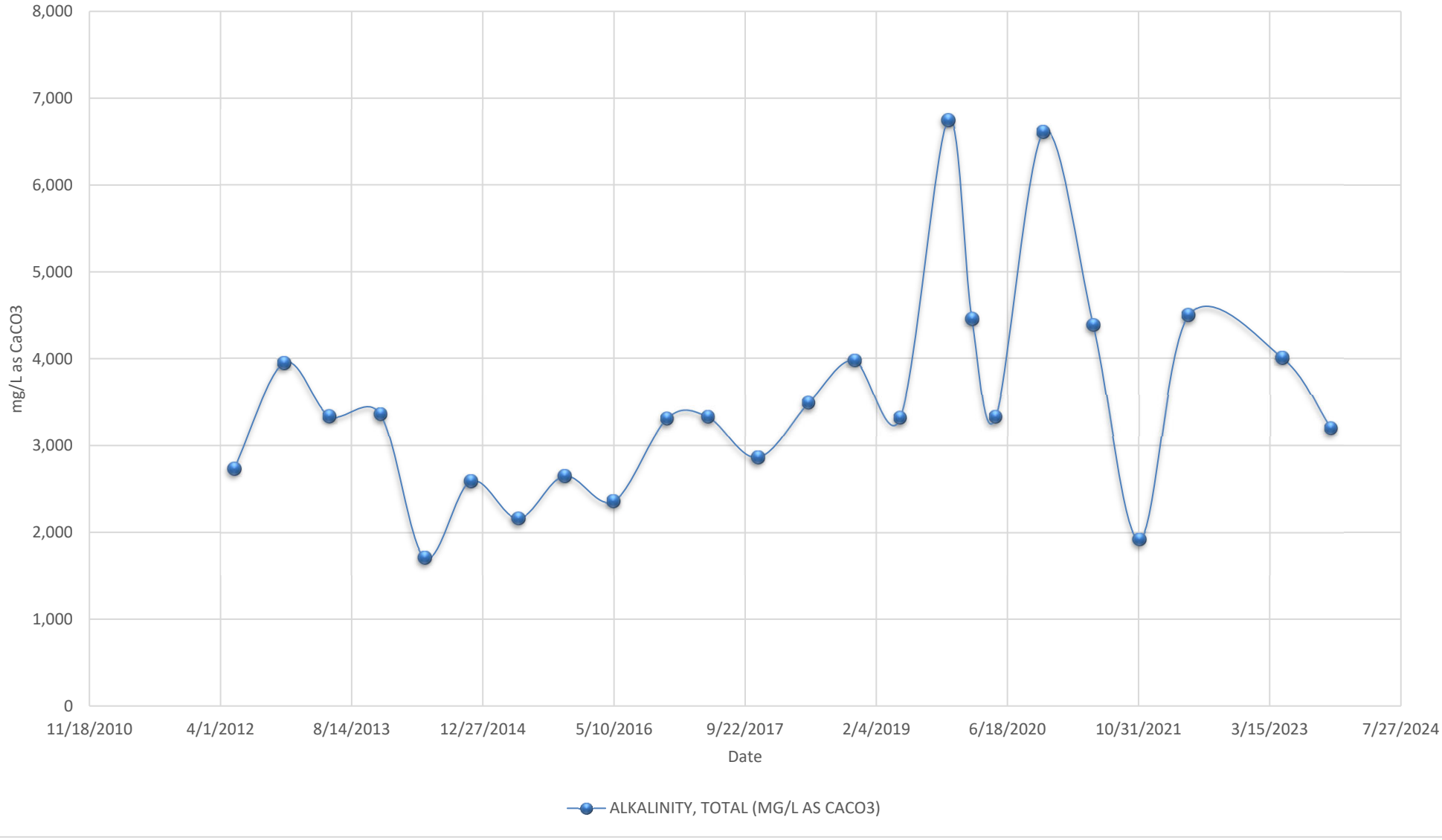


FIGURE G-9
HARDNESS, TOTAL (MG/L AS CACO3) - GEMS POINT ID 451
LA CROSSE COUNTY LANDFILL LIC. #3253

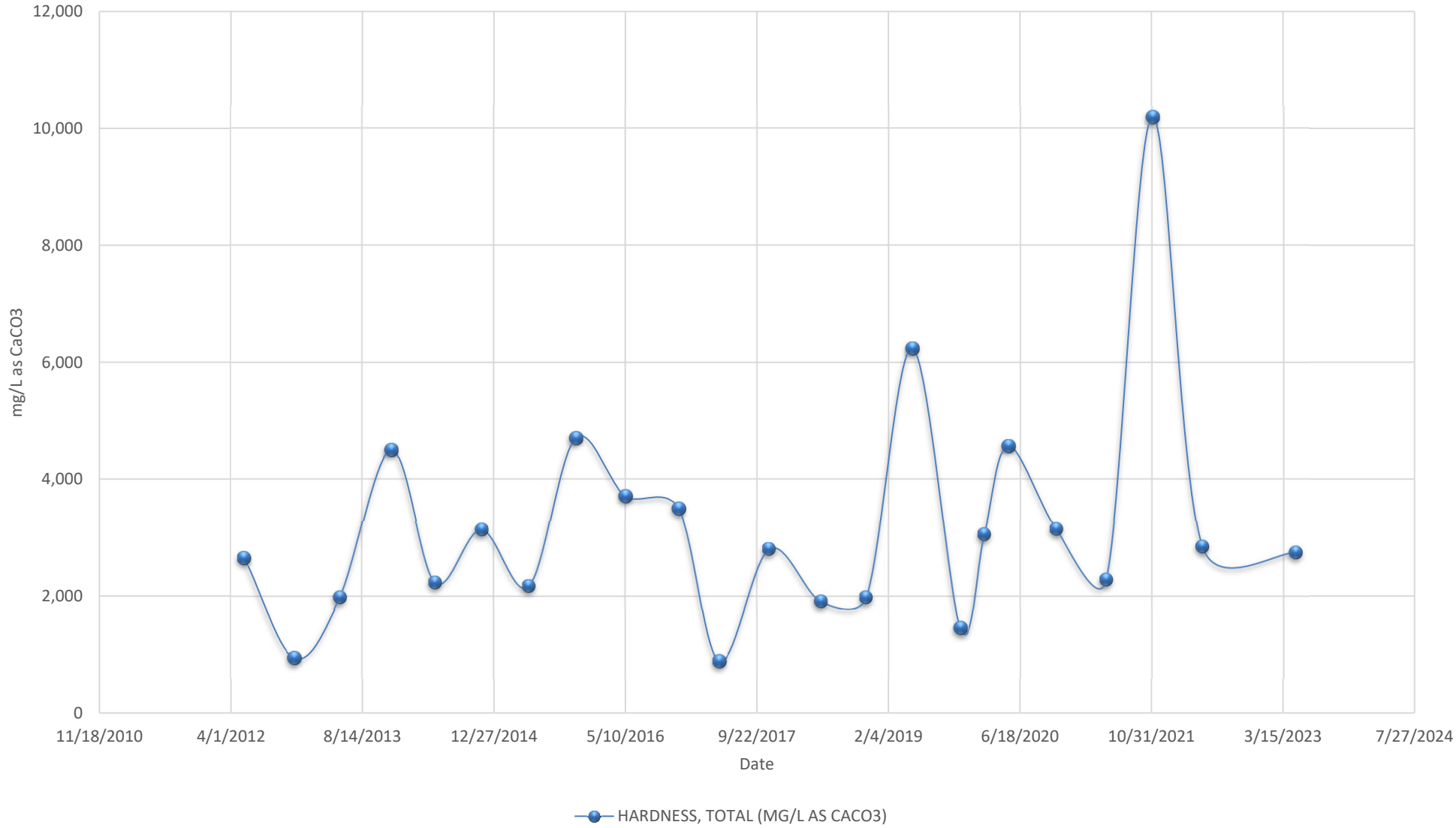
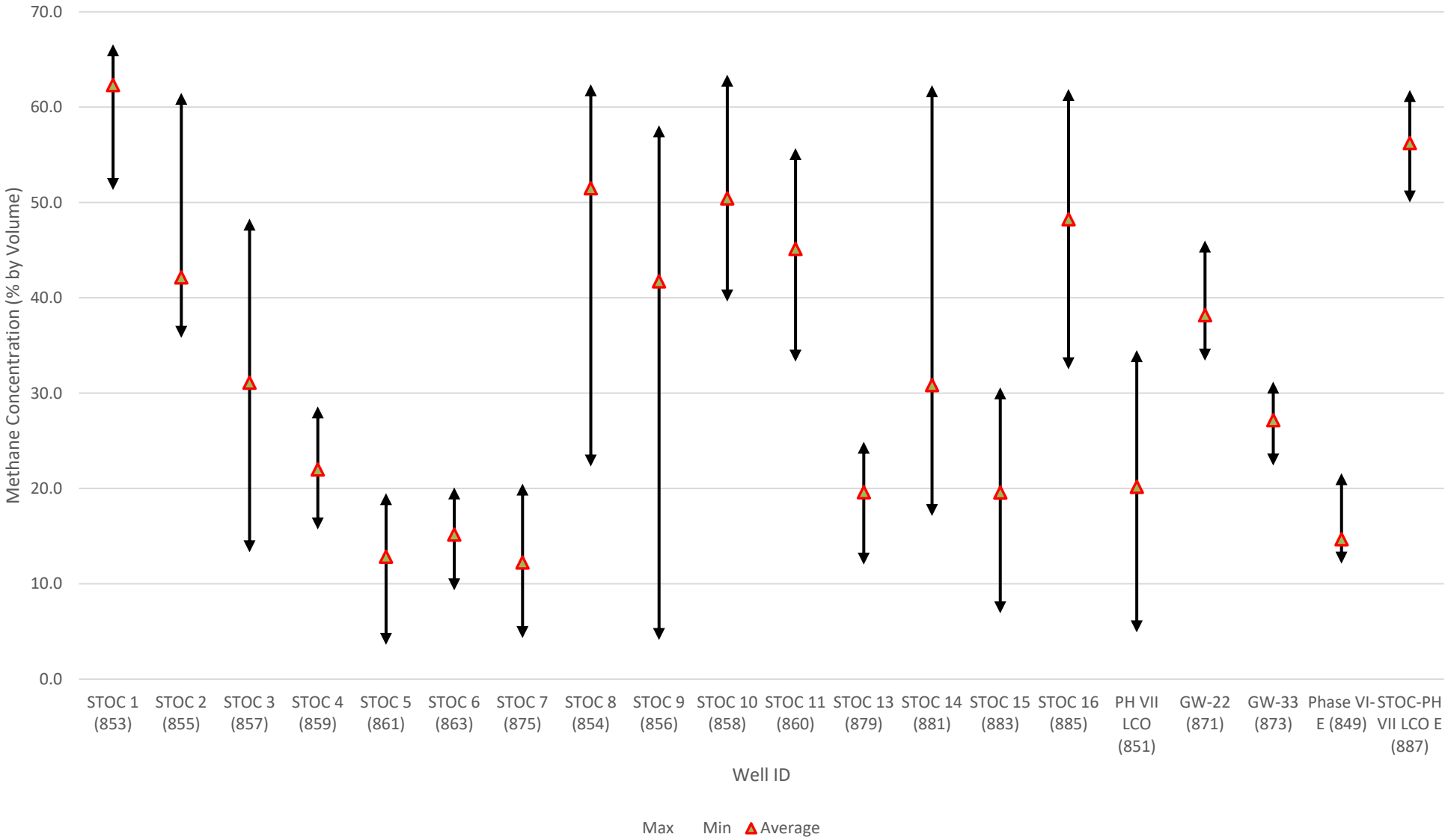


FIGURE G-10
METHANE CONCENTRATION OF WELLS IN LIQUID APPLICATION AREA IN 2023
LA CROSSE COUNTY LANDFILL LIC. #3253



Appendix H

Other Applicable Approval Conditions

H-1 – Annual Air Space Report
H-2 – Annual Bio-Pile Report
H-3 – Annual Shingle Report

H-1 – Annual Air Space Report

Building a Better World for All of Us®

March 6, 2024

RE: La Crosse County - Solid Waste Department
2023 Landfill Capacity Calculations
SEH No. LACSW 176666 4.00

Mr. Jadd Stilwell
Solid Waste Director
3200 Berlin Drive
La Crosse, WI 54601

Dear Mr. Stilwell:

We have completed an evaluation of the remaining air space in the Ash Monofill and Phase I through Phase X of the municipal solid waste (MSW) landfill as of December 31, 2023. The purpose of this letter is to present this information which will assist with solid waste management planning and reporting by the County.

Following is a summary of the calculated effective density for ash and MSW waste as measured between surveys conducted on December 28, 2022 and December 27, 2023, and the remaining permitted air space as of January 1, 2024:

Waste Type	Density[1]	Remaining Permitted Air Space and Site Life[2]
Ash Monofill	1,801 lb./CY	958 CY / 0.1 years ([3])
MSW Landfill	2,344 lb./CY	4,428,694 CY/ 34.7- 44.8 years ([4])
MSW Landfill – Ash Overlay	2,255 lb./CY	55,648 CY / 5.3 - 6.3 years ([5])

Notes:

[1]= Density is separated by waste type and not collectively for the landfill.

[2]= Remaining permitted site life depends on ongoing annual waste receipt volume and density assumptions- see following for more detail.

[3]= Remaining air space in monofill as of January 1, 2024, and assume all ash filling occurs in the Ash Monofill.

[4]=Remaining permitted site life includes the MSW Ash Overlay and depends on ongoing waste receipt and density assumptions, and status of practice of placing Ash in MSW Landfill Ash Overlay.

[5]= Remaining air space in MSW Ash Overlay as of January 1, 2024. Remaining life calculation assumes all ash filling occurs in MSW Ash Overlay.

The La Crosse County Landfill is contracted to manage ash waste from the Xcel French Island refuse derived fuel (RDF) facility through the year 2030. Due to a projected air space shortage for the Ash Monofill the County obtained approval from the Wisconsin Department of Natural Resources (WDNR) to utilize the ash for a final grading overlay in the MSW Landfill (i.e. MSW Landfill – Ash Overlay). Beginning September 1, 2015 ash disposal transitioned from the ash monofill landfill to a specific overlay area of the MSW landfill, which includes the northern portions of Phase III, Phase IV, and Phase V, as shown in Figure 4. However, ash was placed both in the Ash Monofill and MSW ash overlay area during 2023.

The “2023 MSW Landfill Ash Overlay Air Space Consumption and Density” subsection below presents the volume of ash placed in the MSW Landfill during 2023 and its density. The “2023 Ash Monofill Air

Space Consumption and Density" subsection below presents the volume of ash placed in the Ash Monofil during 2023. The "Ash Monofill Remaining Lifespan" subsection below provides the remaining volume of air space in the Ash Monofill. The remaining volume for ash in the MSW landfill is a function of remaining MSW air space and duration of the term of ash disposal. Based on average fill volumes and remaining life span of the Ash Monofill and MSW Ash Overlay, it is determined that the ash overlay footprint within the MSW landfill will not have sufficient airspace to continue ash placement through 2030. This information is presented in the "MSW Landfill" Section under the "MSW Landfill Ash Overlay Remaining Lifespan" subheading.

The MSW Landfill section below summarizes the volume and effective density of MSW and Xcel RDF Ash waste placed during 2023 within the constructed MSW Landfill and Ash Overlay. The following subsection summarizes the remaining lifespan of the constructed landfill. This calculation includes ash volumes assuming all Xcel RDF ash will continue to be placed in the MSW Landfill Ash Overlay. If the ash is placed in the MSW Landfill Ash Overlay, the volume required for ash placement will need to be incorporated with the remaining volume for MSW waste. The remaining life for the MSW Ash Overlay in the MSW Landfill, assuming all ash placement in the MSW Ash Overlay, is presented in the following section.

The "Remaining Permitted Air Space for MSW and Ash Overlay Waste" section presents the total remaining permitted air space in the MSW landfill.

ASH WASTE:

2023 MSW Landfill Ash Overlay Air Space Consumption and Density

Topographic survey of the ash disposal area in the MSW landfill was completed by Paragon Associates, Inc. (Paragon) on December 27, 2023 to calculate the volume of ash placed in the MSW Landfill - Ash Overlay. Topographic data obtained from the 2023 survey in the ash overlay area is provided in Figure 4. Using Civil 3D software, the volume of ash and asbestos fill placed in the MSW Landfill – Ash Overlay between December 28, 2022 and December 26, 2023 was calculated as 2,954 CY and it was assumed that there was no change in intermediate cover in the Ash Overlay. Volume calculations for the ash placed in the MSW Landfill during the survey period are shown on Figure 4.

To determine the amount of ash placed from January 1, 2023 through December 31, 2023, three adjustments were made:

1. According to the landfill scale records, 139 tons of ash and asbestos was placed during December 29, 2022 to December 31, 2022 in the Ash Overlay. Using last year's density of 1,773 lb./CY, this weight equates to 158 CY. This volume was subtracted from the volume calculated in Civil 3D.
2. According to landfill scale records, no ash or asbestos was placed during December 27, 2023 to December 31, 2023 in the Ash Overlay, so no adjustments were made.
3. Survey indicated that 2,954 CY of ash and asbestos was placed in the MSW Ash Overlay between December 28, 2022 and December 26, 2023. In order to derive an ash waste density for 2023, the volume from December 27-31, 2023 of 0 CY was added and the volume received during December 29-31, 2022 of 158 CY was removed, which equates to a volume of 2,796 CY received in the Ash Overlay in 2023. The density was calculated by dividing 3,152 tons by 2,796 CY for a density of 2,255 lb/CY.

The amount of air space consumed by ash and asbestos waste in the MSW Ash Overlay between January 1, 2023 and December 31, 2023 was 2,796 CY. The tonnage of ash and asbestos placed

between January 1, 2023 and December 31, 2023 was 3,152 tons, and ash density was calculated to be 2,255 lb/cy.

2022 Ash Monofill Air Space Consumption and Density

Topographic survey of the Ash Monofill was completed by Paragon Associates, Inc. (Paragon) on December 27, 2023 to calculate the volume of ash placed. Topographic data obtained from the 2023 survey in the Ash Monofill is provided in Figure 1. Using Civil 3D software and considering intermediate cover change in 2032, the volume of ash fill placed in the Ash Monofill Landfill between December 28, 2022 and December 26, 2023 was calculated as 7,592 CY. Volume calculations for the ash placed in the Ash Monofill during the survey period are shown on Figure 1.

The amount of air space consumed in the Ash Monofill between January 1, 2023 and December 31, 2023 was calculated to be 7,722 CY. To determine the amount of ash placed during this time period, the following adjustments were made:

1. According to landfill scale records, 117 tons of ash was placed during December 27, 2023 to December 31, 2023 in the Ash Monofill. Using this year's density (between survey dates) of 1,801 lb/cy, this weight equates to 130 CY. This volume was added to the volume calculated in Civil 3D.
2. Landfill scale records show that no ash was placed from December 28, 2022 to December 31, 2022, so no adjustments were needed.
3. Landfill scale records show that 6,836 tons of ash was received at the Ash Monofill between January 1, 2023 through December 27, 2023. The density was calculated by dividing 6,836 tons by 7,592 CY for a density of 1,801 lb/CY.

The amount of air space consumed by ash waste in the Ash Monofill between January 1, 2023 and December 31, 2023 is 7,722 CY. The tonnage of ash placed between January 1, 2023 and December 31, 2023 is 6,953 tons, and ash density was calculated to be 1,801 lb/cy.

Ash Monofill Remaining Lifespan

The total ash filling volume between January 1, 2023 and December 31, 2023 was calculated as 10,518 CY. This volume includes the ash and asbestos volume placed in the MSW Ash Overlay of 2,796 CY and ash volume placed in the Ash Monofill of 7,722 CY. This cumulative ash filling rate is used to determine remaining lifespans for both the Ash Monofill and the Ash Overlay below, as well as when considering remaining lifespan for the MSW landfill, which includes the Ash Overlay.

A survey of the ash monofill was completed in 2023 because ash was placed in the Ash Monofill during 2023. Figures 1 and 2 include the topography from the December 27, 2023 survey performed by Paragon which was used to calculate the amount of ash placed between December 28, 2022 and December 26, 2023 in the Ash Monofill. Figure 2 shows the existing grades and the approved top of waste grades based on the Plan of Operations drawings. Figure 2 also identifies the areas which currently have 12 inches or more of intermediate cover. The remaining airspace, calculated using Civil 3D software, as of December 27, 2023 is (-12,421) CY. This volume assumes that approximately 13,500 CY of intermediate cover will be removed with waste filling to create waste air space. This quantity was estimated from test pitting of the intermediate cover on October 18, 2023 performed by SEH Inc. and Les Mankse & Sons Excavating and Landscaping to more accurately determine intermediate cover depths as part of upcoming final closure of the Ash Monofill. To determine the remaining life as of January 1, 2023 the intermediate cover volume was added to the net 12,421 CY of cut for a remaining fill volume of 1,088 CY.

If all ash waste received in 2023 (10,518 CY) were placed only in the ash monofill in each subsequent year, the remaining site life is approximately 0.1 years. If the 5-year average filling rate is used based on historic filling rates of 9,993 CY, 9,499 CY, 6,520 CY, and 7,759 CY are averaged with this year's rate

(10,518 CY) an average of 8,858 CY per year is obtained; which yields a remaining site life remains at 0.1 years. It should be noted that final closure of the Ash Monofill is planned for 2024.

MSW Landfill Ash Overlay Remaining Lifespan

The current filling approach is to separate Ash and MSW disposal areas. When considering remaining life for combined waste flows of MSW and ash, it is important to consider that there is only approximately 0.1 years of life remaining in the Ash Monofill and that the Ash Monofill is scheduled for final closure.

Figure 5 shows the existing grades and the proposed top of waste grades for ash fill within the designated ash overlay area within the MSW Landfill. This area has been receiving ash since September 1, 2015 and has been approved for ash fill to the proposed top of waste grades as presented on Figure 5. The remaining air space in this area, calculated using Civil 3D software, as of December 27, 2023 is 55,648 CY. No ash and asbestos waste was received in the MSW Ash Overlay between December 27-31, 2023, therefore the remaining capacity of 55,648 CY is the remaining capacity as of January 1, 2024. If all ash waste were placed in the proposed Ash Overlay footprint, with an annual filling rate of 10,518 CY, the remaining site life is approximately 5.3 years. However, if the 5-year average annual filling rate of 8,858 CY is used, the remaining site life is approximately 6.3 years. The 5-year average, averages the current filling rate 10,518 CY with the prior active five years filling rates of 9,993 CY, 9,499 CY, 6,520, and 7,759 CY.

To maintain the ash disposal location within the MSW landfill, a certain volume needs to be set aside for ash filling through 2030. If this year's ash fill volume of 10,518 CY is used, then as of January 1, 2024 a total of 63,108 CY of ash volume capacity is needed through 2030. If the combined remaining waste capacity in the Ash Monofill (958 CY) and MSW Landfill – Ash Overlay (55,648 CY) is 56,606 CY, then an additional 6,502 CY of air space for ash would be needed through 2030 within the MSW Landfill. If the 5-year average ash filling rate of 8,858 CY is used instead, then approximately 62,006 CY of airspace capacity is needed, which means an additional 5,400 CY of airspace would be needed for ash waste to maintain ash disposal through 2030.

Longer term disposal options for Xcel RDF ash should be considered at this time. Options should also consider the possibility that storage may be required past 2030. Expansion of the current ash overlay to the north or creation of a different location will need to consider the current permit stipulation not allowing placement of MSW above the ash and resulting locational constraints of ash placement on outboard slopes outside of the approved overlay area in Phase 3 through Phase 5. A phasing plan should be prepared to maximize disposal volumes in the existing overlay and to provide ongoing ash disposal in the MSW Landfill. Figure 4 and Figure 5 presents the current maximum Ash Overlay extents.

MSW LANDFILL:

2023 Air Space Consumption and Density for MSW Waste

A topographic existing grades survey of the MSW Landfill was completed by Paragon Associates, Inc. on December 27, 2023. For purposes of this letter, references to MSW waste include construction and demolition waste, landfilled special waste and RDF bottom ash (Cat. 1, 19, 25, 27, 30 and special wastes). Note this does not include RDF ash (Cat. 20) and asbestos (Cat. 6 – Special Waste) waste since it is placed with ash in the MSW Ash Overlay. Topographic data obtained from this survey is provided in Figures 3 through 6. Figure 3 presents filling in Phase VI through Phase VIII between the period from December 28, 2022 and December 26, 2023. After a correction for a net 6,837 CY of interme diate cover placed in Phase VI through Phase VIII Module 2 over the area shown on Figure 3 during the 2023 survey period, the amount of MSW placed in Phase VI through Phase VIII during the 2023 survey period is 96,387 CY.

The total volume placed in the MSW landfill, which does not include the MSW Landfill Ash Overlay, between December 28, 2022 and December 27, 2023 in Phases VI through VIII was calculated as 96,387 CY. To determine the amount of fill placed from January 1, 2023 through December 31, 2023, three adjustments were made:

1. According to the landfill scale records, 897 tons of MSW was placed from December 28, 2022 to December 31, 2022. Using an average with last year's density; 1,663 lb./CY, this weight equates to approximately 1,079 CY. This volume was subtracted from the volume generated by Civil 3D.
2. Landfill scale records show that 875 tons of MSW was placed from December 27, 2023 to December 31, 2023. Using a density of 2,337 lb./CY (calculated using 2022 scale records), this weight equates to approximately 749 CY of material. This volume was added to the volume generated by Civil 3D.
3. Survey indicated that 96,387 CY of MSW waste was placed in the MSW Landfill between December 28, 2022 and December 26, 2023. In order to derive an MSW waste density for 2023, the volume from December 27-31, 2023 of 749 CY was added and the volume received during December 29-31, 2022 of 1,079 CY was removed, which equates to a volume of 96,057 CY placed in the MSW Landfill in 2023, not including the MSW Ash Overlay. The density was calculated by dividing 112,596 tons by 96,057 CY for a density of 2,344 lb/CY.

As this density does not include air space consumed by ash, it will not be used in remaining life and other density calculations.

Remaining Constructed air space for MSW and Ash Overlay Waste

The amount of air space consumed in the MSW Landfill and Ash Overlay by MSW and ash wastes between January 1, 2023 and December 31, 2023 is 98,853 CY (96,057 CY + 2,796 CY). Densities for previous years are presented in the table below. With scale records showing 115,748 tons of ash, asbestos and MSW waste placed in 2023, the density is approximately 2,342 lb./CY.

MSW Landfill			
Year	**Tonnage Received (Tons)**	**Volume Used (CY)**	**Density (lb./CY)**
2019	119,897	145,949	1,643
2020	116,070	140,096	1,657
2021	109,405	125,609	1,742
2022	106,334	127,425	1,669
2023	115,748	98,853	2,342
avg	**113,491**	**127,586**	**1,811**

Constructed air space is that portion of the fill volume that is within the existing constructed footprint. Figure 6 compares the existing grades and the proposed top of waste grades based on the maximum fill grades and the approximate current intermediate cover volume that would be stripped for waste placement prior to closure. It was determined that the constructed remaining capacity of the MSW Landfill, including the Ash Overlay, is 1,343,578 CY. Figure 5 shows 55,648CY of remaining air space designated for ash filling in Phases I through V, as of December 27, 2023.

The remaining MSW Landfill constructed air space, calculated using Civil 3D software, as of December 27, 2023 is 1,343,578 CY. This assumes that areas outside current waste filling locations as shown on Figure 6 have 18 inches of intermediate cover, equating to approximately 56,500 CY of intermediate cover which will be stripped and waste placed prior to closure, so this volume was added to the constructed remaining capacity. After subtracting the volume of fill added between December 27-31, 2023 of 749 CY (749 CY MSW + 0 CY ash), the remaining constructed capacity as of January 1, 2023 is 1,342,829 CY. Using the average fill volume of 127,586, which is based on the prior five years and current year; the remaining constructed site life for Phases I through VIII is approximately 10.5 years. At this year's MSW and Ash Overlay annual filling rate of 98,853 CY the remaining constructed air space provides approximately 13.6 years of remaining life as of January 1, 2024, and is contingent on accessibility for waste placement.

Remaining Permitted Air Space for MSW and Ash Overlay Waste

Permitted air space is the air space currently permitted for MSW waste. On May 4, 2023, the Plan of Operation for the Phase 2 North Expansion was approved to expand the permitted air space by 3,085,865 CY. The expansion footprint extends due north and contiguous with Phase VIII Module 1 and Module 2. The expansion is comprised of Phases IX and X. Phase IX and Phase X are not yet constructed.

Remaining Phase	Remaining Permitted Airspace (CY)
Phase I through Phase VIII	1,342,829
Phase IX through Phase X	3,085,865
Total	4,428,694

The total remaining permitted waste air space of the MSW Landfill is 4,428,694 CY. Using the average fill volumes of the previous five years; the remaining permitted site life for Phases I through X is 34.7 years. Using this years' fill volume, the remaining permitted site life for Phases I through X is 44.8 years. Fill rates and volumes for the MSW Landfill for previous years are presented in the table on Page 5.

If you have any questions about the information presented herein, please call me at 651.490.2163 or Brian Kent at 608.498.4844.

Sincerely,

SHORT ELLIOTT HENDRICKSON INC.

Darryl R. Heaps, PE, CHMM
Senior Project Manager

nrp
Attachment
c: Lanae Nickelotti, La Crosse County Finance Director
Brian Kent, SEH
x:\ko\l\lacsw\176666\4-prelim-dsgn-rpts\2023 annual air space letter\draft\draft_2023 seh airspace letter_20240125.docx

NOTES:

1. CONTOUR INTERVAL IS 2-FOOT.
2. EXISTING GRADE CONTOURS WITHIN WASTE LIMITS PRODUCED BY SURVEY BY PARAGON ASSOCIATES ON DECEMBER 28, 2022.
3. PROPOSED EXISTING GRADE CONTOURS WITHIN WASTE LIMITS PRODUCED BY MOST RECENT SURVEY BY PARAGON ASSOCIATES ON DECEMBER 27, 2023.

LEGEND:

- MAJOR GROUND CONTOUR (DEC. 2022)
- MAJOR GROUND CONTOUR (DEC. 2023)
- APPROVED WASTE LIMITS
- VOLUME ANALYSIS CALC. BOUNDARY
- APPROXIMATE AREA OF INTERMEDIATE COVER (12") ADDED
- APPROXIMATE AREA OF INTERMEDIATE COVER (12") REMOVED

VOLUME ANALYSIS:

INTERMEDIATE COVER: 240 CY
- 0 CY
= 240 CY

INTERMEDIATE COVER CHANGE = 240 CY <ADDED>
(TO BE REMOVED FROM VOLUME CALCULATION)

ASH MONOFILL - WASTE FILL VOLUME
DESCRIPTION: DEC. 2022 - DEC. 2023 WASTE FILL VOLUME
BASE SURFACE: EXISTING GRADE - DEC 2022
COMPARISON SURFACE: EXISTING GRADE

CUT:130 CY
FILL: 7,962 CY
NET: 7,832 CY <FILL>

ASH MONOFILL - WASTE FILL VOLUME
= 7,832 CY - 240 CY = **7,592 CY**

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		Rev.#	Revision Issue Description	Date	Rev.#	Revision Issue Description	Date
SEH Project	LACSW 176666	.			.		
Drawn By	NRP	.			.		
Designed By	TTR	2	REPORTING	03/06/2024	.		
Checked By	DRH	1	ISSUED FOR REVIEW	02/23/2024	.		

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www.sehinc.com

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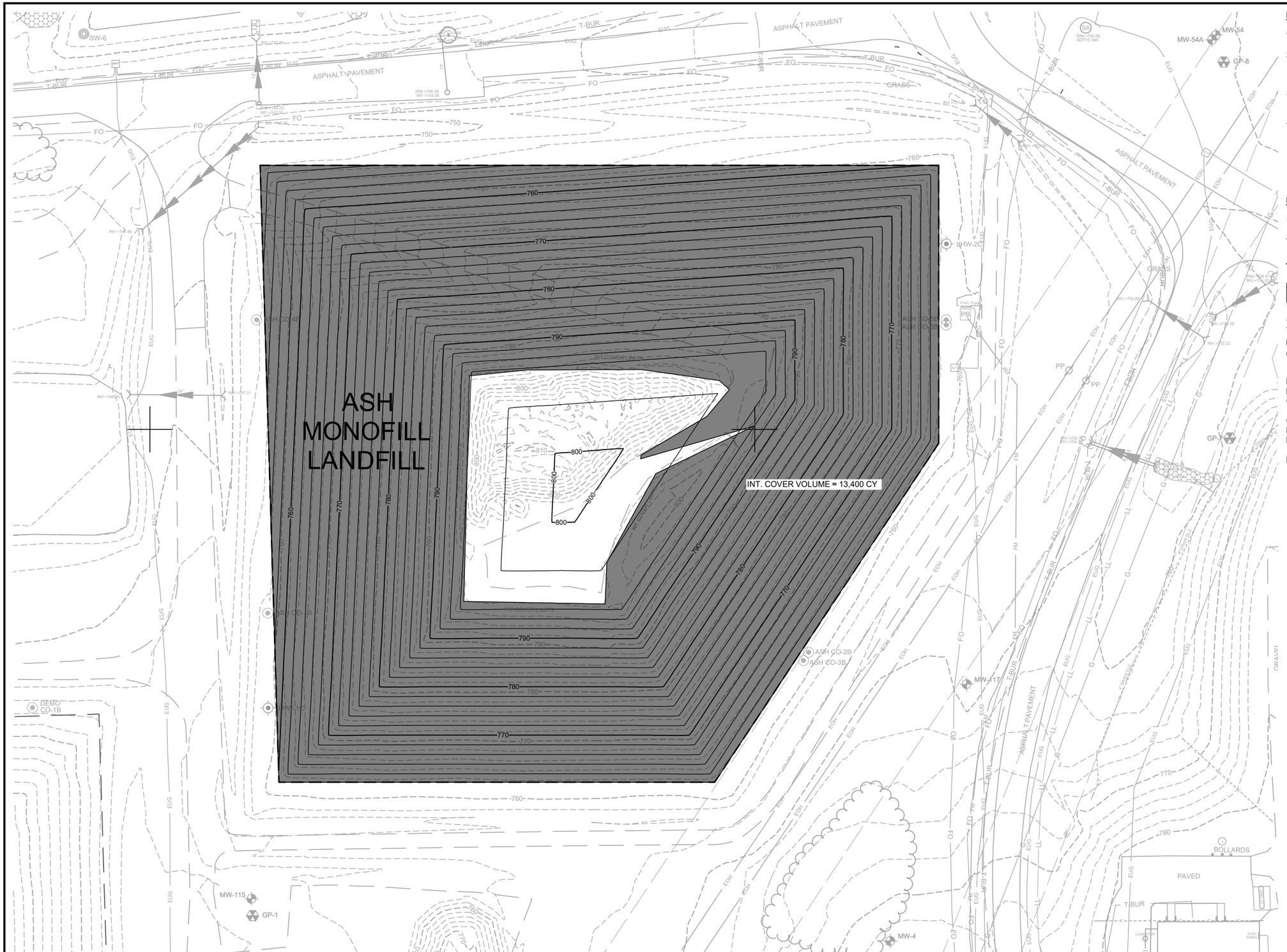
3200 BERLIN DRIVE
LA CROSSE, WI 54601

LA CROSSE COUNTY LANDFILL
2023 ANNUAL REPORT
ASH MONOFILL - ANNUAL WASTE FILL



NOTES:

1. CONTOUR INTERVAL IS 2-FOOT.
2. EXISTING GRADE CONTOURS WITHIN WASTE LIMITS PRODUCED BY MOST RECENT SURVEY BY PARAGON ASSOCIATES ON DECEMBER 27, 2023.
3. PROPOSED CONTOURS REPRESENT PROPOSED TOP OF WASTE ELEVATIONS.
4. ASH MONOFILL INTERMEDIATE COVER VOLUME ESTIMATE IS BASED ON RECENT COVER TEST PITTING PERFORMED BY SEH INC. AND LES MANSKE & SONS EXCAVATING & LANDSCAPING ON OCTOBER 18, 2023 IN PREPARATION FOR ASH MONOFILL FINAL CLOSURE.

LEGEND:

- 760 — MAJOR GROUND CONTOUR (DEC. 2023)
- 760 — PROPOSED TOP OF WASTE
- APPROVED WASTE LIMITS (VOLUME ANALYSIS CALC. BOUNDARY)
- APPROXIMATE AREA OF INTERMEDIATE COVER (DEPTH VARIES)

VOLUME ANALYSIS:

INTERMEDIATE COVER VOLUME ≈ 13,500 CY
(TO BE ADDED TO REMAINING WASTE CAPACITY VOLUME)

REMAINING WASTE CAPACITY
DESCRIPTION: REMAINING ASH MONOFILL WASTE CAPACITY
BASE SURFACE: EXISTING GRADE - DEC. 2023
COMPARISON SURFACE: PROPOSED TOP OF ASH WASTE

CUT: 15,540 CY
FILL: 3,119 CY
NET: 12,421 CY <CUT>

REMAINING ASH WASTE FILL = -12,412 CY + 13,500 CY
= **1,088 CY <FILL>**

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ASH MONOFILL - REMAINING WASTE FILL

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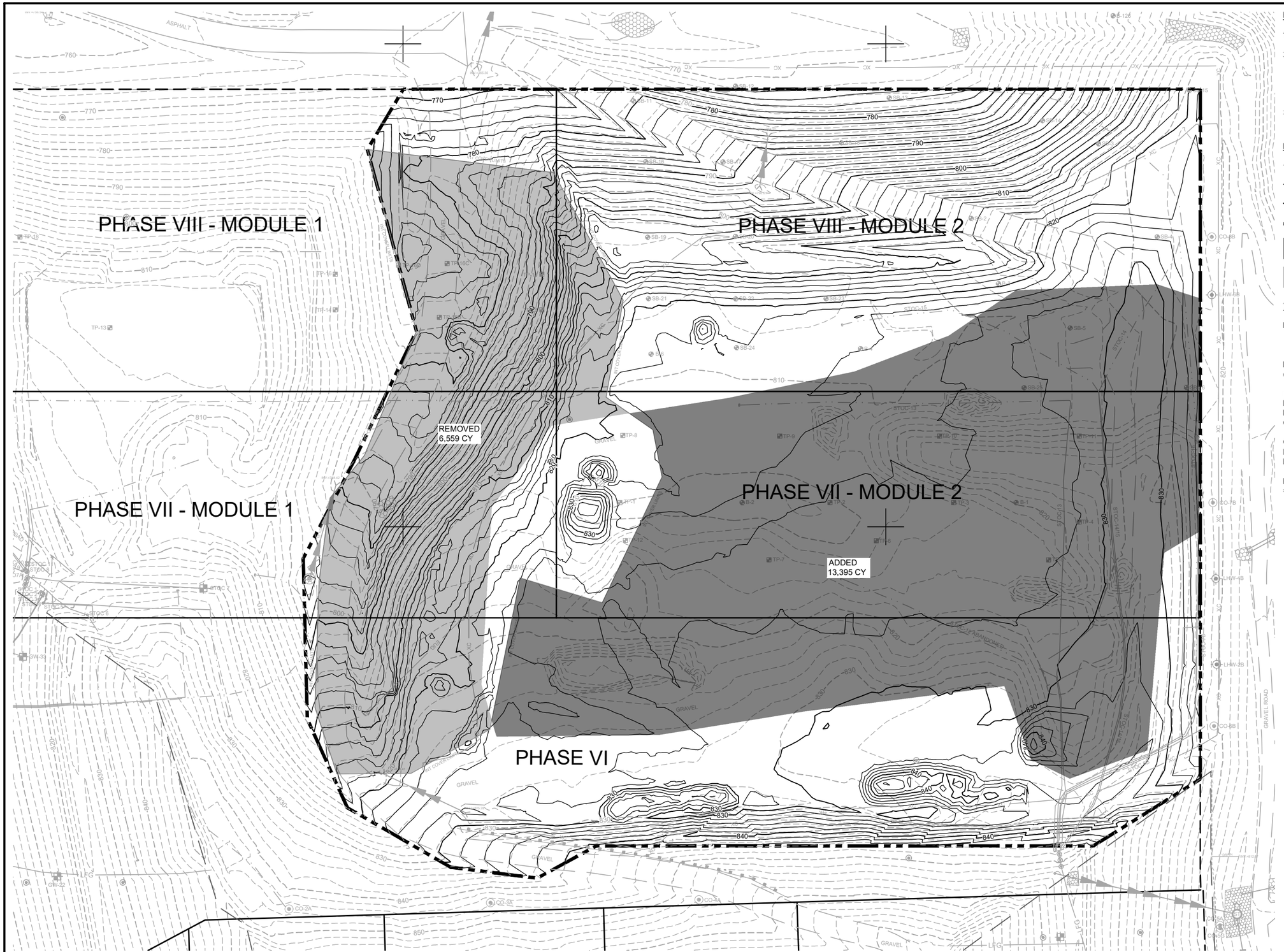

NOTES:

1. CONTOUR INTERVAL IS 2-FOOT.
2. EXISTING GRADE CONTOURS WITHIN WASTE LIMITS PRODUCED BY SURVEY BY PARAGON ASSOCIATES ON DECEMBER 28, 2022 AND POST CONSTRUCTION PHASE VIII ACCESS ROAD SURVEY BY PARAGON ASSOCIATES ON JULY 3, 2023.
3. PROPOSED EXISTING GRADE CONTOURS WITHIN WASTE LIMITS PRODUCED BY MOST RECENT SURVEY BY PARAGON ASSOCIATES ON DECEMBER 27, 2023.

LEGEND:

- 760 — MAJOR GROUND CONTOUR (DEC. 2022)
- 760 — MAJOR GROUND CONTOUR (DEC. 2023)
- APPROVED WASTE LIMITS
- VOLUME ANALYSIS CALC. BOUNDARY
- APPROXIMATE AREA OF INTERMEDIATE COVER (18") ADDED
- APPROXIMATE AREA OF INTERMEDIATE COVER (18") REMOVED

VOLUME ANALYSIS:

INTERMEDIATE COVER: 13,395 CY
- 6,559 CY
= 6,837 CY

INTERMEDIATE COVER CHANGE = 6,837 CY <ADDED>
(TO BE REMOVED FROM VOLUME CALCULATION)

MSW LANDFILL - WASTE FILL VOLUME
DESCRIPTION: DEC. 2022 TO DEC. 2023 WASTE FILL VOLUME
BASE SURFACE: EXISTING GRADE - DEC 2022
COMPARISON SURFACE: EXISTING GRADE

CUT: 13,888 CY
FILL: 117,112 CY
NET: 103,224 CY <FILL>

MSW LANDFILL - WASTE FILL VOLUME
= 103,224 CY - 6,837 CY= **96,387 CY**

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SEH Project	LACSW 176666	.			.		
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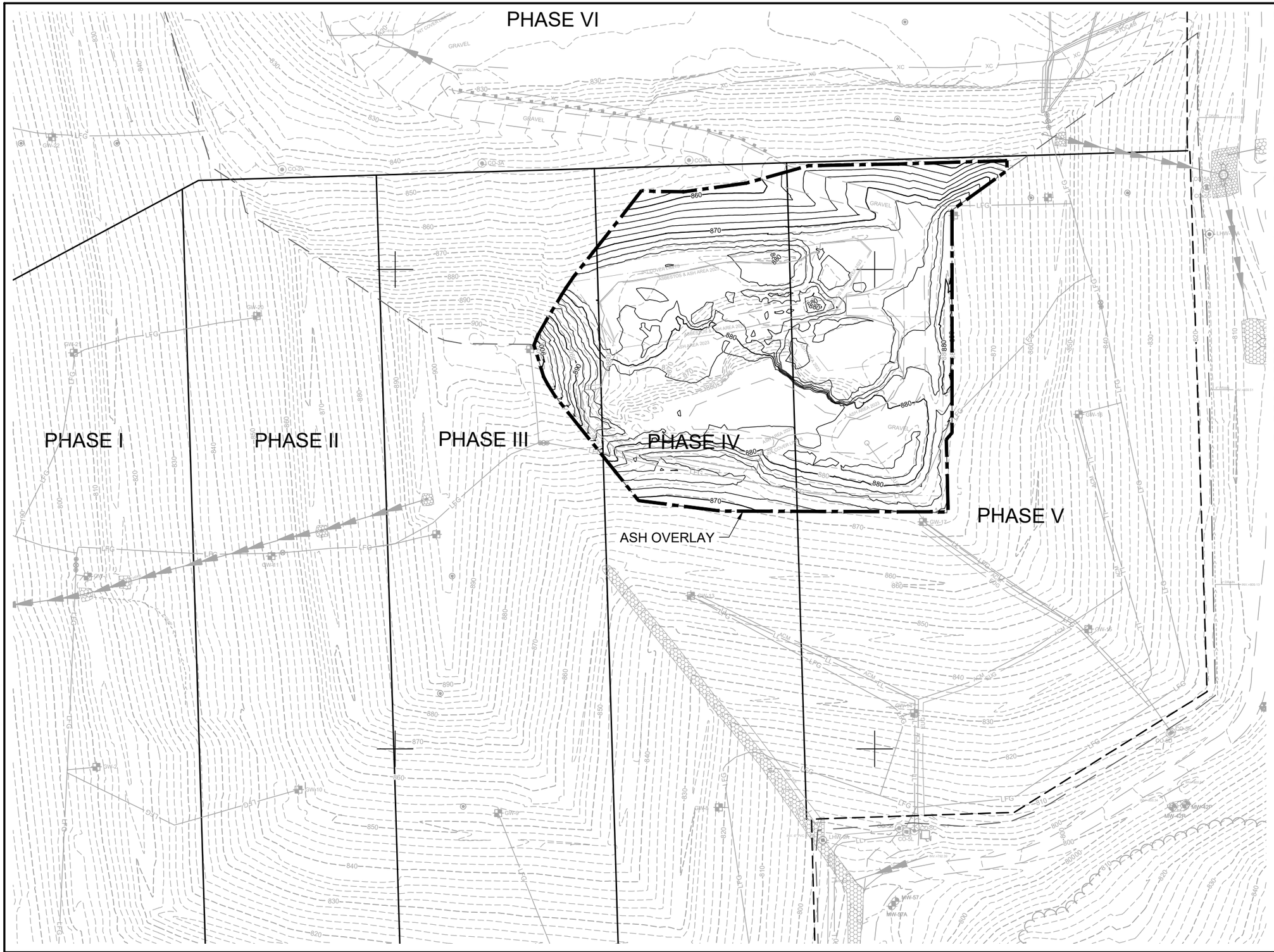
MSW LANDFILL - ANNUAL MSW WASTE FILL



NOTES:

1. CONTOUR INTERVAL IS 2-FOOT.
2. EXISTING GRADE CONTOURS WITHIN WASTE LIMITS PRODUCED BY SURVEY BY PARAGON ASSOCIATES ON DECEMBER 28, 2022 AND POST CONSTRUCTION PAHSE VIII ACCESS ROAD SURVEY BY PARAGON ASSOCIATES ON JULY 3, 2023.
3. PROPOSED EXISTING GRADE CONTOURS WITHIN WASTE LIMITS PRODUCED BY MOST RECENT SURVEY BY PARAGON ASSOCIATES ON DECEMBER 27, 2023.
4. THE MSW LANDFILL ASH OVERLAY ACCEPTS BOTH ASH AND ASBESTOS WASTE.

LEGEND:

- 760 — MAJOR GROUND CONTOUR (DEC. 2022)
- 760 — MAJOR GROUND CONTOUR (DEC. 2023)
- APPROVED WASTE LIMITS
- VOLUME ANALYSIS CALC. BOUNDARY

VOLUME ANALYSIS:

MSW LANDFILL (ASH OVERLAY) - WASTE FILL VOLUME
DESCRIPTION: DEC. 2022 TO DEC 2023 WASTE FILL VOLUME
BASE SURFACE: EXISTING GRADE - DEC 2022
COMPARISON SURFACE: EXISTING GRADE

CUT: 1,569 CY
FILL: 4,523 CY
NET: 2,954 CY <FILL>

MSW LANDFILL (ASH OVERLAY) - WASTE FILL VOLUME = **2,954 CY**

N

50 0 50 100
scale 25 feet

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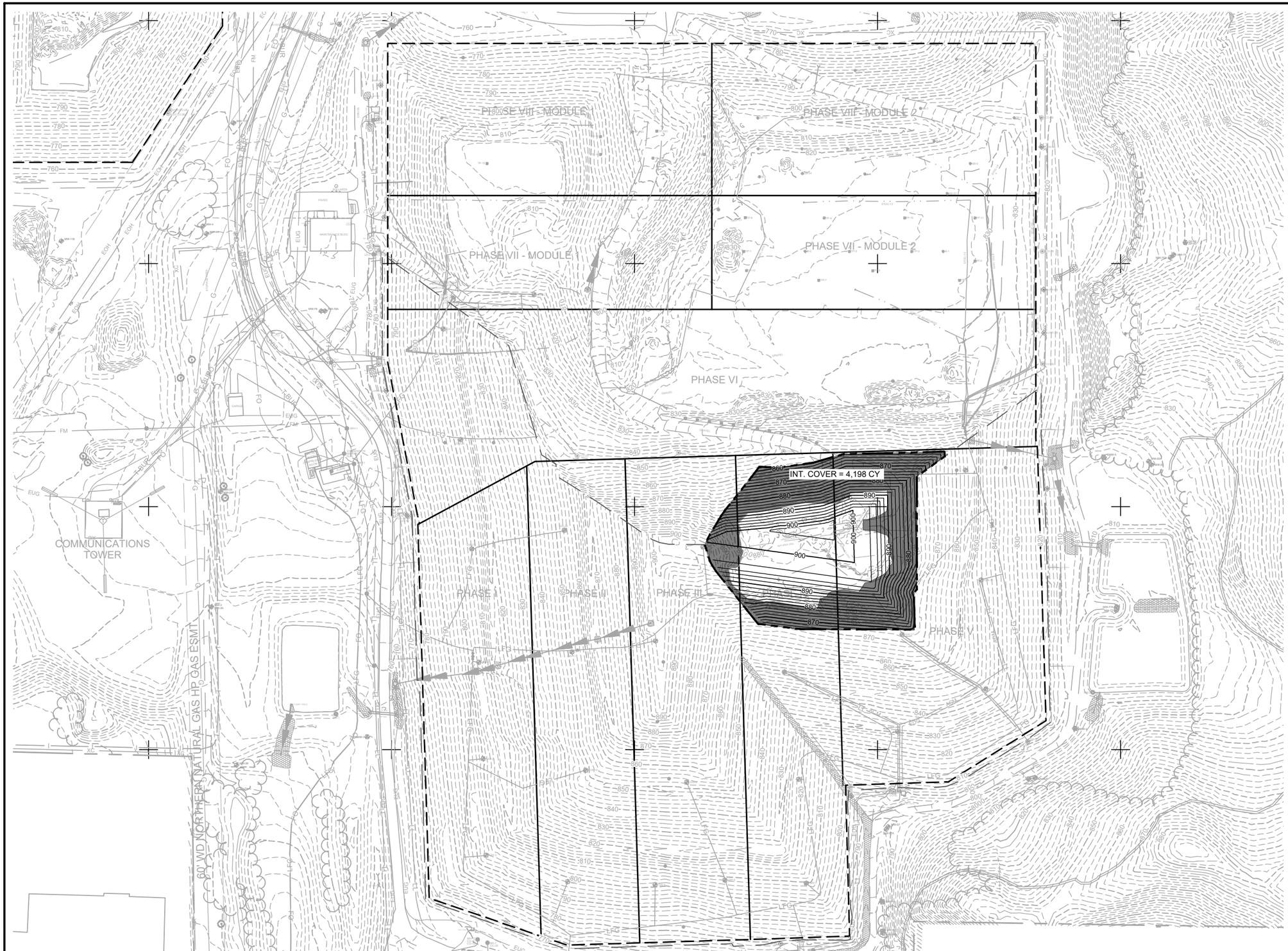
MSW LANDFILL (ASH OVERLAY) - ANNUAL ASH WASTE FILL



NOTES:

1. CONTOUR INTERVAL IS 2-FOOT.
2. EXISTING GRADE CONTOURS WITHIN WASTE LIMITS PRODUCED BY MOST RECENT SURVEY BY PARAGON ASSOCIATES ON DECEMBER 27, 2023.
3. PROPOSED CONTOURS REPRESENT PROPOSED TOP OF ASH OVERLAY WASTE ELEVATIONS.

LEGEND:

- 760 — MAJOR GROUND CONTOUR (DEC. 2023)
- 880 — PROPOSED TOP OF ASH WASTE
- APPROVED WASTE LIMITS
- VOLUME ANALYSIS CALC. BOUNDARY
- APPROXIMATE AREA OF INTERMEDIATE COVER (18-INCH)

VOLUME ANALYSIS:

INTERMEDIATE COVER VOLUME ≈ 4,297 CY
(TO BE ADDED TO REMAINING WASTE CAPACITY VOLUME)

ASH OVERLAY REMAINING WASTE CAPACITY
DESCRIPTION: ASH OVERLAY REMAINING WASTE FILL
BASE SURFACE: EXISTING GRADE (DEC. 2023)
COMPARISON SURFACE: MAX TOP OF ASH WASTE

CUT: 1,695 CY
FILL: 53,046 CY
NET: 51,351 CY <FILL>

ASH OVERLAY REMAINING WASTE CAPACITY
= 51,351 CY + 4,297 CY = **55,648 CY**

N

100 0 100 200
scale 50 feet

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MSW LANDFILL (ASH OVERLAY) - REMAINING ASH WASTE FILL

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NOTES:

1. CONTOUR INTERVAL IS 2-FOOT.
2. EXISTING GRADE CONTOURS WITHIN WASTE LIMITS PRODUCED BY MOST RECENT SURVEY BY PARAGON ASSOCIATES ON DECEMBER 27, 2023.
3. PROPOSED CONTOURS REPRESENT PROPOSED TOP OF WASTE ELEVATIONS.

LEGEND:

- 760 — MAJOR GROUND CONTOUR (DEC. 2023)
- 880 — PROPOSED TOP OF WASTE
- APPROVED WASTE LIMITS
- VOLUME ANALYSIS CALC. BOUNDARY
- APPROXIMATE AREA OF INTERMEDIATE COVER (18-INCH)

VOLUME ANALYSIS:

INTERMEDIATE COVER VOLUME ≈ 56,500 CY
(TO BE ADDED TO REMAINING WASTE CAPACITY VOLUME)

REMAINING MSW WASTE CAPACITY (INCLUDING ASH OVERLAY)
DESCRIPTION: MSW REMAINING WASTE FILL AND ASH OVERLAY
BASE SURFACE: EXISTING GRADE (DEC. 2023)
COMPARISON SURFACE: FINAL WASTE GRADES

CUT: 40,171 CY
FILL: 1,327,249 CY
NET: 1,287,078 CY <>

MSW REMAINING CONSTRUCTED WASTE CAPACITY
= 1,287,078 CY + 56,500 CY= **1,343,578 CY**

(INCLUDES ASH OVERLAY)

N

100 0 100 200
scale 50 feet

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SEH Project	LACSW 176666
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2023 ANNUAL REPORT

MSW LANDFILL - REMAINING WASTE FILL

H-2 – Annual Bio-Pile Report

2023 Contaminated Soil/ Biopile Report

Analysis of Data

This sub-condition requires analyses of data from pretreatment and post-treatment samples of each soil pile, assessment of the reduction of concentration of contaminants in the soil, and length of time used in the processing of each pile.

Pretreatment information is detailed in Section 2.2.

Biopile 19A

Pretreatment	Post Treatment
GRO 0 - 4230	Avg. 87.9
DRO 0-18,000 PPM	Avg. 181.22

Total time in active and passive processing = 3-33 months (18-month average)

Biopile 20

Pretreatment	Post Treatment
GRO 0 – 47,000	N/A
DRO 0-4,000 PPM	N/A

Total time in active and passive processing = 0-7 months (3.5-month average)

Description of Source and Tonnage of Soils

Contaminated Soil Inventory Biopile

Material Below is Biopile 19A

Year	Generator	Tons	DRO	GRO
2021	John Bissen	0.3	Local spill assumed >2,000	
2021	Ku-le Region Forestry, INC	0.35	Local spill assumed >2,000	
2021	Hartland Chemical and Lubricants	8.21	2190	
2021	U.S. Army Corps of Engineers	0.33	Local spill assumed >2,000	
2021	DairyLand Power Cooperative	4.89	Local spill assumed >2,000	
2021	Joe Bragger	3.16	Local spill assumed >2,000	
2021	Kwik Trip #623	0.4	Local spill assumed >2,000	
2021	J.F. Brennan Marine Company	0.73	Local spill assumed >2,000	
2021	St. Joseph Construction Company	13.08	Local spill assumed >2,000	
2021	Milestone Materials	11.66	Local spill assumed >2,000	
2021	Zellmer Excavating	7.09	Local spill assumed >2,000	
2021	Kwik Trip	0.59	Local spill assumed >2,000	
Sub-total 2021		**50.79**		
2022	Hartland Chemical and Lubricants	10.78	Local spill assumed >2,000	

2022	Kraus Oil	286.68	0	2900
2022	Kwik Trip #350	39.93	15600	344
2022	Kwik Trip #771	23.08	5180	0
2022	Fleet Transportation	2.68	3800	0
2022	City of Elroy	2394.60	0	4320
2022	Kwik Trip #775	8.88	Local spill assumed >2,000	
2022	Braun Intertec	4.60	Local spill assumed >2,000	
2022	Kwik Trip DC Center	1.95	Local spill assumed >2,000	
2022	Dairyland Power Cooperative	0.46	Local spill assumed >2,000	
2022	Kwik Trip #996	0.98	Local spill assumed >2,000	
2022	Michaels Power Inc	0.73	Local spill assumed >2,000	
2022	Rethwisch Transport	166.20	Local spill assumed >2,000	
Sub-total 2022		2941.55		
2023	Kulig Contractors	0.03	Local spill assumed >2,000	
2023	Kwik Trip Blair	2.01	18,000	0
2023	Gerke Excavating Inc DBA Riverpoint	133.12	4,000	3900
2023	Kwik Trip #775	21.82	Local spill assumed >2,000	
2023	Veit DPC Project	1.44	Local spill assumed >2,000	
2023	Dahl Toyota	13.33	Local spill assumed >2,000	
2023	Midwest Industrial Asphalt	1.26	Local spill assumed >2,000	
2023	Kwik Trip #492	0.32	Local spill assumed >2,000	
2023	Rochester Sand and Gravel Plant #25	12.13	Local spill assumed >2,000	
2023	Snappers Country Muffler	0.82	Local spill assumed >2,000	
2023	Holmen Cheese LLC	7.94	Local spill assumed >2,000	
2023	Dairyland Power Cooperative	0.34	Local spill assumed >2,000	
Sub-total 2023		194.56		
Total		**3186.90**		

Material Below is Biopile 20

Year	Generator	Tons	DRO	GRO
2023	City of Caledonia	31.70	309	2820
2023	Covia Tunnel City Plant	31.21	4000	
2023	United States Army-Ft. McCoy	82.24	3880	450
2023	City of Waukon	1,120.73	36	47000
2023	Kwik Trip #497	1.51	Local spill assumed >2,000	
2023	Kwik Trip #1114	0.25	Local spill assumed >2,000	

2023	Dairyland Power Cooperative	0.81	Local spill assumed >2,000	
2023	Kwik Trip #619	12.66	Local spill assumed >2,000	
Sub-total 2023		1281.11		
Total		**1281.11**		

Record of Operation

This sub-condition requires a record of operation of each soil pile, including total tonnage treated, total time of active operation, and any noticeable effects of temperature and seasonal conditions on the time period used for processing.

Total tons accepted and year soil was received by La Crosse County Solid Waste Department can be viewed in Section 2.2.

Biopile 19A was started in Spring 2021 and closed in September and sampled. Pile was released in November of 2023.

Biopile 20 was started in September of 2023 and continues to accept soils.

Description of the Disposition of Soil Used in the Processing Operation

This sub-condition requires a description of the disposition of the soil used in the processing operation, whether by disposal or reuse, including any soil sent to an alternative disposal or treatment facility and disposition of any material rejected from the processing operation or subjected to additional treatment.

For Biopile 19A, accepted soils were processed and treated. Pile was released in 2023.

For Biopile 20, accepted soil currently being processed, and initial treatment started. No materials were rejected.

Tabulation of Gas Concentration and Ambient Air Data

This sub-condition requires a tabulation of gas concentration data, tabulation of ambient air data, summary of the amount of time soil air was handled by recycle mode and by direct discharge to the atmosphere, and tabulation of any data from testing air discharged to the carbon canisters and atmosphere.

System was operated in recycle mode in 2023.

Carbon Canister Data

This sub-condition requires information on service life and disposal of spent carbon from the carbon canisters.

Carbon canisters are not fully utilized.

Tabulation of Soil Pile Grids

This sub-condition requires tabulation of soil pile grids selected randomly for post treatment sampling and tabulation of post treatment soil testing data.

For purpose of representative sample collection, Bio-Pile 19A was visually subdivided on a grid system with each grid block's dimensions approximately 15 feet x 15 feet x 6 feet thick. Four grid blocks from each section of the stockpile were selected as presented on Figure 1 in the La Crosse County Landfill Biopile Treatment Sampling provided to the WDNR on October 12th, 2023 to prepare a representative composite soil sample from each quarter-section. A backhoe was used to excavate into each of the four (and one duplicate) selected grid blocks at each quarter-section. Representative soil from each of the four selected grid blocks was placed in a zipper locking plastic bag and homogenized. One composite sample from each of the quarter-sections was collected utilizing this process.

For Biopile 20, no soil was released for use as ADC/DC in 2023.

Summary of Problems Encountered/Deviations from the Approved Plan

This sub-condition requires a summary of any problems encountered with the soil processing equipment or operation, proposed, or implemented solutions to the problems, and any deviations from the approved plan.

No problems were encountered or were any deviations from the plan required.

Source and Tonnage of Oil Dry Materials

This sub-condition requires a description of the source and tonnage of oil dry materials accepted for treatment and a description of the petroleum products which the oil dry materials were applied to.

The total amount of oil dry material that was accepted into Biopile 19A in 2023 was 15.09 ton.

Generator	Tons
Kwik Trip #497	1.51
Kwik Trip #1114	0.25
Dahl Toyota	13.33

Summary of Operational Changes

This sub-condition requires a summary of any changes to the mechanical equipment, operating controls, or methods of operation due to operator experience and technical advance and any plan modifications necessary to incorporate long-term or permanent changes to the plan of operation or approval conditions.

None required in 2023.

5-Year Reporting Requirements

Condition No. 11 of the aforementioned 1996 approval requires that every fifth annual report shall assess the bioremediation process in comparison to recent technical literature regarding aerobic degradation of petroleum hydrocarbons, list the relevant technical references, summarize experience and data from operation of this facility, and propose any changes necessary to incorporate changes into the plan of operation. This information will be presented in the next 5-year reporting period, which is 2027; therefore, no information regarding this requirement is included in the 2023 Annual Report.

Building a Better World
for All of Us®

October 12, 2023

RE: La Crosse County Landfill
Biopile Treatment Sampling
SEH No. LACSW 171063 14.00

Colin Maus
Waste Management Engineer
Wisconsin Department of Natural Resources
3911 Fish Hatchery Road
Fitchburg, WI 53711

Dear Mr. Maus:

On behalf of the La Crosse County Landfill (facility), Short Elliott Hendrickson (SEH®) has reviewed the sampling approach, and subsequent analysis of soil samples collected from Bio-Pile 19A for purposes of determining if the soil was treated sufficiently to be released for beneficial use within the landfill footprint. The petroleum contaminated soils were delivered to the facility between 2018 and 2022 from various generators relating to Wisconsin Department of Natural Resources (WDNR) driven clean-up activities. The facility maintains records of each generator and associated volume. A summary of the generators, tonnage, and analytical data specific to each generator was provided in Appendix D of the 2022 Annual Report issued to the WDNR. The sampling methodology and analytical results are summarized in the following sections.

BIO-PILE SAMPLING

On September 14, 2023, the La Crosse County Landfill Operations Manager collected four composite soil samples from Bio-Pile 19A for laboratory analysis. Bio-Pile 19A consist of soils treated through the bio-pile process and are located in a northcentral portion of Phase VI as depicted on Figure 1, “Bio-pile Stockpile Location Map.” Bio-Pile 19A is estimated to contain approximately 1,550 cubic yards of treated soil.

For purpose of representative sample collection, Bio-Pile 19A was visually subdivided on a grid system with each grid block’s dimensions approximately 15 feet x 15 feet x 6 feet thick. Four grid blocks from each section of the stockpile were selected as presented on Figure 1 to prepare a representative composite soil sample from each quarter-section. A backhoe was used to excavate into each of the four selected grid blocks at each quarter-section. Representative soil from each of the four selected grid blocks was placed in a zipper locking plastic bag and homogenized. One composite sample from each of the quarter-sections was collected utilizing this process.

Each homogenized soil sample was placed in laboratory clean analytical bottles, labeled, preserved as necessary, and placed on ice. The samples were submitted to Pace Analytical Services, LLC (Pace) in Green Bay, Wisconsin (WI Certification #405132750) for analysis of volatile organic compounds (VOCs), polynuclear aromatic hydrocarbons (PAHs), gasoline range organics (GRO), and diesel range organics (DRO). Standard chain-of-custody documentation was maintained during sample collection and shipment.

ANALYTICAL RESULTS

DRO and several PAHs were detected in the soil sample collected from the south stockpile. DRO, GRO, and several PAHs and VOCs were detected in the samples collected from the north and east stockpiles. A summary of the GRO and DRO concentrations is provided below, and the complete laboratory analytical package provided by Pace is included as Attachment 1.

Location		GRO (mg/kg)	DRO (mg/kg)	Total (mg/kg)
Grid 1 (BP-1)		9.8	712	721.8
Grid 2 (BP-2)		132	95.5	227.5
Grid 3 (BP-3)		296	10.1	306.1
Grid 4 (BP-4)		1.7	36.4	38.1
Grid 4 (BP-4 Dup)		<1.4	52.1	52.1

The concentrations of GRO and DRO detected in the treated bio-piles are below the limits established for petroleum contaminated soils to be beneficially used as alternative daily cover (less than 2,000 mg/kg combined GRO and DRO total), as defined in the WDNR's May 7, 2010 Conditional Plan Modification Approval. Thus, the soils in the three stockpiles have been sufficiently treated and will be utilized as alternative daily cover (ADC), or for an internal landfill use for which ADC is approved for.

CLOSURE

We trust the information provided in this letter adequately documents the bio-pile soil stockpile sampling event and the associated analytical process and results. Please contact me at 608.498.4844 if you have any questions regarding the sampling event or associated results.

Sincerely,

SHORT ELLIOTT HENDRICKSON INC.

Brian L. Kent, CHMM
Project Manager

BLK/blk/JD
Attachments
c: Jadd Stilwell, Solid Waste Director- La Crosse County Landfill
Jackie Davis, Operations Manager- La Crosse County Landfill

x:\ko\l\lacsw\171063\3-env-stdy-regs\2023 biopile\lacsw biopile testing summary 2023_10.12.23.docx

NOTES:

1. CONTOUR INTERVAL IS 2-FOOT.

LEGEND

810 DECEMBER 2022 EXISTING GRADE

1.A SAMPLE GRID LOCATION

PHASE VII - MODULE 2

PHASE VI

1.A	1.B	1.C	1.D	2.A	2.B	2.C	2.D
3.A	3.B	3.C	3.D	4.A	4.B	4.C	4.D

BIOPILE 19A

TP-15B B-6 SB-24 B-4 SB-25 STOC-13 GRAVEL TP-8 TP-9 TP-10 TP-1 B-2 TP-2 TP-3 B-1 TP-12 TP-6 TP-7 INV.=788.42 AIR HOSE 810 GRAVEL STOC-12 ABANDONED 820 830 840 850 INV.=818.41 INV.=825.28 GRAVEL GRAVEL XC

N

30 0 30 60
scale 15 feet

SEH Project	LACSW 171063	Rev.#	Revision Issue Description	Date	Rev.#	Revision Issue Description	Date
Drawn By	NRP	.			.		
Designed By	TTR	.			.		
Checked By	DRH	.			.		

PLANS PREPARED BY:
329 JAY STREET
SUITE 301
LA CROSSE, WI 54601-4034
PHONE: 1.608.782.3161

PLANS PREPARED FOR:
LA CROSSE SOLID WASTE DEPT
3200 BERLIN DRIVE
LA CROSSE, WI 54601

LA CROSSE COUNTY LANDFILL
LA CROSSE, WISCONSIN
BIOPILE STOCKPILE LOCATION MAP

FIG 1 of 1

Save: 8/1/2023 1:46 PM mpeterson Plot: 8/1/2023 1:47 PM X:\KOL\LACSW\171063\5-final-dsgn\51-drawings\85-Heavy\Civ\2022 ANNUAL REPORT\SHEETS\BIOPILE 19A_SAMPLING PLAN.dwg

Attachment 1
Laboratory Analytical Data

Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

September 27, 2023

Jackie Davis
La Crosse County Solid Waste Department
6500 State Road 16
La Crosse, WI 54601

RE: Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Dear Jackie Davis:

Enclosed are the analytical results for sample(s) received by the laboratory on September 15, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Green Bay

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

Sincerely,

Tod Noltemeyer

Tod Noltemeyer
tod.noltemeyer@pacelabs.com
(920)469-2436
Project Manager

Enclosures

cc: Veronica Aranda, SEH
Brian Kent, SEH
Jadd Stilwell, LaCrosse Co Dept. of Solid Waste

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

CERTIFICATIONS

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Pace Analytical Services Green Bay
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
South Carolina Certification #: 83006001
Texas Certification #: T104704529-21-8
Virginia VELAP Certification ID: 11873
Wisconsin Certification #: 405132750
Wisconsin DATCP Certification #: 105-444
USDA Soil Permit #: P330-21-00008
Federal Fish & Wildlife Permit #: 51774A

REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SAMPLE SUMMARY

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Lab ID	Sample ID	Matrix	Date Collected	Date Received
40268135001	**BP-1**	Solid	09/14/23 08:30	09/15/23 09:55
40268135002	**BP-2**	Solid	09/14/23 08:30	09/15/23 09:55
40268135003	**BP-3**	Solid	09/14/23 08:30	09/15/23 09:55
40268135004	**BP-4**	Solid	09/14/23 08:30	09/15/23 09:55
40268135005	**BP-4 DUP**	Solid	09/14/23 08:30	09/15/23 09:55

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(920)469-2436

SAMPLE ANALYTE COUNT

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
40268135001	**BP-1**	WI MOD DRO	MRN	1	PASI-G
		WI MOD GRO	EMG	1	PASI-G
		EPA 8270E by SIM	RJN	20	PASI-G
		EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	EGL	1	PASI-G
40268135002	**BP-2**	WI MOD DRO	MRN	1	PASI-G
		WI MOD GRO	EMG	1	PASI-G
		EPA 8270E by SIM	RJN	20	PASI-G
		EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	EGL	1	PASI-G
40268135003	**BP-3**	WI MOD DRO	MRN	1	PASI-G
		WI MOD GRO	EMG	1	PASI-G
		EPA 8270E by SIM	RJN	20	PASI-G
		EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	EGL	1	PASI-G
40268135004	**BP-4**	WI MOD DRO	MRN	1	PASI-G
		WI MOD GRO	EMG	1	PASI-G
		EPA 8270E by SIM	RJN	20	PASI-G
		EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	EGL	1	PASI-G
40268135005	**BP-4 DUP**	WI MOD DRO	MRN	1	PASI-G
		WI MOD GRO	EMG	1	PASI-G
		EPA 8270E by SIM	RJN	20	PASI-G
		EPA 8260	SMT	64	PASI-G
		ASTM D2974-87	EGL	1	PASI-G

PASI-G = Pace Analytical Services - Green Bay

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SUMMARY OF DETECTION

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40268135001	**BP-1**					
WI MOD DRO	Diesel Range Organics	712	mg/kg	53.9	09/19/23 08:38	DC
WI MOD GRO	Gasoline Range Organics	9.8	mg/kg	2.8	09/20/23 13:10	G+
EPA 8270E by SIM	Acenaphthylene	8.1J	ug/kg	36.8	09/25/23 17:40	
EPA 8270E by SIM	Anthracene	9.1J	ug/kg	36.8	09/25/23 17:40	
EPA 8270E by SIM	Benzo(a)anthracene	28.3J	ug/kg	36.8	09/25/23 17:40	
EPA 8270E by SIM	Benzo(a)pyrene	55.8	ug/kg	36.8	09/25/23 17:40	
EPA 8270E by SIM	Benzo(b)fluoranthene	93.4	ug/kg	36.8	09/25/23 17:40	
EPA 8270E by SIM	Benzo(g,h,i)perylene	29.4J	ug/kg	36.8	09/25/23 17:40	
EPA 8270E by SIM	Benzo(k)fluoranthene	37.5	ug/kg	36.8	09/25/23 17:40	
EPA 8270E by SIM	Chrysene	110	ug/kg	36.8	09/25/23 17:40	
EPA 8270E by SIM	Dibenz(a,h)anthracene	6.6J	ug/kg	36.8	09/25/23 17:40	
EPA 8270E by SIM	Fluoranthene	78.2	ug/kg	36.8	09/25/23 17:40	
EPA 8270E by SIM	Indeno(1,2,3-cd)pyrene	22.1J	ug/kg	36.8	09/25/23 17:40	
EPA 8270E by SIM	1-Methylnaphthalene	17.7J	ug/kg	36.8	09/25/23 17:40	
EPA 8270E by SIM	2-Methylnaphthalene	27.7J	ug/kg	36.8	09/25/23 17:40	
EPA 8270E by SIM	Naphthalene	48.3	ug/kg	36.8	09/25/23 17:40	D3
EPA 8270E by SIM	Phenanthrene	26.1J	ug/kg	36.8	09/25/23 17:40	
EPA 8270E by SIM	Pyrene	114	ug/kg	36.8	09/25/23 17:40	
EPA 8260	1,2,4-Trimethylbenzene	34.1J	ug/kg	60.1	09/25/23 18:49	
EPA 8260	p-Isopropyltoluene	33.2J	ug/kg	60.1	09/25/23 18:49	
ASTM D2974-87	Percent Moisture	9.2	%	0.10	09/19/23 15:43	
40268135002	**BP-2**					
WI MOD DRO	Diesel Range Organics	95.5	mg/kg	6.0	09/19/23 08:20	DC
WI MOD GRO	Gasoline Range Organics	132	mg/kg	2.9	09/20/23 15:19	GO
EPA 8270E by SIM	Acenaphthene	40.3	ug/kg	19.5	09/25/23 14:48	
EPA 8270E by SIM	Acenaphthylene	18.8J	ug/kg	19.5	09/25/23 14:48	
EPA 8270E by SIM	Anthracene	17.1J	ug/kg	19.5	09/25/23 14:48	
EPA 8270E by SIM	Benzo(a)anthracene	22.1	ug/kg	19.5	09/25/23 14:48	
EPA 8270E by SIM	Benzo(a)pyrene	29.6	ug/kg	19.5	09/25/23 14:48	
EPA 8270E by SIM	Benzo(b)fluoranthene	45.2	ug/kg	19.5	09/25/23 14:48	
EPA 8270E by SIM	Benzo(g,h,i)perylene	16.7J	ug/kg	19.5	09/25/23 14:48	
EPA 8270E by SIM	Benzo(k)fluoranthene	20.0	ug/kg	19.5	09/25/23 14:48	
EPA 8270E by SIM	Chrysene	29.8	ug/kg	19.5	09/25/23 14:48	
EPA 8270E by SIM	Dibenz(a,h)anthracene	4.3J	ug/kg	19.5	09/25/23 14:48	
EPA 8270E by SIM	Fluoranthene	45.6	ug/kg	19.5	09/25/23 14:48	
EPA 8270E by SIM	Fluorene	18.9J	ug/kg	19.5	09/25/23 14:48	
EPA 8270E by SIM	Indeno(1,2,3-cd)pyrene	13.4J	ug/kg	19.5	09/25/23 14:48	
EPA 8270E by SIM	1-Methylnaphthalene	86.5	ug/kg	19.5	09/25/23 14:48	
EPA 8270E by SIM	2-Methylnaphthalene	141	ug/kg	19.5	09/25/23 14:48	
EPA 8270E by SIM	Naphthalene	393	ug/kg	19.5	09/25/23 14:48	
EPA 8270E by SIM	Phenanthrene	61.1	ug/kg	19.5	09/25/23 14:48	
EPA 8270E by SIM	Pyrene	51.4	ug/kg	19.5	09/25/23 14:48	
EPA 8260	1,2,4-Trimethylbenzene	181	ug/kg	67.2	09/25/23 19:10	
EPA 8260	1,3,5-Trimethylbenzene	127	ug/kg	67.2	09/25/23 19:10	
EPA 8260	Ethylbenzene	25.7J	ug/kg	67.2	09/25/23 19:10	
EPA 8260	Naphthalene	77.5J	ug/kg	336	09/25/23 19:10	
EPA 8260	m&p-Xylene	119J	ug/kg	134	09/25/23 19:10	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SUMMARY OF DETECTION

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40268135002	**BP-2**					
EPA 8260	o-Xylene	41.0J	ug/kg	67.2	09/25/23 19:10	
EPA 8260	p-Isopropyltoluene	41.2J	ug/kg	67.2	09/25/23 19:10	
ASTM D2974-87	Percent Moisture	14.6	%	0.10	09/19/23 15:43	
40268135003	**BP-3**					
WI MOD DRO	Diesel Range Organics	10.1	mg/kg	6.1	09/19/23 09:41	
WI MOD GRO	Gasoline Range Organics	296	mg/kg	7.2	09/20/23 14:53	GO
EPA 8270E by SIM	Acenaphthylene	2.7J	ug/kg	19.3	09/25/23 15:05	
EPA 8270E by SIM	Anthracene	6.8J	ug/kg	19.3	09/25/23 15:05	
EPA 8270E by SIM	Benzo(a)anthracene	22.9	ug/kg	19.3	09/25/23 15:05	
EPA 8270E by SIM	Benzo(a)pyrene	29.8	ug/kg	19.3	09/25/23 15:05	
EPA 8270E by SIM	Benzo(b)fluoranthene	50.6	ug/kg	19.3	09/25/23 15:05	
EPA 8270E by SIM	Benzo(g,h,i)perylene	18.9J	ug/kg	19.3	09/25/23 15:05	
EPA 8270E by SIM	Benzo(k)fluoranthene	16.4J	ug/kg	19.3	09/25/23 15:05	
EPA 8270E by SIM	Chrysene	31.7	ug/kg	19.3	09/25/23 15:05	
EPA 8270E by SIM	Dibenz(a,h)anthracene	5.1J	ug/kg	19.3	09/25/23 15:05	
EPA 8270E by SIM	Fluoranthene	45.0	ug/kg	19.3	09/25/23 15:05	
EPA 8270E by SIM	Indeno(1,2,3-cd)pyrene	15.6J	ug/kg	19.3	09/25/23 15:05	
EPA 8270E by SIM	1-Methylnaphthalene	20.8	ug/kg	19.3	09/25/23 15:05	
EPA 8270E by SIM	2-Methylnaphthalene	39.4	ug/kg	19.3	09/25/23 15:05	
EPA 8270E by SIM	Naphthalene	49.2	ug/kg	19.3	09/25/23 15:05	
EPA 8270E by SIM	Phenanthrene	30.9	ug/kg	19.3	09/25/23 15:05	
EPA 8270E by SIM	Pyrene	40.9	ug/kg	19.3	09/25/23 15:05	
EPA 8260	1,2,4-Trimethylbenzene	427	ug/kg	65.6	09/25/23 20:31	
EPA 8260	1,3,5-Trimethylbenzene	308	ug/kg	65.6	09/25/23 20:31	
EPA 8260	Isopropylbenzene (Cumene)	27.3J	ug/kg	65.6	09/25/23 20:31	
EPA 8260	n-Propylbenzene	79.2	ug/kg	65.6	09/25/23 20:31	
EPA 8260	sec-Butylbenzene	39.0J	ug/kg	65.6	09/25/23 20:31	
ASTM D2974-87	Percent Moisture	13.5	%	0.10	09/19/23 15:44	
40268135004	**BP-4**					
WI MOD DRO	Diesel Range Organics	36.4J	mg/kg	44.0	09/19/23 08:47	D3,DC
WI MOD GRO	Gasoline Range Organics	1.7J	mg/kg	2.8	09/20/23 13:35	
EPA 8270E by SIM	Acenaphthylene	13.7J	ug/kg	18.8	09/25/23 15:22	
EPA 8270E by SIM	Anthracene	17.5J	ug/kg	18.8	09/25/23 15:22	
EPA 8270E by SIM	Benzo(a)anthracene	57.5	ug/kg	18.8	09/25/23 15:22	
EPA 8270E by SIM	Benzo(a)pyrene	73.1	ug/kg	18.8	09/25/23 15:22	
EPA 8270E by SIM	Benzo(b)fluoranthene	109	ug/kg	18.8	09/25/23 15:22	
EPA 8270E by SIM	Benzo(g,h,i)perylene	39.2	ug/kg	18.8	09/25/23 15:22	
EPA 8270E by SIM	Benzo(k)fluoranthene	53.2	ug/kg	18.8	09/25/23 15:22	
EPA 8270E by SIM	Chrysene	76.3	ug/kg	18.8	09/25/23 15:22	
EPA 8270E by SIM	Dibenz(a,h)anthracene	11.8J	ug/kg	18.8	09/25/23 15:22	
EPA 8270E by SIM	Fluoranthene	125	ug/kg	18.8	09/25/23 15:22	
EPA 8270E by SIM	Fluorene	3.9J	ug/kg	18.8	09/25/23 15:22	
EPA 8270E by SIM	Indeno(1,2,3-cd)pyrene	35.3	ug/kg	18.8	09/25/23 15:22	
EPA 8270E by SIM	1-Methylnaphthalene	11.8J	ug/kg	18.8	09/25/23 15:22	
EPA 8270E by SIM	2-Methylnaphthalene	24.2	ug/kg	18.8	09/25/23 15:22	
EPA 8270E by SIM	Naphthalene	39.8	ug/kg	18.8	09/25/23 15:22	

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

SUMMARY OF DETECTION

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Lab Sample ID / Method	Client Sample ID / Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
40268135004	**BP-4**					
EPA 8270E by SIM	Phenanthrene	50.6	ug/kg	18.8	09/25/23 15:22	
EPA 8270E by SIM	Pyrene	109	ug/kg	18.8	09/25/23 15:22	
ASTM D2974-87	Percent Moisture	11.0	%	0.10	09/19/23 15:44	
40268135005	**BP-4 DUP**					
WI MOD DRO	Diesel Range Organics	52.1	mg/kg	51.7	09/19/23 08:56	D3,DC
EPA 8270E by SIM	Acenaphthene	4.1J	ug/kg	18.3	09/25/23 15:40	
EPA 8270E by SIM	Acenaphthylene	23.7	ug/kg	18.3	09/25/23 15:40	
EPA 8270E by SIM	Anthracene	19.0	ug/kg	18.3	09/25/23 15:40	
EPA 8270E by SIM	Benzo(a)anthracene	68.0	ug/kg	18.3	09/25/23 15:40	
EPA 8270E by SIM	Benzo(a)pyrene	88.2	ug/kg	18.3	09/25/23 15:40	
EPA 8270E by SIM	Benzo(b)fluoranthene	128	ug/kg	18.3	09/25/23 15:40	
EPA 8270E by SIM	Benzo(g,h,i)perylene	42.9	ug/kg	18.3	09/25/23 15:40	
EPA 8270E by SIM	Benzo(k)fluoranthene	62.9	ug/kg	18.3	09/25/23 15:40	
EPA 8270E by SIM	Chrysene	81.9	ug/kg	18.3	09/25/23 15:40	
EPA 8270E by SIM	Dibenz(a,h)anthracene	12.1J	ug/kg	18.3	09/25/23 15:40	
EPA 8270E by SIM	Fluoranthene	179	ug/kg	18.3	09/25/23 15:40	
EPA 8270E by SIM	Fluorene	10.9J	ug/kg	18.3	09/25/23 15:40	
EPA 8270E by SIM	Indeno(1,2,3-cd)pyrene	39.3	ug/kg	18.3	09/25/23 15:40	
EPA 8270E by SIM	1-Methylnaphthalene	17.9J	ug/kg	18.3	09/25/23 15:40	
EPA 8270E by SIM	2-Methylnaphthalene	30.8	ug/kg	18.3	09/25/23 15:40	
EPA 8270E by SIM	Naphthalene	43.4	ug/kg	18.3	09/25/23 15:40	
EPA 8270E by SIM	Phenanthrene	137	ug/kg	18.3	09/25/23 15:40	
EPA 8270E by SIM	Pyrene	155	ug/kg	18.3	09/25/23 15:40	
ASTM D2974-87	Percent Moisture	9.0	%	0.10	09/19/23 15:44	

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Method: **WI MOD DRO**
Description: WIDRO GCS
Client: La Crosse Co. Dept of Solid Waste
Date: September 27, 2023

General Information:
5 samples were analyzed for WI MOD DRO by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with WI MOD DRO with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 454968

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- BP-4 (Lab ID: 40268135004)
  - Diesel Range Organics
- BP-4 DUP (Lab ID: 40268135005)
  - Diesel Range Organics

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

PROJECT NARRATIVE

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Method: **WI MOD GRO**
Description: WIGRO GCV
Client: La Crosse Co. Dept of Solid Waste
Date: September 27, 2023

General Information:
5 samples were analyzed for WI MOD GRO by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with TPH GRO/PVOC WI ext. with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Method: **EPA 8270E by SIM**
Description: 8270E MSSV PAH by SIM
Client: La Crosse Co. Dept of Solid Waste
Date: September 27, 2023

General Information:
5 samples were analyzed for EPA 8270E by SIM by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3546 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: 455633

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- BP-1 (Lab ID: 40268135001)
  - Naphthalene

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PROJECT NARRATIVE

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Method: **EPA 8260**
Description: 8260 MSV Med Level Normal List
Client: La Crosse Co. Dept of Solid Waste
Date: September 27, 2023

General Information:
5 samples were analyzed for EPA 8260 by Pace Analytical Services Green Bay. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 5035/5030B with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

QC Batch: 455539

v1: The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

- BLANK (Lab ID: 2616265)
  - Chloroethane
- BP-1 (Lab ID: 40268135001)
  - Chloroethane
- BP-2 (Lab ID: 40268135002)
  - Chloroethane
- BP-3 (Lab ID: 40268135003)
  - Chloroethane
- BP-4 (Lab ID: 40268135004)
  - Chloroethane
- BP-4 DUP (Lab ID: 40268135005)
  - Chloroethane
- LCS (Lab ID: 2616266)
  - Chloroethane
- MS (Lab ID: 2616267)
  - Chloroethane
- MSD (Lab ID: 2616268)
  - Chloroethane

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

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PROJECT NARRATIVE

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Method: **EPA 8260**
Description: 8260 MSV Med Level Normal List
Client: La Crosse Co. Dept of Solid Waste
Date: September 27, 2023

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: 455539

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 40268328009

R1: RPD value was outside control limits.

- MSD (Lab ID: 2616268)
  - Bromoform
  - trans-1,2-Dichloroethene

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Sample: BP-1 **Lab ID: 40268135001** Collected: 09/14/23 08:30 Received: 09/15/23 09:55 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 Preparation Method: WI MOD DRO Pace Analytical Services - Green Bay								
Diesel Range Organics	**712**	mg/kg	53.9	16.1	10	09/18/23 09:32	09/19/23 08:38		DC
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext. Pace Analytical Services - Green Bay								
Gasoline Range Organics	**9.8**	mg/kg	2.8	1.4	1	09/20/23 07:30	09/20/23 13:10		G+
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**<4.8**	ug/kg	36.8	4.8	2	09/25/23 08:15	09/25/23 17:40	83-32-9	
Acenaphthylene	**8.1J**	ug/kg	36.8	4.6	2	09/25/23 08:15	09/25/23 17:40	208-96-8	
Anthracene	**9.1J**	ug/kg	36.8	4.6	2	09/25/23 08:15	09/25/23 17:40	120-12-7	
Benzo(a)anthracene	**28.3J**	ug/kg	36.8	4.8	2	09/25/23 08:15	09/25/23 17:40	56-55-3	
Benzo(a)pyrene	**55.8**	ug/kg	36.8	4.2	2	09/25/23 08:15	09/25/23 17:40	50-32-8	
Benzo(b)fluoranthene	**93.4**	ug/kg	36.8	5.1	2	09/25/23 08:15	09/25/23 17:40	205-99-2	
Benzo(g,h,i)perylene	**29.4J**	ug/kg	36.8	6.5	2	09/25/23 08:15	09/25/23 17:40	191-24-2	
Benzo(k)fluoranthene	**37.5**	ug/kg	36.8	4.7	2	09/25/23 08:15	09/25/23 17:40	207-08-9	
Chrysene	**110**	ug/kg	36.8	6.9	2	09/25/23 08:15	09/25/23 17:40	218-01-9	
Dibenz(a,h)anthracene	**6.6J**	ug/kg	36.8	5.1	2	09/25/23 08:15	09/25/23 17:40	53-70-3	
Fluoranthene	**78.2**	ug/kg	36.8	4.4	2	09/25/23 08:15	09/25/23 17:40	206-44-0	
Fluorene	**<4.4**	ug/kg	36.8	4.4	2	09/25/23 08:15	09/25/23 17:40	86-73-7	
Indeno(1,2,3-cd)pyrene	**22.1J**	ug/kg	36.8	7.7	2	09/25/23 08:15	09/25/23 17:40	193-39-5	
1-Methylnaphthalene	**17.7J**	ug/kg	36.8	5.4	2	09/25/23 08:15	09/25/23 17:40	90-12-0	
2-Methylnaphthalene	**27.7J**	ug/kg	36.8	5.4	2	09/25/23 08:15	09/25/23 17:40	91-57-6	
Naphthalene	**48.3**	ug/kg	36.8	3.6	2	09/25/23 08:15	09/25/23 17:40	91-20-3	D3
Phenanthrene	**26.1J**	ug/kg	36.8	4.2	2	09/25/23 08:15	09/25/23 17:40	85-01-8	
Pyrene	**114**	ug/kg	36.8	5.4	2	09/25/23 08:15	09/25/23 17:40	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	54	%	39-120		2	09/25/23 08:15	09/25/23 17:40	321-60-8	
Terphenyl-d14 (S)	61	%	36-120		2	09/25/23 08:15	09/25/23 17:40	1718-51-0	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<14.4**	ug/kg	60.1	14.4	1	09/22/23 08:30	09/25/23 18:49	630-20-6	
1,1,1-Trichloroethane	**<15.4**	ug/kg	60.1	15.4	1	09/22/23 08:30	09/25/23 18:49	71-55-6	
1,1,2,2-Tetrachloroethane	**<21.8**	ug/kg	60.1	21.8	1	09/22/23 08:30	09/25/23 18:49	79-34-5	
1,1,2-Trichloroethane	**<21.9**	ug/kg	60.1	21.9	1	09/22/23 08:30	09/25/23 18:49	79-00-5	
1,1-Dichloroethane	**<15.4**	ug/kg	60.1	15.4	1	09/22/23 08:30	09/25/23 18:49	75-34-3	
1,1-Dichloroethene	**<20.0**	ug/kg	60.1	20.0	1	09/22/23 08:30	09/25/23 18:49	75-35-4	
1,1-Dichloropropene	**<19.5**	ug/kg	60.1	19.5	1	09/22/23 08:30	09/25/23 18:49	563-58-6	
1,2,3-Trichlorobenzene	**<67.0**	ug/kg	301	67.0	1	09/22/23 08:30	09/25/23 18:49	87-61-6	
1,2,3-Trichloropropane	**<29.2**	ug/kg	60.1	29.2	1	09/22/23 08:30	09/25/23 18:49	96-18-4	
1,2,4-Trichlorobenzene	**<49.5**	ug/kg	301	49.5	1	09/22/23 08:30	09/25/23 18:49	120-82-1	
1,2,4-Trimethylbenzene	**34.1J**	ug/kg	60.1	17.9	1	09/22/23 08:30	09/25/23 18:49	95-63-6	
1,2-Dibromo-3-chloropropane	**<46.7**	ug/kg	301	46.7	1	09/22/23 08:30	09/25/23 18:49	96-12-8	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Sample: BP-1 **Lab ID: 40268135001** Collected: 09/14/23 08:30 Received: 09/15/23 09:55 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 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,2-Dibromoethane (EDB)	**<16.5**	ug/kg	60.1	16.5	1	09/22/23 08:30	09/25/23 18:49	106-93-4	
1,2-Dichlorobenzene	**<18.6**	ug/kg	60.1	18.6	1	09/22/23 08:30	09/25/23 18:49	95-50-1	
1,2-Dichloroethane	**<13.8**	ug/kg	60.1	13.8	1	09/22/23 08:30	09/25/23 18:49	107-06-2	
1,2-Dichloropropane	**<14.3**	ug/kg	60.1	14.3	1	09/22/23 08:30	09/25/23 18:49	78-87-5	
1,3,5-Trimethylbenzene	**<19.4**	ug/kg	60.1	19.4	1	09/22/23 08:30	09/25/23 18:49	108-67-8	
1,3-Dichlorobenzene	**<16.5**	ug/kg	60.1	16.5	1	09/22/23 08:30	09/25/23 18:49	541-73-1	
1,3-Dichloropropane	**<13.1**	ug/kg	60.1	13.1	1	09/22/23 08:30	09/25/23 18:49	142-28-9	
1,4-Dichlorobenzene	**<16.5**	ug/kg	60.1	16.5	1	09/22/23 08:30	09/25/23 18:49	106-46-7	
2,2-Dichloropropane	**<16.2**	ug/kg	60.1	16.2	1	09/22/23 08:30	09/25/23 18:49	594-20-7	
2-Chlorotoluene	**<19.5**	ug/kg	60.1	19.5	1	09/22/23 08:30	09/25/23 18:49	95-49-8	
4-Chlorotoluene	**<22.8**	ug/kg	60.1	22.8	1	09/22/23 08:30	09/25/23 18:49	106-43-4	
Benzene	**<14.3**	ug/kg	24.0	14.3	1	09/22/23 08:30	09/25/23 18:49	71-43-2	
Bromobenzene	**<23.4**	ug/kg	60.1	23.4	1	09/22/23 08:30	09/25/23 18:49	108-86-1	
Bromochloromethane	**<16.5**	ug/kg	60.1	16.5	1	09/22/23 08:30	09/25/23 18:49	74-97-5	
Bromodichloromethane	**<14.3**	ug/kg	60.1	14.3	1	09/22/23 08:30	09/25/23 18:49	75-27-4	
Bromoform	**<265**	ug/kg	301	265	1	09/22/23 08:30	09/25/23 18:49	75-25-2	
Bromomethane	**<84.3**	ug/kg	301	84.3	1	09/22/23 08:30	09/25/23 18:49	74-83-9	
Carbon tetrachloride	**<13.2**	ug/kg	60.1	13.2	1	09/22/23 08:30	09/25/23 18:49	56-23-5	
Chlorobenzene	**<7.2**	ug/kg	60.1	7.2	1	09/22/23 08:30	09/25/23 18:49	108-90-7	
Chloroethane	**<25.4**	ug/kg	301	25.4	1	09/22/23 08:30	09/25/23 18:49	75-00-3	v1
Chloroform	**<43.0**	ug/kg	301	43.0	1	09/22/23 08:30	09/25/23 18:49	67-66-3	
Chloromethane	**<22.8**	ug/kg	60.1	22.8	1	09/22/23 08:30	09/25/23 18:49	74-87-3	
Dibromochloromethane	**<205**	ug/kg	301	205	1	09/22/23 08:30	09/25/23 18:49	124-48-1	
Dibromomethane	**<17.8**	ug/kg	60.1	17.8	1	09/22/23 08:30	09/25/23 18:49	74-95-3	
Dichlorodifluoromethane	**<25.9**	ug/kg	60.1	25.9	1	09/22/23 08:30	09/25/23 18:49	75-71-8	
Diisopropyl ether	**<14.9**	ug/kg	60.1	14.9	1	09/22/23 08:30	09/25/23 18:49	108-20-3	
Ethylbenzene	**<14.3**	ug/kg	60.1	14.3	1	09/22/23 08:30	09/25/23 18:49	100-41-4	
Hexachloro-1,3-butadiene	**<120**	ug/kg	301	120	1	09/22/23 08:30	09/25/23 18:49	87-68-3	
Isopropylbenzene (Cumene)	**<16.2**	ug/kg	60.1	16.2	1	09/22/23 08:30	09/25/23 18:49	98-82-8	
Methyl-tert-butyl ether	**<17.7**	ug/kg	60.1	17.7	1	09/22/23 08:30	09/25/23 18:49	1634-04-4	
Methylene Chloride	**<16.7**	ug/kg	60.1	16.7	1	09/22/23 08:30	09/25/23 18:49	75-09-2	
Naphthalene	**<25.3**	ug/kg	301	25.3	1	09/22/23 08:30	09/25/23 18:49	91-20-3	
Styrene	**<15.4**	ug/kg	60.1	15.4	1	09/22/23 08:30	09/25/23 18:49	100-42-5	
Tetrachloroethene	**<23.3**	ug/kg	60.1	23.3	1	09/22/23 08:30	09/25/23 18:49	127-18-4	
Toluene	**<15.2**	ug/kg	60.1	15.2	1	09/22/23 08:30	09/25/23 18:49	108-88-3	
Trichloroethene	**<22.5**	ug/kg	60.1	22.5	1	09/22/23 08:30	09/25/23 18:49	79-01-6	
Trichlorofluoromethane	**<17.4**	ug/kg	60.1	17.4	1	09/22/23 08:30	09/25/23 18:49	75-69-4	
Vinyl chloride	**<12.1**	ug/kg	60.1	12.1	1	09/22/23 08:30	09/25/23 18:49	75-01-4	
cis-1,2-Dichloroethene	**<12.9**	ug/kg	60.1	12.9	1	09/22/23 08:30	09/25/23 18:49	156-59-2	
cis-1,3-Dichloropropene	**<39.7**	ug/kg	301	39.7	1	09/22/23 08:30	09/25/23 18:49	10061-01-5	
m&p-Xylene	**<25.4**	ug/kg	120	25.4	1	09/22/23 08:30	09/25/23 18:49	179601-23-1	
n-Butylbenzene	**<27.5**	ug/kg	60.1	27.5	1	09/22/23 08:30	09/25/23 18:49	104-51-8	
n-Propylbenzene	**<14.4**	ug/kg	60.1	14.4	1	09/22/23 08:30	09/25/23 18:49	103-65-1	
o-Xylene	**<18.0**	ug/kg	60.1	18.0	1	09/22/23 08:30	09/25/23 18:49	95-47-6	

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ANALYTICAL RESULTS

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Sample: BP-1 **Lab ID: 40268135001** Collected: 09/14/23 08:30 Received: 09/15/23 09:55 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 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
p-Isopropyltoluene	**33.2J**	ug/kg	60.1	20.4	1	09/22/23 08:30	09/25/23 18:49	99-87-6	
sec-Butylbenzene	**<20.6**	ug/kg	60.1	20.6	1	09/22/23 08:30	09/25/23 18:49	135-98-8	
tert-Butylbenzene	**<18.9**	ug/kg	60.1	18.9	1	09/22/23 08:30	09/25/23 18:49	98-06-6	
trans-1,2-Dichloroethene	**<13.0**	ug/kg	60.1	13.0	1	09/22/23 08:30	09/25/23 18:49	156-60-5	
trans-1,3-Dichloropropene	**<172**	ug/kg	301	172	1	09/22/23 08:30	09/25/23 18:49	10061-02-6	
Surrogates									
Toluene-d8 (S)	112	%	70-139		1	09/22/23 08:30	09/25/23 18:49	2037-26-5	
4-Bromofluorobenzene (S)	101	%	72-142		1	09/22/23 08:30	09/25/23 18:49	460-00-4	
1,2-Dichlorobenzene-d4 (S)	137	%	67-144		1	09/22/23 08:30	09/25/23 18:49	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**9.2**	%	0.10	0.10	1		09/19/23 15:43		

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ANALYTICAL RESULTS

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Sample: BP-2 **Lab ID: 40268135002** Collected: 09/14/23 08:30 Received: 09/15/23 09:55 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 Preparation Method: WI MOD DRO Pace Analytical Services - Green Bay								
Diesel Range Organics	**95.5**	mg/kg	6.0	1.8	1	09/18/23 09:32	09/19/23 08:20		DC
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext. Pace Analytical Services - Green Bay								
Gasoline Range Organics	**132**	mg/kg	2.9	1.5	1	09/20/23 07:30	09/20/23 15:19		GO
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**40.3**	ug/kg	19.5	2.5	1	09/25/23 08:15	09/25/23 14:48	83-32-9	
Acenaphthylene	**18.8J**	ug/kg	19.5	2.5	1	09/25/23 08:15	09/25/23 14:48	208-96-8	
Anthracene	**17.1J**	ug/kg	19.5	2.4	1	09/25/23 08:15	09/25/23 14:48	120-12-7	
Benzo(a)anthracene	**22.1**	ug/kg	19.5	2.5	1	09/25/23 08:15	09/25/23 14:48	56-55-3	
Benzo(a)pyrene	**29.6**	ug/kg	19.5	2.2	1	09/25/23 08:15	09/25/23 14:48	50-32-8	
Benzo(b)fluoranthene	**45.2**	ug/kg	19.5	2.7	1	09/25/23 08:15	09/25/23 14:48	205-99-2	
Benzo(g,h,i)perylene	**16.7J**	ug/kg	19.5	3.4	1	09/25/23 08:15	09/25/23 14:48	191-24-2	
Benzo(k)fluoranthene	**20.0**	ug/kg	19.5	2.5	1	09/25/23 08:15	09/25/23 14:48	207-08-9	
Chrysene	**29.8**	ug/kg	19.5	3.7	1	09/25/23 08:15	09/25/23 14:48	218-01-9	
Dibenz(a,h)anthracene	**4.3J**	ug/kg	19.5	2.7	1	09/25/23 08:15	09/25/23 14:48	53-70-3	
Fluoranthene	**45.6**	ug/kg	19.5	2.3	1	09/25/23 08:15	09/25/23 14:48	206-44-0	
Fluorene	**18.9J**	ug/kg	19.5	2.3	1	09/25/23 08:15	09/25/23 14:48	86-73-7	
Indeno(1,2,3-cd)pyrene	**13.4J**	ug/kg	19.5	4.1	1	09/25/23 08:15	09/25/23 14:48	193-39-5	
1-Methylnaphthalene	**86.5**	ug/kg	19.5	2.9	1	09/25/23 08:15	09/25/23 14:48	90-12-0	
2-Methylnaphthalene	**141**	ug/kg	19.5	2.9	1	09/25/23 08:15	09/25/23 14:48	91-57-6	
Naphthalene	**393**	ug/kg	19.5	1.9	1	09/25/23 08:15	09/25/23 14:48	91-20-3	
Phenanthrene	**61.1**	ug/kg	19.5	2.2	1	09/25/23 08:15	09/25/23 14:48	85-01-8	
Pyrene	**51.4**	ug/kg	19.5	2.9	1	09/25/23 08:15	09/25/23 14:48	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	58	%	39-120		1	09/25/23 08:15	09/25/23 14:48	321-60-8	
Terphenyl-d14 (S)	64	%	36-120		1	09/25/23 08:15	09/25/23 14:48	1718-51-0	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<16.1**	ug/kg	67.2	16.1	1	09/22/23 08:30	09/25/23 19:10	630-20-6	
1,1,1-Trichloroethane	**<17.2**	ug/kg	67.2	17.2	1	09/22/23 08:30	09/25/23 19:10	71-55-6	
1,1,2,2-Tetrachloroethane	**<24.3**	ug/kg	67.2	24.3	1	09/22/23 08:30	09/25/23 19:10	79-34-5	
1,1,2-Trichloroethane	**<24.4**	ug/kg	67.2	24.4	1	09/22/23 08:30	09/25/23 19:10	79-00-5	
1,1-Dichloroethane	**<17.2**	ug/kg	67.2	17.2	1	09/22/23 08:30	09/25/23 19:10	75-34-3	
1,1-Dichloroethene	**<22.3**	ug/kg	67.2	22.3	1	09/22/23 08:30	09/25/23 19:10	75-35-4	
1,1-Dichloropropene	**<21.8**	ug/kg	67.2	21.8	1	09/22/23 08:30	09/25/23 19:10	563-58-6	
1,2,3-Trichlorobenzene	**<74.8**	ug/kg	336	74.8	1	09/22/23 08:30	09/25/23 19:10	87-61-6	
1,2,3-Trichloropropane	**<32.6**	ug/kg	67.2	32.6	1	09/22/23 08:30	09/25/23 19:10	96-18-4	
1,2,4-Trichlorobenzene	**<55.3**	ug/kg	336	55.3	1	09/22/23 08:30	09/25/23 19:10	120-82-1	
1,2,4-Trimethylbenzene	**181**	ug/kg	67.2	20.0	1	09/22/23 08:30	09/25/23 19:10	95-63-6	
1,2-Dibromo-3-chloropropane	**<52.1**	ug/kg	336	52.1	1	09/22/23 08:30	09/25/23 19:10	96-12-8	

REPORT OF LABORATORY ANALYSIS

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Sample: BP-2 **Lab ID: 40268135002** Collected: 09/14/23 08:30 Received: 09/15/23 09:55 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 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,2-Dibromoethane (EDB)	**<18.4**	ug/kg	67.2	18.4	1	09/22/23 08:30	09/25/23 19:10	106-93-4	
1,2-Dichlorobenzene	**<20.8**	ug/kg	67.2	20.8	1	09/22/23 08:30	09/25/23 19:10	95-50-1	
1,2-Dichloroethane	**<15.4**	ug/kg	67.2	15.4	1	09/22/23 08:30	09/25/23 19:10	107-06-2	
1,2-Dichloropropane	**<16.0**	ug/kg	67.2	16.0	1	09/22/23 08:30	09/25/23 19:10	78-87-5	
1,3,5-Trimethylbenzene	**127**	ug/kg	67.2	21.6	1	09/22/23 08:30	09/25/23 19:10	108-67-8	
1,3-Dichlorobenzene	**<18.4**	ug/kg	67.2	18.4	1	09/22/23 08:30	09/25/23 19:10	541-73-1	
1,3-Dichloropropane	**<14.6**	ug/kg	67.2	14.6	1	09/22/23 08:30	09/25/23 19:10	142-28-9	
1,4-Dichlorobenzene	**<18.4**	ug/kg	67.2	18.4	1	09/22/23 08:30	09/25/23 19:10	106-46-7	
2,2-Dichloropropane	**<18.1**	ug/kg	67.2	18.1	1	09/22/23 08:30	09/25/23 19:10	594-20-7	
2-Chlorotoluene	**<21.8**	ug/kg	67.2	21.8	1	09/22/23 08:30	09/25/23 19:10	95-49-8	
4-Chlorotoluene	**<25.5**	ug/kg	67.2	25.5	1	09/22/23 08:30	09/25/23 19:10	106-43-4	
Benzene	**<16.0**	ug/kg	26.9	16.0	1	09/22/23 08:30	09/25/23 19:10	71-43-2	
Bromobenzene	**<26.2**	ug/kg	67.2	26.2	1	09/22/23 08:30	09/25/23 19:10	108-86-1	
Bromochloromethane	**<18.4**	ug/kg	67.2	18.4	1	09/22/23 08:30	09/25/23 19:10	74-97-5	
Bromodichloromethane	**<16.0**	ug/kg	67.2	16.0	1	09/22/23 08:30	09/25/23 19:10	75-27-4	
Bromoform	**<295**	ug/kg	336	295	1	09/22/23 08:30	09/25/23 19:10	75-25-2	
Bromomethane	**<94.1**	ug/kg	336	94.1	1	09/22/23 08:30	09/25/23 19:10	74-83-9	
Carbon tetrachloride	**<14.8**	ug/kg	67.2	14.8	1	09/22/23 08:30	09/25/23 19:10	56-23-5	
Chlorobenzene	**<8.0**	ug/kg	67.2	8.0	1	09/22/23 08:30	09/25/23 19:10	108-90-7	
Chloroethane	**<28.3**	ug/kg	336	28.3	1	09/22/23 08:30	09/25/23 19:10	75-00-3	v1
Chloroform	**<48.1**	ug/kg	336	48.1	1	09/22/23 08:30	09/25/23 19:10	67-66-3	
Chloromethane	**<25.5**	ug/kg	67.2	25.5	1	09/22/23 08:30	09/25/23 19:10	74-87-3	
Dibromochloromethane	**<230**	ug/kg	336	230	1	09/22/23 08:30	09/25/23 19:10	124-48-1	
Dibromomethane	**<19.9**	ug/kg	67.2	19.9	1	09/22/23 08:30	09/25/23 19:10	74-95-3	
Dichlorodifluoromethane	**<28.9**	ug/kg	67.2	28.9	1	09/22/23 08:30	09/25/23 19:10	75-71-8	
Diisopropyl ether	**<16.7**	ug/kg	67.2	16.7	1	09/22/23 08:30	09/25/23 19:10	108-20-3	
Ethylbenzene	**25.7J**	ug/kg	67.2	16.0	1	09/22/23 08:30	09/25/23 19:10	100-41-4	
Hexachloro-1,3-butadiene	**<134**	ug/kg	336	134	1	09/22/23 08:30	09/25/23 19:10	87-68-3	
Isopropylbenzene (Cumene)	**<18.1**	ug/kg	67.2	18.1	1	09/22/23 08:30	09/25/23 19:10	98-82-8	
Methyl-tert-butyl ether	**<19.7**	ug/kg	67.2	19.7	1	09/22/23 08:30	09/25/23 19:10	1634-04-4	
Methylene Chloride	**<18.7**	ug/kg	67.2	18.7	1	09/22/23 08:30	09/25/23 19:10	75-09-2	
Naphthalene	**77.5J**	ug/kg	336	28.2	1	09/22/23 08:30	09/25/23 19:10	91-20-3	
Styrene	**<17.2**	ug/kg	67.2	17.2	1	09/22/23 08:30	09/25/23 19:10	100-42-5	
Tetrachloroethene	**<26.1**	ug/kg	67.2	26.1	1	09/22/23 08:30	09/25/23 19:10	127-18-4	
Toluene	**<16.9**	ug/kg	67.2	16.9	1	09/22/23 08:30	09/25/23 19:10	108-88-3	
Trichloroethene	**<25.1**	ug/kg	67.2	25.1	1	09/22/23 08:30	09/25/23 19:10	79-01-6	
Trichlorofluoromethane	**<19.5**	ug/kg	67.2	19.5	1	09/22/23 08:30	09/25/23 19:10	75-69-4	
Vinyl chloride	**<13.6**	ug/kg	67.2	13.6	1	09/22/23 08:30	09/25/23 19:10	75-01-4	
cis-1,2-Dichloroethene	**<14.4**	ug/kg	67.2	14.4	1	09/22/23 08:30	09/25/23 19:10	156-59-2	
cis-1,3-Dichloropropene	**<44.3**	ug/kg	336	44.3	1	09/22/23 08:30	09/25/23 19:10	10061-01-5	
m&p-Xylene	**119J**	ug/kg	134	28.3	1	09/22/23 08:30	09/25/23 19:10	179601-23-1	
n-Butylbenzene	**<30.8**	ug/kg	67.2	30.8	1	09/22/23 08:30	09/25/23 19:10	104-51-8	
n-Propylbenzene	**<16.1**	ug/kg	67.2	16.1	1	09/22/23 08:30	09/25/23 19:10	103-65-1	
o-Xylene	**41.0J**	ug/kg	67.2	20.1	1	09/22/23 08:30	09/25/23 19:10	95-47-6	

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(920)469-2436

ANALYTICAL RESULTS

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Sample: BP-2 **Lab ID: 40268135002** Collected: 09/14/23 08:30 Received: 09/15/23 09:55 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 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
p-Isopropyltoluene	**41.2J**	ug/kg	67.2	22.8	1	09/22/23 08:30	09/25/23 19:10	99-87-6	
sec-Butylbenzene	**<23.0**	ug/kg	67.2	23.0	1	09/22/23 08:30	09/25/23 19:10	135-98-8	
tert-Butylbenzene	**<21.1**	ug/kg	67.2	21.1	1	09/22/23 08:30	09/25/23 19:10	98-06-6	
trans-1,2-Dichloroethene	**<14.5**	ug/kg	67.2	14.5	1	09/22/23 08:30	09/25/23 19:10	156-60-5	
trans-1,3-Dichloropropene	**<192**	ug/kg	336	192	1	09/22/23 08:30	09/25/23 19:10	10061-02-6	
Surrogates									
Toluene-d8 (S)	115	%	70-139		1	09/22/23 08:30	09/25/23 19:10	2037-26-5	
4-Bromofluorobenzene (S)	112	%	72-142		1	09/22/23 08:30	09/25/23 19:10	460-00-4	
1,2-Dichlorobenzene-d4 (S)	139	%	67-144		1	09/22/23 08:30	09/25/23 19:10	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**14.6**	%	0.10	0.10	1		09/19/23 15:43		

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ANALYTICAL RESULTS

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Sample: BP-3 **Lab ID: 40268135003** Collected: 09/14/23 08:30 Received: 09/15/23 09:55 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 Preparation Method: WI MOD DRO Pace Analytical Services - Green Bay								
Diesel Range Organics	**10.1**	mg/kg	6.1	1.8	1	09/18/23 09:32	09/19/23 09:41		
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext. Pace Analytical Services - Green Bay								
Gasoline Range Organics	**296**	mg/kg	7.2	3.6	2.5	09/20/23 07:30	09/20/23 14:53		GO
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**<2.5**	ug/kg	19.3	2.5	1	09/25/23 08:15	09/25/23 15:05	83-32-9	
Acenaphthylene	**2.7J**	ug/kg	19.3	2.4	1	09/25/23 08:15	09/25/23 15:05	208-96-8	
Anthracene	**6.8J**	ug/kg	19.3	2.4	1	09/25/23 08:15	09/25/23 15:05	120-12-7	
Benzo(a)anthracene	**22.9**	ug/kg	19.3	2.5	1	09/25/23 08:15	09/25/23 15:05	56-55-3	
Benzo(a)pyrene	**29.8**	ug/kg	19.3	2.2	1	09/25/23 08:15	09/25/23 15:05	50-32-8	
Benzo(b)fluoranthene	**50.6**	ug/kg	19.3	2.7	1	09/25/23 08:15	09/25/23 15:05	205-99-2	
Benzo(g,h,i)perylene	**18.9J**	ug/kg	19.3	3.4	1	09/25/23 08:15	09/25/23 15:05	191-24-2	
Benzo(k)fluoranthene	**16.4J**	ug/kg	19.3	2.5	1	09/25/23 08:15	09/25/23 15:05	207-08-9	
Chrysene	**31.7**	ug/kg	19.3	3.6	1	09/25/23 08:15	09/25/23 15:05	218-01-9	
Dibenz(a,h)anthracene	**5.1J**	ug/kg	19.3	2.7	1	09/25/23 08:15	09/25/23 15:05	53-70-3	
Fluoranthene	**45.0**	ug/kg	19.3	2.3	1	09/25/23 08:15	09/25/23 15:05	206-44-0	
Fluorene	**<2.3**	ug/kg	19.3	2.3	1	09/25/23 08:15	09/25/23 15:05	86-73-7	
Indeno(1,2,3-cd)pyrene	**15.6J**	ug/kg	19.3	4.0	1	09/25/23 08:15	09/25/23 15:05	193-39-5	
1-Methylnaphthalene	**20.8**	ug/kg	19.3	2.8	1	09/25/23 08:15	09/25/23 15:05	90-12-0	
2-Methylnaphthalene	**39.4**	ug/kg	19.3	2.8	1	09/25/23 08:15	09/25/23 15:05	91-57-6	
Naphthalene	**49.2**	ug/kg	19.3	1.9	1	09/25/23 08:15	09/25/23 15:05	91-20-3	
Phenanthrene	**30.9**	ug/kg	19.3	2.2	1	09/25/23 08:15	09/25/23 15:05	85-01-8	
Pyrene	**40.9**	ug/kg	19.3	2.8	1	09/25/23 08:15	09/25/23 15:05	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	64	%	39-120		1	09/25/23 08:15	09/25/23 15:05	321-60-8	
Terphenyl-d14 (S)	71	%	36-120		1	09/25/23 08:15	09/25/23 15:05	1718-51-0	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<15.7**	ug/kg	65.6	15.7	1	09/22/23 08:30	09/25/23 20:31	630-20-6	
1,1,1-Trichloroethane	**<16.8**	ug/kg	65.6	16.8	1	09/22/23 08:30	09/25/23 20:31	71-55-6	
1,1,2,2-Tetrachloroethane	**<23.7**	ug/kg	65.6	23.7	1	09/22/23 08:30	09/25/23 20:31	79-34-5	
1,1,2-Trichloroethane	**<23.9**	ug/kg	65.6	23.9	1	09/22/23 08:30	09/25/23 20:31	79-00-5	
1,1-Dichloroethane	**<16.8**	ug/kg	65.6	16.8	1	09/22/23 08:30	09/25/23 20:31	75-34-3	
1,1-Dichloroethene	**<21.8**	ug/kg	65.6	21.8	1	09/22/23 08:30	09/25/23 20:31	75-35-4	
1,1-Dichloropropene	**<21.2**	ug/kg	65.6	21.2	1	09/22/23 08:30	09/25/23 20:31	563-58-6	
1,2,3-Trichlorobenzene	**<73.0**	ug/kg	328	73.0	1	09/22/23 08:30	09/25/23 20:31	87-61-6	
1,2,3-Trichloropropane	**<31.9**	ug/kg	65.6	31.9	1	09/22/23 08:30	09/25/23 20:31	96-18-4	
1,2,4-Trichlorobenzene	**<54.0**	ug/kg	328	54.0	1	09/22/23 08:30	09/25/23 20:31	120-82-1	
1,2,4-Trimethylbenzene	**427**	ug/kg	65.6	19.5	1	09/22/23 08:30	09/25/23 20:31	95-63-6	
1,2-Dibromo-3-chloropropane	**<50.9**	ug/kg	328	50.9	1	09/22/23 08:30	09/25/23 20:31	96-12-8	

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ANALYTICAL RESULTS

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Sample: BP-3 **Lab ID: 40268135003** Collected: 09/14/23 08:30 Received: 09/15/23 09:55 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 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,2-Dibromoethane (EDB)	**<18.0**	ug/kg	65.6	18.0	1	09/22/23 08:30	09/25/23 20:31	106-93-4	
1,2-Dichlorobenzene	**<20.3**	ug/kg	65.6	20.3	1	09/22/23 08:30	09/25/23 20:31	95-50-1	
1,2-Dichloroethane	**<15.1**	ug/kg	65.6	15.1	1	09/22/23 08:30	09/25/23 20:31	107-06-2	
1,2-Dichloropropane	**<15.6**	ug/kg	65.6	15.6	1	09/22/23 08:30	09/25/23 20:31	78-87-5	
1,3,5-Trimethylbenzene	**308**	ug/kg	65.6	21.1	1	09/22/23 08:30	09/25/23 20:31	108-67-8	
1,3-Dichlorobenzene	**<18.0**	ug/kg	65.6	18.0	1	09/22/23 08:30	09/25/23 20:31	541-73-1	
1,3-Dichloropropane	**<14.3**	ug/kg	65.6	14.3	1	09/22/23 08:30	09/25/23 20:31	142-28-9	
1,4-Dichlorobenzene	**<18.0**	ug/kg	65.6	18.0	1	09/22/23 08:30	09/25/23 20:31	106-46-7	
2,2-Dichloropropane	**<17.7**	ug/kg	65.6	17.7	1	09/22/23 08:30	09/25/23 20:31	594-20-7	
2-Chlorotoluene	**<21.2**	ug/kg	65.6	21.2	1	09/22/23 08:30	09/25/23 20:31	95-49-8	
4-Chlorotoluene	**<24.9**	ug/kg	65.6	24.9	1	09/22/23 08:30	09/25/23 20:31	106-43-4	
Benzene	**<15.6**	ug/kg	26.2	15.6	1	09/22/23 08:30	09/25/23 20:31	71-43-2	
Bromobenzene	**<25.6**	ug/kg	65.6	25.6	1	09/22/23 08:30	09/25/23 20:31	108-86-1	
Bromochloromethane	**<18.0**	ug/kg	65.6	18.0	1	09/22/23 08:30	09/25/23 20:31	74-97-5	
Bromodichloromethane	**<15.6**	ug/kg	65.6	15.6	1	09/22/23 08:30	09/25/23 20:31	75-27-4	
Bromoform	**<288**	ug/kg	328	288	1	09/22/23 08:30	09/25/23 20:31	75-25-2	
Bromomethane	**<91.9**	ug/kg	328	91.9	1	09/22/23 08:30	09/25/23 20:31	74-83-9	
Carbon tetrachloride	**<14.4**	ug/kg	65.6	14.4	1	09/22/23 08:30	09/25/23 20:31	56-23-5	
Chlorobenzene	**<7.9**	ug/kg	65.6	7.9	1	09/22/23 08:30	09/25/23 20:31	108-90-7	
Chloroethane	**<27.7**	ug/kg	328	27.7	1	09/22/23 08:30	09/25/23 20:31	75-00-3	v1
Chloroform	**<46.9**	ug/kg	328	46.9	1	09/22/23 08:30	09/25/23 20:31	67-66-3	
Chloromethane	**<24.9**	ug/kg	65.6	24.9	1	09/22/23 08:30	09/25/23 20:31	74-87-3	
Dibromochloromethane	**<224**	ug/kg	328	224	1	09/22/23 08:30	09/25/23 20:31	124-48-1	
Dibromomethane	**<19.4**	ug/kg	65.6	19.4	1	09/22/23 08:30	09/25/23 20:31	74-95-3	
Dichlorodifluoromethane	**<28.2**	ug/kg	65.6	28.2	1	09/22/23 08:30	09/25/23 20:31	75-71-8	
Diisopropyl ether	**<16.3**	ug/kg	65.6	16.3	1	09/22/23 08:30	09/25/23 20:31	108-20-3	
Ethylbenzene	**<15.6**	ug/kg	65.6	15.6	1	09/22/23 08:30	09/25/23 20:31	100-41-4	
Hexachloro-1,3-butadiene	**<130**	ug/kg	328	130	1	09/22/23 08:30	09/25/23 20:31	87-68-3	
Isopropylbenzene (Cumene)	**27.3J**	ug/kg	65.6	17.7	1	09/22/23 08:30	09/25/23 20:31	98-82-8	
Methyl-tert-butyl ether	**<19.3**	ug/kg	65.6	19.3	1	09/22/23 08:30	09/25/23 20:31	1634-04-4	
Methylene Chloride	**<18.2**	ug/kg	65.6	18.2	1	09/22/23 08:30	09/25/23 20:31	75-09-2	
Naphthalene	**<27.6**	ug/kg	328	27.6	1	09/22/23 08:30	09/25/23 20:31	91-20-3	
Styrene	**<16.8**	ug/kg	65.6	16.8	1	09/22/23 08:30	09/25/23 20:31	100-42-5	
Tetrachloroethene	**<25.4**	ug/kg	65.6	25.4	1	09/22/23 08:30	09/25/23 20:31	127-18-4	
Toluene	**<16.5**	ug/kg	65.6	16.5	1	09/22/23 08:30	09/25/23 20:31	108-88-3	
Trichloroethene	**<24.5**	ug/kg	65.6	24.5	1	09/22/23 08:30	09/25/23 20:31	79-01-6	
Trichlorofluoromethane	**<19.0**	ug/kg	65.6	19.0	1	09/22/23 08:30	09/25/23 20:31	75-69-4	
Vinyl chloride	**<13.2**	ug/kg	65.6	13.2	1	09/22/23 08:30	09/25/23 20:31	75-01-4	
cis-1,2-Dichloroethene	**<14.0**	ug/kg	65.6	14.0	1	09/22/23 08:30	09/25/23 20:31	156-59-2	
cis-1,3-Dichloropropene	**<43.3**	ug/kg	328	43.3	1	09/22/23 08:30	09/25/23 20:31	10061-01-5	
m&p-Xylene	**<27.7**	ug/kg	131	27.7	1	09/22/23 08:30	09/25/23 20:31	179601-23-1	
n-Butylbenzene	**<30.0**	ug/kg	65.6	30.0	1	09/22/23 08:30	09/25/23 20:31	104-51-8	
n-Propylbenzene	**79.2**	ug/kg	65.6	15.7	1	09/22/23 08:30	09/25/23 20:31	103-65-1	
o-Xylene	**<19.7**	ug/kg	65.6	19.7	1	09/22/23 08:30	09/25/23 20:31	95-47-6	

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1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Sample: BP-3 **Lab ID: 40268135003** Collected: 09/14/23 08:30 Received: 09/15/23 09:55 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 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
p-Isopropyltoluene	**<22.3**	ug/kg	65.6	22.3	1	09/22/23 08:30	09/25/23 20:31	99-87-6	
sec-Butylbenzene	**39.0J**	ug/kg	65.6	22.5	1	09/22/23 08:30	09/25/23 20:31	135-98-8	
tert-Butylbenzene	**<20.6**	ug/kg	65.6	20.6	1	09/22/23 08:30	09/25/23 20:31	98-06-6	
trans-1,2-Dichloroethene	**<14.2**	ug/kg	65.6	14.2	1	09/22/23 08:30	09/25/23 20:31	156-60-5	
trans-1,3-Dichloropropene	**<187**	ug/kg	328	187	1	09/22/23 08:30	09/25/23 20:31	10061-02-6	
Surrogates									
Toluene-d8 (S)	109	%	70-139		1	09/22/23 08:30	09/25/23 20:31	2037-26-5	
4-Bromofluorobenzene (S)	101	%	72-142		1	09/22/23 08:30	09/25/23 20:31	460-00-4	
1,2-Dichlorobenzene-d4 (S)	125	%	67-144		1	09/22/23 08:30	09/25/23 20:31	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**13.5**	%	0.10	0.10	1		09/19/23 15:44		

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ANALYTICAL RESULTS

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Sample: BP-4 **Lab ID: 40268135004** Collected: 09/14/23 08:30 Received: 09/15/23 09:55 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 Preparation Method: WI MOD DRO Pace Analytical Services - Green Bay								
Diesel Range Organics	**36.4J**	mg/kg	44.0	13.2	10	09/18/23 09:32	09/19/23 08:47		D3,DC
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext. Pace Analytical Services - Green Bay								
Gasoline Range Organics	**1.7J**	mg/kg	2.8	1.4	1	09/20/23 07:30	09/20/23 13:35		
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**<2.4**	ug/kg	18.8	2.4	1	09/25/23 08:15	09/25/23 15:22	83-32-9	
Acenaphthylene	**13.7J**	ug/kg	18.8	2.4	1	09/25/23 08:15	09/25/23 15:22	208-96-8	
Anthracene	**17.5J**	ug/kg	18.8	2.3	1	09/25/23 08:15	09/25/23 15:22	120-12-7	
Benzo(a)anthracene	**57.5**	ug/kg	18.8	2.4	1	09/25/23 08:15	09/25/23 15:22	56-55-3	
Benzo(a)pyrene	**73.1**	ug/kg	18.8	2.1	1	09/25/23 08:15	09/25/23 15:22	50-32-8	
Benzo(b)fluoranthene	**109**	ug/kg	18.8	2.6	1	09/25/23 08:15	09/25/23 15:22	205-99-2	
Benzo(g,h,i)perylene	**39.2**	ug/kg	18.8	3.3	1	09/25/23 08:15	09/25/23 15:22	191-24-2	
Benzo(k)fluoranthene	**53.2**	ug/kg	18.8	2.4	1	09/25/23 08:15	09/25/23 15:22	207-08-9	
Chrysene	**76.3**	ug/kg	18.8	3.5	1	09/25/23 08:15	09/25/23 15:22	218-01-9	
Dibenz(a,h)anthracene	**11.8J**	ug/kg	18.8	2.6	1	09/25/23 08:15	09/25/23 15:22	53-70-3	
Fluoranthene	**125**	ug/kg	18.8	2.2	1	09/25/23 08:15	09/25/23 15:22	206-44-0	
Fluorene	**3.9J**	ug/kg	18.8	2.3	1	09/25/23 08:15	09/25/23 15:22	86-73-7	
Indeno(1,2,3-cd)pyrene	**35.3**	ug/kg	18.8	3.9	1	09/25/23 08:15	09/25/23 15:22	193-39-5	
1-Methylnaphthalene	**11.8J**	ug/kg	18.8	2.7	1	09/25/23 08:15	09/25/23 15:22	90-12-0	
2-Methylnaphthalene	**24.2**	ug/kg	18.8	2.7	1	09/25/23 08:15	09/25/23 15:22	91-57-6	
Naphthalene	**39.8**	ug/kg	18.8	1.8	1	09/25/23 08:15	09/25/23 15:22	91-20-3	
Phenanthrene	**50.6**	ug/kg	18.8	2.2	1	09/25/23 08:15	09/25/23 15:22	85-01-8	
Pyrene	**109**	ug/kg	18.8	2.8	1	09/25/23 08:15	09/25/23 15:22	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	55	%	39-120		1	09/25/23 08:15	09/25/23 15:22	321-60-8	
Terphenyl-d14 (S)	59	%	36-120		1	09/25/23 08:15	09/25/23 15:22	1718-51-0	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<15.0**	ug/kg	62.3	15.0	1	09/22/23 08:30	09/25/23 19:30	630-20-6	
1,1,1-Trichloroethane	**<16.0**	ug/kg	62.3	16.0	1	09/22/23 08:30	09/25/23 19:30	71-55-6	
1,1,2,2-Tetrachloroethane	**<22.6**	ug/kg	62.3	22.6	1	09/22/23 08:30	09/25/23 19:30	79-34-5	
1,1,2-Trichloroethane	**<22.7**	ug/kg	62.3	22.7	1	09/22/23 08:30	09/25/23 19:30	79-00-5	
1,1-Dichloroethane	**<16.0**	ug/kg	62.3	16.0	1	09/22/23 08:30	09/25/23 19:30	75-34-3	
1,1-Dichloroethene	**<20.7**	ug/kg	62.3	20.7	1	09/22/23 08:30	09/25/23 19:30	75-35-4	
1,1-Dichloropropene	**<20.2**	ug/kg	62.3	20.2	1	09/22/23 08:30	09/25/23 19:30	563-58-6	
1,2,3-Trichlorobenzene	**<69.5**	ug/kg	312	69.5	1	09/22/23 08:30	09/25/23 19:30	87-61-6	
1,2,3-Trichloropropane	**<30.3**	ug/kg	62.3	30.3	1	09/22/23 08:30	09/25/23 19:30	96-18-4	
1,2,4-Trichlorobenzene	**<51.4**	ug/kg	312	51.4	1	09/22/23 08:30	09/25/23 19:30	120-82-1	
1,2,4-Trimethylbenzene	**<18.6**	ug/kg	62.3	18.6	1	09/22/23 08:30	09/25/23 19:30	95-63-6	
1,2-Dibromo-3-chloropropane	**<48.4**	ug/kg	312	48.4	1	09/22/23 08:30	09/25/23 19:30	96-12-8	

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Sample: BP-4 **Lab ID: 40268135004** Collected: 09/14/23 08:30 Received: 09/15/23 09:55 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 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,2-Dibromoethane (EDB)	**<17.1**	ug/kg	62.3	17.1	1	09/22/23 08:30	09/25/23 19:30	106-93-4	
1,2-Dichlorobenzene	**<19.3**	ug/kg	62.3	19.3	1	09/22/23 08:30	09/25/23 19:30	95-50-1	
1,2-Dichloroethane	**<14.3**	ug/kg	62.3	14.3	1	09/22/23 08:30	09/25/23 19:30	107-06-2	
1,2-Dichloropropane	**<14.8**	ug/kg	62.3	14.8	1	09/22/23 08:30	09/25/23 19:30	78-87-5	
1,3,5-Trimethylbenzene	**<20.1**	ug/kg	62.3	20.1	1	09/22/23 08:30	09/25/23 19:30	108-67-8	
1,3-Dichlorobenzene	**<17.1**	ug/kg	62.3	17.1	1	09/22/23 08:30	09/25/23 19:30	541-73-1	
1,3-Dichloropropane	**<13.6**	ug/kg	62.3	13.6	1	09/22/23 08:30	09/25/23 19:30	142-28-9	
1,4-Dichlorobenzene	**<17.1**	ug/kg	62.3	17.1	1	09/22/23 08:30	09/25/23 19:30	106-46-7	
2,2-Dichloropropane	**<16.8**	ug/kg	62.3	16.8	1	09/22/23 08:30	09/25/23 19:30	594-20-7	
2-Chlorotoluene	**<20.2**	ug/kg	62.3	20.2	1	09/22/23 08:30	09/25/23 19:30	95-49-8	
4-Chlorotoluene	**<23.7**	ug/kg	62.3	23.7	1	09/22/23 08:30	09/25/23 19:30	106-43-4	
Benzene	**<14.8**	ug/kg	24.9	14.8	1	09/22/23 08:30	09/25/23 19:30	71-43-2	
Bromobenzene	**<24.3**	ug/kg	62.3	24.3	1	09/22/23 08:30	09/25/23 19:30	108-86-1	
Bromochloromethane	**<17.1**	ug/kg	62.3	17.1	1	09/22/23 08:30	09/25/23 19:30	74-97-5	
Bromodichloromethane	**<14.8**	ug/kg	62.3	14.8	1	09/22/23 08:30	09/25/23 19:30	75-27-4	
Bromoform	**<274**	ug/kg	312	274	1	09/22/23 08:30	09/25/23 19:30	75-25-2	
Bromomethane	**<87.4**	ug/kg	312	87.4	1	09/22/23 08:30	09/25/23 19:30	74-83-9	
Carbon tetrachloride	**<13.7**	ug/kg	62.3	13.7	1	09/22/23 08:30	09/25/23 19:30	56-23-5	
Chlorobenzene	**<7.5**	ug/kg	62.3	7.5	1	09/22/23 08:30	09/25/23 19:30	108-90-7	
Chloroethane	**<26.3**	ug/kg	312	26.3	1	09/22/23 08:30	09/25/23 19:30	75-00-3	v1
Chloroform	**<44.6**	ug/kg	312	44.6	1	09/22/23 08:30	09/25/23 19:30	67-66-3	
Chloromethane	**<23.7**	ug/kg	62.3	23.7	1	09/22/23 08:30	09/25/23 19:30	74-87-3	
Dibromochloromethane	**<213**	ug/kg	312	213	1	09/22/23 08:30	09/25/23 19:30	124-48-1	
Dibromomethane	**<18.5**	ug/kg	62.3	18.5	1	09/22/23 08:30	09/25/23 19:30	74-95-3	
Dichlorodifluoromethane	**<26.8**	ug/kg	62.3	26.8	1	09/22/23 08:30	09/25/23 19:30	75-71-8	
Diisopropyl ether	**<15.5**	ug/kg	62.3	15.5	1	09/22/23 08:30	09/25/23 19:30	108-20-3	
Ethylbenzene	**<14.8**	ug/kg	62.3	14.8	1	09/22/23 08:30	09/25/23 19:30	100-41-4	
Hexachloro-1,3-butadiene	**<124**	ug/kg	312	124	1	09/22/23 08:30	09/25/23 19:30	87-68-3	
Isopropylbenzene (Cumene)	**<16.8**	ug/kg	62.3	16.8	1	09/22/23 08:30	09/25/23 19:30	98-82-8	
Methyl-tert-butyl ether	**<18.3**	ug/kg	62.3	18.3	1	09/22/23 08:30	09/25/23 19:30	1634-04-4	
Methylene Chloride	**<17.3**	ug/kg	62.3	17.3	1	09/22/23 08:30	09/25/23 19:30	75-09-2	
Naphthalene	**<26.2**	ug/kg	312	26.2	1	09/22/23 08:30	09/25/23 19:30	91-20-3	
Styrene	**<16.0**	ug/kg	62.3	16.0	1	09/22/23 08:30	09/25/23 19:30	100-42-5	
Tetrachloroethene	**<24.2**	ug/kg	62.3	24.2	1	09/22/23 08:30	09/25/23 19:30	127-18-4	
Toluene	**<15.7**	ug/kg	62.3	15.7	1	09/22/23 08:30	09/25/23 19:30	108-88-3	
Trichloroethene	**<23.3**	ug/kg	62.3	23.3	1	09/22/23 08:30	09/25/23 19:30	79-01-6	
Trichlorofluoromethane	**<18.1**	ug/kg	62.3	18.1	1	09/22/23 08:30	09/25/23 19:30	75-69-4	
Vinyl chloride	**<12.6**	ug/kg	62.3	12.6	1	09/22/23 08:30	09/25/23 19:30	75-01-4	
cis-1,2-Dichloroethene	**<13.3**	ug/kg	62.3	13.3	1	09/22/23 08:30	09/25/23 19:30	156-59-2	
cis-1,3-Dichloropropene	**<41.2**	ug/kg	312	41.2	1	09/22/23 08:30	09/25/23 19:30	10061-01-5	
m&p-Xylene	**<26.3**	ug/kg	125	26.3	1	09/22/23 08:30	09/25/23 19:30	179601-23-1	
n-Butylbenzene	**<28.6**	ug/kg	62.3	28.6	1	09/22/23 08:30	09/25/23 19:30	104-51-8	
n-Propylbenzene	**<15.0**	ug/kg	62.3	15.0	1	09/22/23 08:30	09/25/23 19:30	103-65-1	
o-Xylene	**<18.7**	ug/kg	62.3	18.7	1	09/22/23 08:30	09/25/23 19:30	95-47-6	

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ANALYTICAL RESULTS

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Sample: BP-4 **Lab ID: 40268135004** Collected: 09/14/23 08:30 Received: 09/15/23 09:55 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 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
p-Isopropyltoluene	**<21.2**	ug/kg	62.3	21.2	1	09/22/23 08:30	09/25/23 19:30	99-87-6	
sec-Butylbenzene	**<21.4**	ug/kg	62.3	21.4	1	09/22/23 08:30	09/25/23 19:30	135-98-8	
tert-Butylbenzene	**<19.6**	ug/kg	62.3	19.6	1	09/22/23 08:30	09/25/23 19:30	98-06-6	
trans-1,2-Dichloroethene	**<13.5**	ug/kg	62.3	13.5	1	09/22/23 08:30	09/25/23 19:30	156-60-5	
trans-1,3-Dichloropropene	**<178**	ug/kg	312	178	1	09/22/23 08:30	09/25/23 19:30	10061-02-6	
Surrogates									
Toluene-d8 (S)	103	%	70-139		1	09/22/23 08:30	09/25/23 19:30	2037-26-5	
4-Bromofluorobenzene (S)	96	%	72-142		1	09/22/23 08:30	09/25/23 19:30	460-00-4	
1,2-Dichlorobenzene-d4 (S)	117	%	67-144		1	09/22/23 08:30	09/25/23 19:30	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**11.0**	%	0.10	0.10	1		09/19/23 15:44		

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1241 Bellevue Street - Suite 9
Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Sample: BP-4 DUP **Lab ID: 40268135005** Collected: 09/14/23 08:30 Received: 09/15/23 09:55 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 Preparation Method: WI MOD DRO Pace Analytical Services - Green Bay								
Diesel Range Organics	**52.1**	mg/kg	51.7	15.4	10	09/18/23 09:32	09/19/23 08:56		D3,DC
WIGRO GCV	Analytical Method: WI MOD GRO Preparation Method: TPH GRO/PVOC WI ext. Pace Analytical Services - Green Bay								
Gasoline Range Organics	**<1.4**	mg/kg	2.7	1.4	1	09/20/23 07:30	09/20/23 14:01		
8270E MSSV PAH by SIM	Analytical Method: EPA 8270E by SIM Preparation Method: EPA 3546 Pace Analytical Services - Green Bay								
Acenaphthene	**4.1J**	ug/kg	18.3	2.4	1	09/25/23 08:15	09/25/23 15:40	83-32-9	
Acenaphthylene	**23.7**	ug/kg	18.3	2.3	1	09/25/23 08:15	09/25/23 15:40	208-96-8	
Anthracene	**19.0**	ug/kg	18.3	2.3	1	09/25/23 08:15	09/25/23 15:40	120-12-7	
Benzo(a)anthracene	**68.0**	ug/kg	18.3	2.4	1	09/25/23 08:15	09/25/23 15:40	56-55-3	
Benzo(a)pyrene	**88.2**	ug/kg	18.3	2.1	1	09/25/23 08:15	09/25/23 15:40	50-32-8	
Benzo(b)fluoranthene	**128**	ug/kg	18.3	2.5	1	09/25/23 08:15	09/25/23 15:40	205-99-2	
Benzo(g,h,i)perylene	**42.9**	ug/kg	18.3	3.2	1	09/25/23 08:15	09/25/23 15:40	191-24-2	
Benzo(k)fluoranthene	**62.9**	ug/kg	18.3	2.3	1	09/25/23 08:15	09/25/23 15:40	207-08-9	
Chrysene	**81.9**	ug/kg	18.3	3.5	1	09/25/23 08:15	09/25/23 15:40	218-01-9	
Dibenz(a,h)anthracene	**12.1J**	ug/kg	18.3	2.5	1	09/25/23 08:15	09/25/23 15:40	53-70-3	
Fluoranthene	**179**	ug/kg	18.3	2.2	1	09/25/23 08:15	09/25/23 15:40	206-44-0	
Fluorene	**10.9J**	ug/kg	18.3	2.2	1	09/25/23 08:15	09/25/23 15:40	86-73-7	
Indeno(1,2,3-cd)pyrene	**39.3**	ug/kg	18.3	3.8	1	09/25/23 08:15	09/25/23 15:40	193-39-5	
1-Methylnaphthalene	**17.9J**	ug/kg	18.3	2.7	1	09/25/23 08:15	09/25/23 15:40	90-12-0	
2-Methylnaphthalene	**30.8**	ug/kg	18.3	2.7	1	09/25/23 08:15	09/25/23 15:40	91-57-6	
Naphthalene	**43.4**	ug/kg	18.3	1.8	1	09/25/23 08:15	09/25/23 15:40	91-20-3	
Phenanthrene	**137**	ug/kg	18.3	2.1	1	09/25/23 08:15	09/25/23 15:40	85-01-8	
Pyrene	**155**	ug/kg	18.3	2.7	1	09/25/23 08:15	09/25/23 15:40	129-00-0	
Surrogates									
2-Fluorobiphenyl (S)	62	%	39-120		1	09/25/23 08:15	09/25/23 15:40	321-60-8	
Terphenyl-d14 (S)	69	%	36-120		1	09/25/23 08:15	09/25/23 15:40	1718-51-0	
8260 MSV Med Level Normal List	Analytical Method: EPA 8260 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,1,1,2-Tetrachloroethane	**<14.4**	ug/kg	59.9	14.4	1	09/22/23 08:30	09/25/23 19:50	630-20-6	
1,1,1-Trichloroethane	**<15.3**	ug/kg	59.9	15.3	1	09/22/23 08:30	09/25/23 19:50	71-55-6	
1,1,2,2-Tetrachloroethane	**<21.7**	ug/kg	59.9	21.7	1	09/22/23 08:30	09/25/23 19:50	79-34-5	
1,1,2-Trichloroethane	**<21.8**	ug/kg	59.9	21.8	1	09/22/23 08:30	09/25/23 19:50	79-00-5	
1,1-Dichloroethane	**<15.3**	ug/kg	59.9	15.3	1	09/22/23 08:30	09/25/23 19:50	75-34-3	
1,1-Dichloroethene	**<19.9**	ug/kg	59.9	19.9	1	09/22/23 08:30	09/25/23 19:50	75-35-4	
1,1-Dichloropropene	**<19.4**	ug/kg	59.9	19.4	1	09/22/23 08:30	09/25/23 19:50	563-58-6	
1,2,3-Trichlorobenzene	**<66.7**	ug/kg	299	66.7	1	09/22/23 08:30	09/25/23 19:50	87-61-6	
1,2,3-Trichloropropane	**<29.1**	ug/kg	59.9	29.1	1	09/22/23 08:30	09/25/23 19:50	96-18-4	
1,2,4-Trichlorobenzene	**<49.3**	ug/kg	299	49.3	1	09/22/23 08:30	09/25/23 19:50	120-82-1	
1,2,4-Trimethylbenzene	**<17.8**	ug/kg	59.9	17.8	1	09/22/23 08:30	09/25/23 19:50	95-63-6	
1,2-Dibromo-3-chloropropane	**<46.5**	ug/kg	299	46.5	1	09/22/23 08:30	09/25/23 19:50	96-12-8	

REPORT OF LABORATORY ANALYSIS

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Green Bay, WI 54302
(920)469-2436

ANALYTICAL RESULTS

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Sample: BP-4 DUP **Lab ID: 40268135005** Collected: 09/14/23 08:30 Received: 09/15/23 09:55 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 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
1,2-Dibromoethane (EDB)	**<16.4**	ug/kg	59.9	16.4	1	09/22/23 08:30	09/25/23 19:50	106-93-4	
1,2-Dichlorobenzene	**<18.6**	ug/kg	59.9	18.6	1	09/22/23 08:30	09/25/23 19:50	95-50-1	
1,2-Dichloroethane	**<13.8**	ug/kg	59.9	13.8	1	09/22/23 08:30	09/25/23 19:50	107-06-2	
1,2-Dichloropropane	**<14.3**	ug/kg	59.9	14.3	1	09/22/23 08:30	09/25/23 19:50	78-87-5	
1,3,5-Trimethylbenzene	**<19.3**	ug/kg	59.9	19.3	1	09/22/23 08:30	09/25/23 19:50	108-67-8	
1,3-Dichlorobenzene	**<16.4**	ug/kg	59.9	16.4	1	09/22/23 08:30	09/25/23 19:50	541-73-1	
1,3-Dichloropropane	**<13.1**	ug/kg	59.9	13.1	1	09/22/23 08:30	09/25/23 19:50	142-28-9	
1,4-Dichlorobenzene	**<16.4**	ug/kg	59.9	16.4	1	09/22/23 08:30	09/25/23 19:50	106-46-7	
2,2-Dichloropropane	**<16.2**	ug/kg	59.9	16.2	1	09/22/23 08:30	09/25/23 19:50	594-20-7	
2-Chlorotoluene	**<19.4**	ug/kg	59.9	19.4	1	09/22/23 08:30	09/25/23 19:50	95-49-8	
4-Chlorotoluene	**<22.8**	ug/kg	59.9	22.8	1	09/22/23 08:30	09/25/23 19:50	106-43-4	
Benzene	**<14.3**	ug/kg	24.0	14.3	1	09/22/23 08:30	09/25/23 19:50	71-43-2	
Bromobenzene	**<23.4**	ug/kg	59.9	23.4	1	09/22/23 08:30	09/25/23 19:50	108-86-1	
Bromochloromethane	**<16.4**	ug/kg	59.9	16.4	1	09/22/23 08:30	09/25/23 19:50	74-97-5	
Bromodichloromethane	**<14.3**	ug/kg	59.9	14.3	1	09/22/23 08:30	09/25/23 19:50	75-27-4	
Bromoform	**<263**	ug/kg	299	263	1	09/22/23 08:30	09/25/23 19:50	75-25-2	
Bromomethane	**<84.0**	ug/kg	299	84.0	1	09/22/23 08:30	09/25/23 19:50	74-83-9	
Carbon tetrachloride	**<13.2**	ug/kg	59.9	13.2	1	09/22/23 08:30	09/25/23 19:50	56-23-5	
Chlorobenzene	**<7.2**	ug/kg	59.9	7.2	1	09/22/23 08:30	09/25/23 19:50	108-90-7	
Chloroethane	**<25.3**	ug/kg	299	25.3	1	09/22/23 08:30	09/25/23 19:50	75-00-3	v1
Chloroform	**<42.9**	ug/kg	299	42.9	1	09/22/23 08:30	09/25/23 19:50	67-66-3	
Chloromethane	**<22.8**	ug/kg	59.9	22.8	1	09/22/23 08:30	09/25/23 19:50	74-87-3	
Dibromochloromethane	**<205**	ug/kg	299	205	1	09/22/23 08:30	09/25/23 19:50	124-48-1	
Dibromomethane	**<17.7**	ug/kg	59.9	17.7	1	09/22/23 08:30	09/25/23 19:50	74-95-3	
Dichlorodifluoromethane	**<25.7**	ug/kg	59.9	25.7	1	09/22/23 08:30	09/25/23 19:50	75-71-8	
Diisopropyl ether	**<14.9**	ug/kg	59.9	14.9	1	09/22/23 08:30	09/25/23 19:50	108-20-3	
Ethylbenzene	**<14.3**	ug/kg	59.9	14.3	1	09/22/23 08:30	09/25/23 19:50	100-41-4	
Hexachloro-1,3-butadiene	**<119**	ug/kg	299	119	1	09/22/23 08:30	09/25/23 19:50	87-68-3	
Isopropylbenzene (Cumene)	**<16.2**	ug/kg	59.9	16.2	1	09/22/23 08:30	09/25/23 19:50	98-82-8	
Methyl-tert-butyl ether	**<17.6**	ug/kg	59.9	17.6	1	09/22/23 08:30	09/25/23 19:50	1634-04-4	
Methylene Chloride	**<16.6**	ug/kg	59.9	16.6	1	09/22/23 08:30	09/25/23 19:50	75-09-2	
Naphthalene	**<25.2**	ug/kg	299	25.2	1	09/22/23 08:30	09/25/23 19:50	91-20-3	
Styrene	**<15.3**	ug/kg	59.9	15.3	1	09/22/23 08:30	09/25/23 19:50	100-42-5	
Tetrachloroethene	**<23.2**	ug/kg	59.9	23.2	1	09/22/23 08:30	09/25/23 19:50	127-18-4	
Toluene	**<15.1**	ug/kg	59.9	15.1	1	09/22/23 08:30	09/25/23 19:50	108-88-3	
Trichloroethene	**<22.4**	ug/kg	59.9	22.4	1	09/22/23 08:30	09/25/23 19:50	79-01-6	
Trichlorofluoromethane	**<17.4**	ug/kg	59.9	17.4	1	09/22/23 08:30	09/25/23 19:50	75-69-4	
Vinyl chloride	**<12.1**	ug/kg	59.9	12.1	1	09/22/23 08:30	09/25/23 19:50	75-01-4	
cis-1,2-Dichloroethene	**<12.8**	ug/kg	59.9	12.8	1	09/22/23 08:30	09/25/23 19:50	156-59-2	
cis-1,3-Dichloropropene	**<39.5**	ug/kg	299	39.5	1	09/22/23 08:30	09/25/23 19:50	10061-01-5	
m&p-Xylene	**<25.3**	ug/kg	120	25.3	1	09/22/23 08:30	09/25/23 19:50	179601-23-1	
n-Butylbenzene	**<27.4**	ug/kg	59.9	27.4	1	09/22/23 08:30	09/25/23 19:50	104-51-8	
n-Propylbenzene	**<14.4**	ug/kg	59.9	14.4	1	09/22/23 08:30	09/25/23 19:50	103-65-1	
o-Xylene	**<18.0**	ug/kg	59.9	18.0	1	09/22/23 08:30	09/25/23 19:50	95-47-6	

REPORT OF LABORATORY ANALYSIS

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(920)469-2436

ANALYTICAL RESULTS

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Sample: BP-4 DUP **Lab ID: 40268135005** Collected: 09/14/23 08:30 Received: 09/15/23 09:55 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 Preparation Method: EPA 5035/5030B Pace Analytical Services - Green Bay								
p-Isopropyltoluene	**<20.4**	ug/kg	59.9	20.4	1	09/22/23 08:30	09/25/23 19:50	99-87-6	
sec-Butylbenzene	**<20.6**	ug/kg	59.9	20.6	1	09/22/23 08:30	09/25/23 19:50	135-98-8	
tert-Butylbenzene	**<18.8**	ug/kg	59.9	18.8	1	09/22/23 08:30	09/25/23 19:50	98-06-6	
trans-1,2-Dichloroethene	**<12.9**	ug/kg	59.9	12.9	1	09/22/23 08:30	09/25/23 19:50	156-60-5	
trans-1,3-Dichloropropene	**<171**	ug/kg	299	171	1	09/22/23 08:30	09/25/23 19:50	10061-02-6	
Surrogates									
Toluene-d8 (S)	103	%	70-139		1	09/22/23 08:30	09/25/23 19:50	2037-26-5	
4-Bromofluorobenzene (S)	95	%	72-142		1	09/22/23 08:30	09/25/23 19:50	460-00-4	
1,2-Dichlorobenzene-d4 (S)	120	%	67-144		1	09/22/23 08:30	09/25/23 19:50	2199-69-1	
Percent Moisture	Analytical Method: ASTM D2974-87 Pace Analytical Services - Green Bay								
Percent Moisture	**9.0**	%	0.10	0.10	1		09/19/23 15:44		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

QC Batch: 455273
QC Batch Method: TPH GRO/PVOC WI ext.
Analysis Method: WI MOD GRO
Analysis Description: WIGRO Solid GCV
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40268135001, 40268135002, 40268135003, 40268135004, 40268135005

METHOD BLANK: 2614394 Matrix: Solid
Associated Lab Samples: 40268135001, 40268135002, 40268135003, 40268135004, 40268135005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Gasoline Range Organics	mg/kg	<1.2	2.5	09/20/23 11:01	
a,a,a-Trifluorotoluene (S)	%	98	80-120	09/20/23 11:01	

LABORATORY CONTROL SAMPLE & LCSD: 2614395 2614396

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Gasoline Range Organics	mg/kg	10	10.4	10.6	104	106	80-120	2	20	
a,a,a-Trifluorotoluene (S)	%				100	102	80-120			

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QUALITY CONTROL DATA

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

QC Batch: 455539
QC Batch Method: EPA 5035/5030B
Analysis Method: EPA 8260
Analysis Description: 8260 MSV Med Level Normal List
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40268135001, 40268135002, 40268135003, 40268135004, 40268135005

METHOD BLANK: 2616265 Matrix: Solid
Associated Lab Samples: 40268135001, 40268135002, 40268135003, 40268135004, 40268135005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1,2-Tetrachloroethane	ug/kg	<12.0	50.0	09/25/23 11:23	
1,1,1-Trichloroethane	ug/kg	<12.8	50.0	09/25/23 11:23	
1,1,2,2-Tetrachloroethane	ug/kg	<18.1	50.0	09/25/23 11:23	
1,1,2-Trichloroethane	ug/kg	<18.2	50.0	09/25/23 11:23	
1,1-Dichloroethane	ug/kg	<12.8	50.0	09/25/23 11:23	
1,1-Dichloroethene	ug/kg	<16.6	50.0	09/25/23 11:23	
1,1-Dichloropropene	ug/kg	<16.2	50.0	09/25/23 11:23	
1,2,3-Trichlorobenzene	ug/kg	<55.7	250	09/25/23 11:23	
1,2,3-Trichloropropane	ug/kg	<24.3	50.0	09/25/23 11:23	
1,2,4-Trichlorobenzene	ug/kg	<41.2	250	09/25/23 11:23	
1,2,4-Trimethylbenzene	ug/kg	<14.9	50.0	09/25/23 11:23	
1,2-Dibromo-3-chloropropane	ug/kg	<38.8	250	09/25/23 11:23	
1,2-Dibromoethane (EDB)	ug/kg	<13.7	50.0	09/25/23 11:23	
1,2-Dichlorobenzene	ug/kg	<15.5	50.0	09/25/23 11:23	
1,2-Dichloroethane	ug/kg	<11.5	50.0	09/25/23 11:23	
1,2-Dichloropropane	ug/kg	<11.9	50.0	09/25/23 11:23	
1,3,5-Trimethylbenzene	ug/kg	<16.1	50.0	09/25/23 11:23	
1,3-Dichlorobenzene	ug/kg	<13.7	50.0	09/25/23 11:23	
1,3-Dichloropropane	ug/kg	<10.9	50.0	09/25/23 11:23	
1,4-Dichlorobenzene	ug/kg	<13.7	50.0	09/25/23 11:23	
2,2-Dichloropropane	ug/kg	<13.5	50.0	09/25/23 11:23	
2-Chlorotoluene	ug/kg	<16.2	50.0	09/25/23 11:23	
4-Chlorotoluene	ug/kg	<19.0	50.0	09/25/23 11:23	
Benzene	ug/kg	<11.9	20.0	09/25/23 11:23	
Bromobenzene	ug/kg	<19.5	50.0	09/25/23 11:23	
Bromochloromethane	ug/kg	<13.7	50.0	09/25/23 11:23	
Bromodichloromethane	ug/kg	<11.9	50.0	09/25/23 11:23	
Bromoform	ug/kg	<220	250	09/25/23 11:23	
Bromomethane	ug/kg	<70.1	250	09/25/23 11:23	
Carbon tetrachloride	ug/kg	<11.0	50.0	09/25/23 11:23	
Chlorobenzene	ug/kg	<6.0	50.0	09/25/23 11:23	
Chloroethane	ug/kg	<21.1	250	09/25/23 11:23	v1
Chloroform	ug/kg	<35.8	250	09/25/23 11:23	
Chloromethane	ug/kg	<19.0	50.0	09/25/23 11:23	
cis-1,2-Dichloroethene	ug/kg	<10.7	50.0	09/25/23 11:23	
cis-1,3-Dichloropropene	ug/kg	<33.0	250	09/25/23 11:23	
Dibromochloromethane	ug/kg	<171	250	09/25/23 11:23	
Dibromomethane	ug/kg	<14.8	50.0	09/25/23 11:23	
Dichlorodifluoromethane	ug/kg	<21.5	50.0	09/25/23 11:23	
Diisopropyl ether	ug/kg	<12.4	50.0	09/25/23 11:23	

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.

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QUALITY CONTROL DATA

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

METHOD BLANK: 2616265 Matrix: Solid
Associated Lab Samples: 40268135001, 40268135002, 40268135003, 40268135004, 40268135005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Ethylbenzene	ug/kg	<11.9	50.0	09/25/23 11:23	
Hexachloro-1,3-butadiene	ug/kg	<99.4	250	09/25/23 11:23	
Isopropylbenzene (Cumene)	ug/kg	<13.5	50.0	09/25/23 11:23	
m&p-Xylene	ug/kg	<21.1	100	09/25/23 11:23	
Methyl-tert-butyl ether	ug/kg	<14.7	50.0	09/25/23 11:23	
Methylene Chloride	ug/kg	<13.9	50.0	09/25/23 11:23	
n-Butylbenzene	ug/kg	<22.9	50.0	09/25/23 11:23	
n-Propylbenzene	ug/kg	<12.0	50.0	09/25/23 11:23	
Naphthalene	ug/kg	<21.0	250	09/25/23 11:23	
o-Xylene	ug/kg	<15.0	50.0	09/25/23 11:23	
p-Isopropyltoluene	ug/kg	<17.0	50.0	09/25/23 11:23	
sec-Butylbenzene	ug/kg	<17.2	50.0	09/25/23 11:23	
Styrene	ug/kg	<12.8	50.0	09/25/23 11:23	
tert-Butylbenzene	ug/kg	<15.7	50.0	09/25/23 11:23	
Tetrachloroethene	ug/kg	<19.4	50.0	09/25/23 11:23	
Toluene	ug/kg	<12.6	50.0	09/25/23 11:23	
trans-1,2-Dichloroethene	ug/kg	<10.8	50.0	09/25/23 11:23	
trans-1,3-Dichloropropene	ug/kg	<143	250	09/25/23 11:23	
Trichloroethene	ug/kg	<18.7	50.0	09/25/23 11:23	
Trichlorofluoromethane	ug/kg	<14.5	50.0	09/25/23 11:23	
Vinyl chloride	ug/kg	<10.1	50.0	09/25/23 11:23	
1,2-Dichlorobenzene-d4 (S)	%	94	67-144	09/25/23 11:23	
4-Bromofluorobenzene (S)	%	74	72-142	09/25/23 11:23	
Toluene-d8 (S)	%	83	70-139	09/25/23 11:23	

LABORATORY CONTROL SAMPLE: 2616266

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	2500	2710	108	70-130	
1,1,2,2-Tetrachloroethane	ug/kg	2500	2410	96	70-130	
1,1,2-Trichloroethane	ug/kg	2500	2360	94	70-130	
1,1-Dichloroethane	ug/kg	2500	2650	106	70-130	
1,1-Dichloroethene	ug/kg	2500	2400	96	77-122	
1,2,4-Trichlorobenzene	ug/kg	2500	2360	94	66-125	
1,2-Dibromo-3-chloropropane	ug/kg	2500	2100	84	66-130	
1,2-Dibromoethane (EDB)	ug/kg	2500	2360	95	70-130	
1,2-Dichlorobenzene	ug/kg	2500	2610	105	70-130	
1,2-Dichloroethane	ug/kg	2500	2850	114	70-130	
1,2-Dichloropropane	ug/kg	2500	2490	100	80-121	
1,3-Dichlorobenzene	ug/kg	2500	2550	102	70-130	
1,4-Dichlorobenzene	ug/kg	2500	2560	102	70-130	
Benzene	ug/kg	2500	2480	99	70-130	
Bromodichloromethane	ug/kg	2500	2670	107	70-130	
Bromoform	ug/kg	2500	2940	118	67-130	

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(920)469-2436

QUALITY CONTROL DATA

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

LABORATORY CONTROL SAMPLE: 2616266

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromomethane	ug/kg	2500	3140	125	25-150	
Carbon tetrachloride	ug/kg	2500	2760	110	72-136	
Chlorobenzene	ug/kg	2500	2520	101	70-130	
Chloroethane	ug/kg	2500	3980	159	20-178	v1
Chloroform	ug/kg	2500	2610	105	80-120	
Chloromethane	ug/kg	2500	2550	102	45-123	
cis-1,2-Dichloroethene	ug/kg	2500	2470	99	70-130	
cis-1,3-Dichloropropene	ug/kg	2500	2410	97	70-130	
Dibromochloromethane	ug/kg	2500	2570	103	70-130	
Dichlorodifluoromethane	ug/kg	2500	1340	54	14-106	
Ethylbenzene	ug/kg	2500	2260	90	80-120	
Isopropylbenzene (Cumene)	ug/kg	2500	2310	92	70-130	
m&p-Xylene	ug/kg	5000	5160	103	70-130	
Methyl-tert-butyl ether	ug/kg	2500	2270	91	70-130	
Methylene Chloride	ug/kg	2500	2610	105	70-130	
o-Xylene	ug/kg	2500	2620	105	70-130	
Styrene	ug/kg	2500	2940	118	70-130	
Tetrachloroethene	ug/kg	2500	2580	103	70-130	
Toluene	ug/kg	2500	2380	95	80-120	
trans-1,2-Dichloroethene	ug/kg	2500	2490	100	70-130	
trans-1,3-Dichloropropene	ug/kg	2500	2210	88	70-130	
Trichloroethene	ug/kg	2500	2620	105	70-130	
Trichlorofluoromethane	ug/kg	2500	2660	107	49-141	
Vinyl chloride	ug/kg	2500	1840	74	59-120	
1,2-Dichlorobenzene-d4 (S)	%			109	67-144	
4-Bromofluorobenzene (S)	%			92	72-142	
Toluene-d8 (S)	%			90	70-139	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2616267 2616268

Parameter	Units	40268328009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	<17.3			1070	1210				13	20	
1,1,2,2-Tetrachloroethane	ug/kg	<24.5			1130	1130				0	20	
1,1,2-Trichloroethane	ug/kg	<24.7			1130	1250				10	20	
1,1-Dichloroethane	ug/kg	<17.3			1190	1260				6	20	
1,1-Dichloroethene	ug/kg	<22.5			877	1000				13	20	
1,2,4-Trichlorobenzene	ug/kg	<55.8			1240	1300				5	20	
1,2-Dibromo-3-chloropropane	ug/kg	<52.6			1130	1090				3	23	
1,2-Dibromoethane (EDB)	ug/kg	<18.6			1100	1210				9	20	
1,2-Dichlorobenzene	ug/kg	<21.0			1380	1360				2	20	
1,2-Dichloroethane	ug/kg	<15.6			1250	1380				10	20	
1,2-Dichloropropane	ug/kg	<16.1			1150	1260				9	20	
1,3-Dichlorobenzene	ug/kg	<18.6			1300	1360				5	20	

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QUALITY CONTROL DATA

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2616267 2616268

Parameter	Units	40268328009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,4-Dichlorobenzene	ug/kg	<18.6			1270	1300				2	20	
Benzene	ug/kg	<16.1			1070	1270				17	20	
Bromodichloromethane	ug/kg	<16.1			1130	1340				17	20	
Bromoform	ug/kg	<298			1220	1500				21	20	R1
Bromomethane	ug/kg	<95.0			1380	1600				15	20	
Carbon tetrachloride	ug/kg	<14.9			1130	1190				5	20	
Chlorobenzene	ug/kg	<8.1			1260	1310				4	20	
Chloroethane	ug/kg	<28.6			1570	1770				12	23	v1
Chloroform	ug/kg	<48.5			1120	1310				16	20	
Chloromethane	ug/kg	<25.8			784	857				9	20	
cis-1,2-Dichloroethene	ug/kg	<14.5			1100	1210				9	20	
cis-1,3-Dichloropropene	ug/kg	<44.7			1020	1150				12	20	
Dibromochloromethane	ug/kg	<232			1200	1320				9	20	
Dichlorodifluoromethane	ug/kg	<29.1			145	170				16	34	
Ethylbenzene	ug/kg	<16.1			998	1120				11	20	
Isopropylbenzene (Cumene)	ug/kg	<18.3			985	1120				13	20	
m&p-Xylene	ug/kg	<28.6			2370	2610				10	20	
Methyl-tert-butyl ether	ug/kg	<19.9			931	989				6	20	
Methylene Chloride	ug/kg	<18.8			1130	1310				15	20	
o-Xylene	ug/kg	<20.3			1140	1370				19	20	
Styrene	ug/kg	<17.3			1290	1450				12	20	
Tetrachloroethene	ug/kg	<26.3			1180	1230				5	20	
Toluene	ug/kg	<17.1			1070	1220				13	20	
trans-1,2-Dichloroethene	ug/kg	<14.6			1020	1300				24	20	R1
trans-1,3-Dichloropropene	ug/kg	<194			1020	1090				6	20	
Trichloroethene	ug/kg	<25.3			1130	1260				11	20	
Trichlorofluoromethane	ug/kg	<19.7			746	822				10	28	
Vinyl chloride	ug/kg	<13.7			636	684				7	20	
1,2-Dichlorobenzene-d4 (S)	%						128	122	67-144			
4-Bromofluorobenzene (S)	%						106	105	72-142			
Toluene-d8 (S)	%						106	107	70-139			

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QUALITY CONTROL DATA

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

QC Batch: 455633
QC Batch Method: EPA 3546
Analysis Method: EPA 8270E by SIM
Analysis Description: 8270E/3546 MSSV PAH by SIM
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40268135001, 40268135002, 40268135003, 40268135004, 40268135005

METHOD BLANK: 2617225 Matrix: Solid
Associated Lab Samples: 40268135001, 40268135002, 40268135003, 40268135004, 40268135005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1-Methylnaphthalene	ug/kg	<2.4	16.7	09/25/23 10:48	
2-Methylnaphthalene	ug/kg	<2.4	16.7	09/25/23 10:48	
Acenaphthene	ug/kg	<2.2	16.7	09/25/23 10:48	
Acenaphthylene	ug/kg	<2.1	16.7	09/25/23 10:48	
Anthracene	ug/kg	<2.1	16.7	09/25/23 10:48	
Benzo(a)anthracene	ug/kg	<2.2	16.7	09/25/23 10:48	
Benzo(a)pyrene	ug/kg	<1.9	16.7	09/25/23 10:48	
Benzo(b)fluoranthene	ug/kg	<2.3	16.7	09/25/23 10:48	
Benzo(g,h,i)perylene	ug/kg	<2.9	16.7	09/25/23 10:48	
Benzo(k)fluoranthene	ug/kg	<2.1	16.7	09/25/23 10:48	
Chrysene	ug/kg	<3.2	16.7	09/25/23 10:48	
Dibenz(a,h)anthracene	ug/kg	<2.3	16.7	09/25/23 10:48	
Fluoranthene	ug/kg	<2.0	16.7	09/25/23 10:48	
Fluorene	ug/kg	<2.0	16.7	09/25/23 10:48	
Indeno(1,2,3-cd)pyrene	ug/kg	<3.5	16.7	09/25/23 10:48	
Naphthalene	ug/kg	<1.6	16.7	09/25/23 10:48	
Phenanthrene	ug/kg	<1.9	16.7	09/25/23 10:48	
Pyrene	ug/kg	<2.5	16.7	09/25/23 10:48	
2-Fluorobiphenyl (S)	%	77	39-120	09/25/23 10:48	
Terphenyl-d14 (S)	%	86	36-120	09/25/23 10:48	

LABORATORY CONTROL SAMPLE: 2617226

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1-Methylnaphthalene	ug/kg	333	275	83	62-120	
2-Methylnaphthalene	ug/kg	333	280	84	61-120	
Acenaphthene	ug/kg	333	284	85	66-120	
Acenaphthylene	ug/kg	333	283	85	63-120	
Anthracene	ug/kg	333	294	88	72-120	
Benzo(a)anthracene	ug/kg	333	294	88	64-120	
Benzo(a)pyrene	ug/kg	333	314	94	76-120	
Benzo(b)fluoranthene	ug/kg	333	322	97	62-120	
Benzo(g,h,i)perylene	ug/kg	333	305	91	73-120	
Benzo(k)fluoranthene	ug/kg	333	283	85	69-120	
Chrysene	ug/kg	333	278	83	70-120	
Dibenz(a,h)anthracene	ug/kg	333	305	91	72-120	
Fluoranthene	ug/kg	333	325	97	71-120	
Fluorene	ug/kg	333	297	89	68-120	
Indeno(1,2,3-cd)pyrene	ug/kg	333	304	91	72-120	

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QUALITY CONTROL DATA

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

LABORATORY CONTROL SAMPLE: 2617226

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Naphthalene	ug/kg	333	253	76	60-120	
Phenanthrene	ug/kg	333	309	93	66-120	
Pyrene	ug/kg	333	305	91	65-120	
2-Fluorobiphenyl (S)	%			81	39-120	
Terphenyl-d14 (S)	%			90	36-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 2617227 2617228

Parameter	Units	40268480004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1-Methylnaphthalene	ug/kg	<2.4	333	333	240	220	72	66	50-120	9	34	
2-Methylnaphthalene	ug/kg	<2.4	333	333	244	224	73	67	48-120	8	29	
Acenaphthene	ug/kg	<0.0022 mg/kg	333	333	227	217	68	65	51-120	5	26	
Acenaphthylene	ug/kg	<0.0021 mg/kg	333	333	239	216	72	65	49-120	10	22	
Anthracene	ug/kg	<0.0021 mg/kg	333	333	251	224	75	67	52-120	11	25	
Benzo(a)anthracene	ug/kg	<0.0022 mg/kg	333	333	228	201	68	60	47-120	12	37	
Benzo(a)pyrene	ug/kg	<0.0019 mg/kg	333	333	245	218	73	65	53-120	11	33	
Benzo(b)fluoranthene	ug/kg	<0.0023 mg/kg	333	333	269	210	80	63	43-120	25	43	
Benzo(g,h,i)perylene	ug/kg	<0.0029 mg/kg	333	333	238	211	71	63	38-120	12	36	
Benzo(k)fluoranthene	ug/kg	<0.0021 mg/kg	333	333	219	224	65	67	49-120	2	30	
Chrysene	ug/kg	<0.0032 mg/kg	333	333	232	207	69	62	45-120	12	28	
Dibenz(a,h)anthracene	ug/kg	<0.0023 mg/kg	333	333	241	213	72	64	41-120	12	33	
Fluoranthene	ug/kg	<0.0020 mg/kg	333	333	267	227	80	68	50-120	16	43	
Fluorene	ug/kg	<0.0020 mg/kg	333	333	241	217	72	65	47-120	10	27	
Indeno(1,2,3-cd)pyrene	ug/kg	<0.0035 mg/kg	333	333	238	210	71	63	35-120	12	33	
Naphthalene	ug/kg	<0.0016 mg/kg	333	333	234	214	70	64	42-120	9	26	
Phenanthrene	ug/kg	<0.0019 mg/kg	333	333	247	218	74	65	45-120	12	24	
Pyrene	ug/kg	<0.0025 mg/kg	333	333	238	207	71	62	42-120	14	41	
2-Fluorobiphenyl (S)	%						69	62	39-120			
Terphenyl-d14 (S)	%						67	58	36-120			

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QUALITY CONTROL DATA

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

QC Batch: 454968
QC Batch Method: WI MOD DRO
Analysis Method: WI MOD DRO
Analysis Description: WIDRO GCS
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40268135001, 40268135002, 40268135003, 40268135004, 40268135005

METHOD BLANK: 2613344 Matrix: Solid
Associated Lab Samples: 40268135001, 40268135002, 40268135003, 40268135004, 40268135005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Diesel Range Organics	mg/kg	<1.3	4.3	09/19/23 06:03	

LABORATORY CONTROL SAMPLE & LCSD: 2613345 2613346

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Diesel Range Organics	mg/kg	39.7	28.0	28.4	70	71	70-120	1	20	

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QUALITY CONTROL DATA

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

QC Batch: 455214
QC Batch Method: ASTM D2974-87
Analysis Method: ASTM D2974-87
Analysis Description: Dry Weight/Percent Moisture
Laboratory: Pace Analytical Services - Green Bay
Associated Lab Samples: 40268135001, 40268135002, 40268135003, 40268135004, 40268135005

SAMPLE DUPLICATE: 2614208

Parameter	Units	40268211003 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	5.6	5.7	2	10	

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QUALIFIERS

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

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.

DL - Adjusted Method Detection Limit.

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.

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TNI - The NELAC Institute.

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
DC	Chromatographic pattern inconsistent with typical Diesel Fuel.
G+	Late peaks present outside the GRO window.
GO	Early and late peaks present outside the GRO window.
R1	RPD value was outside control limits.
v1	The continuing calibration verification was above the method acceptance limit. Any detection for the analyte in the associated samples may have a high bias.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: BP DRO, PAH, VOC, GRO
Pace Project No.: 40268135

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
40268135001	**BP-1**	WI MOD DRO	454968	WI MOD DRO	455073
40268135002	**BP-2**	WI MOD DRO	454968	WI MOD DRO	455073
40268135003	**BP-3**	WI MOD DRO	454968	WI MOD DRO	455073
40268135004	**BP-4**	WI MOD DRO	454968	WI MOD DRO	455073
40268135005	**BP-4 DUP**	WI MOD DRO	454968	WI MOD DRO	455073
40268135001	**BP-1**	TPH GRO/PVOC WI ext.	455273	WI MOD GRO	455276
40268135002	**BP-2**	TPH GRO/PVOC WI ext.	455273	WI MOD GRO	455276
40268135003	**BP-3**	TPH GRO/PVOC WI ext.	455273	WI MOD GRO	455276
40268135004	**BP-4**	TPH GRO/PVOC WI ext.	455273	WI MOD GRO	455276
40268135005	**BP-4 DUP**	TPH GRO/PVOC WI ext.	455273	WI MOD GRO	455276
40268135001	**BP-1**	EPA 3546	455633	EPA 8270E by SIM	455673
40268135002	**BP-2**	EPA 3546	455633	EPA 8270E by SIM	455673
40268135003	**BP-3**	EPA 3546	455633	EPA 8270E by SIM	455673
40268135004	**BP-4**	EPA 3546	455633	EPA 8270E by SIM	455673
40268135005	**BP-4 DUP**	EPA 3546	455633	EPA 8270E by SIM	455673
40268135001	**BP-1**	EPA 5035/5030B	455539	EPA 8260	455544
40268135002	**BP-2**	EPA 5035/5030B	455539	EPA 8260	455544
40268135003	**BP-3**	EPA 5035/5030B	455539	EPA 8260	455544
40268135004	**BP-4**	EPA 5035/5030B	455539	EPA 8260	455544
40268135005	**BP-4 DUP**	EPA 5035/5030B	455539	EPA 8260	455544
40268135001	**BP-1**	ASTM D2974-87	455214		
40268135002	**BP-2**	ASTM D2974-87	455214		
40268135003	**BP-3**	ASTM D2974-87	455214		
40268135004	**BP-4**	ASTM D2974-87	455214		
40268135005	**BP-4 DUP**	ASTM D2974-87	455214		

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT All relevant fields must be completed accurately.

Page: of

Section A Required Client Information		Section B Required Project Information		Section C Invoice Information	
Company	La Crosse County Solid Waste Dept	Report To	Same as Client information	Attention	
Address	3200 Berlin Drive	Copy To		Company Name	
				Address	
Email To	jdavis@lacrossecounty.org	Purchase Order No		Pace Quote Reference	
Phone	608-790-1900 Fax	Project Name		Pace Project Manager	
Requested Due Date/TAT:		Project Number		Pace Profile #	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	DRO, PAH, Moisture	VOC, GRO	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	BP-1			9/14/23	8 30				2	X								X	X			001
2	BP-2			9/14/23	8 30				2	X								X	X			002
3	BP-3			9/14/23	8 30				2	X								X	X			003
4	BP-4			9/14/23	8 30				2	X								X	X			004
5	BP-4 DUP			9/14/23	8 30				2	X								X	X			005
6	BP-1			9/14/23	8 45				3							X			X			
7	BP-2			9/14/23	8 45				3							X			X			
8	BP-3			9/14/23	8 45				3							X			X			
9	BP-4			9/14/23	8 45				3							X			X			
10	BP-4 DUP			9/14/23	8 45				3							X			X			
11	Blank																					006
12																						

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Fedex	9/15/23	0955		9/15/23	0955	0.0	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie L Davis

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 9/14/23

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1 5% per month for any invoices not paid within 30 days

Sample Preservation Receipt Form

Client Name: LaCrosse County Solid Waste Project #

All containers needing preservation have been checked and noted below. ☐Yes ☐No ☒N/A Initial when completed: Date/ Time.

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

	Glass							Plastic						Vials						Jars				General							
Pace Lab #	AG1U	BG1U	AG1H	AG4S	AG5U	AG2S	BG3U	BP1U	BP3U	BP3B	BP3N	BP3S	BP2Z	VG9C	DG9T	VG9U	VG9H	VG9M	VG9D	JGFU	JG9U	WGFU	WPFU	SP5T	ZPLC	GN 1	GN 2	VOA Vials (>6mm) *	H2SO4 pH ≤2	NaOH+Zn Act pH ≥9	NaOH pH ≥12	HNO3 pH ≤2	pH after adjusted	Volume (mL)
001																		MW																2.5 / 5
002																		MW																2.5 / 5
003																		MW																2.5 / 5
004																		MW																2.5 / 5
005																		MW																2.5 / 5
006																	2											2						2.5 / 5
007																																		2.5 / 5
008																																		2.5 / 5
009																																		2.5 / 5
010																																		2.5 / 5
011																																		2.5 / 5
012																																		2.5 / 5
013																																		2.5 / 5
014																																		2.5 / 5
015																																		2.5 / 5
016								mtf 9/15 TS																										2.5 / 5
017																																		2.5 / 5
018																																		2.5 / 5
019																																		2.5 / 5
020																																		2.5 / 5

Exceptions to preservation check (VOA) Coliform, TOC, TOX, TOH, O&G, WI DRO, Phenolics, Other: Headspace in VOA Vials (>6mm) : ☒Yes ☐No ☐N/A ***If yes look in headspace column**

AG1U	1 liter amber glass	BP1U	1 liter plastic unpres	VG9C	40 mL clear ascorbic w/ HCl	JGFU	4 oz amber jar unpres
BG1U	1 liter clear glass	BP3U	250 mL plastic unpres	DG9T	40 mL amber Na Thio	JG9U	9 oz amber jar unpres
AG1H	1 liter amber glass HCL	BP3B	250 mL plastic NaOH	VG9U	40 mL clear vial unpres	WGFU	4 oz clear jar unpres
AG4S	125 mL amber glass H2SO4	BP3N	250 mL plastic HNO3	VG9H	40 mL clear vial HCL	WPFU	4 oz plastic jar unpres
AG5U	100 mL amber glass unpres	BP3S	250 mL plastic H2SO4	VG9M	40 mL clear vial MeOH	SP5T	120 mL plastic Na Thiosulfate
AG2S	500 mL amber glass H2SO4	BP2Z	500 mL plastic NaOH + Zn	VG9D	40 mL clear vial DI	ZPLC	ziploc bag
BG3U	250 mL clear glass unpres					GN 1	
						GN 2	

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Sample Condition Upon Receipt Form (SCUR)

Project #:

WO# : 40268135

40268135

Client Name: LaCrosse County Solid Waste

Courier: ☐ CS Logistics ☑ Fed Ex ☐ Speedee ☐ UPS ☐ Waltco
☐ Client ☐ Pace Other: _____

Tracking #: 7734 1108 8349

Custody Seal on Cooler/Box Present: ☑ yes ☐ no Seals intact: ☑ yes ☐ no

Custody Seal on Samples Present: ☐ yes ☑ no Seals intact: ☐ yes ☑ no

Packing Material: ☑ Bubble Wrap ☑ Bubble Bags ☐ None ☐ Other _____

Thermometer Used SR - 120 **Type of Ice:** (Wet) Blue Dry None ☐ Meltwater Only

Cooler Temperature Uncorr: 0.0 /Corr. 0.0

Temp Blank Present: ☑ yes ☐ no **Biological Tissue is Frozen:** ☐ yes ☐ no

Person examining contents:
Date: 9/15/25 /Initials: mtl

Labeled By Initials: AG

Temp should be above freezing to 6°C
Biota Samples may be received at ≤ 0°C if shipped on Dry Ice.

Chain of Custody Present:	☑Yes ☐No ☐N/A	1.
Chain of Custody Filled Out:	☐Yes ☑No ☐N/A	2. Invoice, pg# mtl 9/15/25
Chain of Custody Relinquished:	☐Yes ☑No ☐N/A	3.
Sampler Name & Signature on COC:	☐Yes ☑No ☐N/A	4.
Samples Arrived within Hold Time:	☑Yes ☐No	5.
- DI VOA Samples frozen upon receipt	☐Yes ☐No	Date/Time:
Short Hold Time Analysis (<72hr):	☐Yes ☑No	6.
Rush Turn Around Time Requested:	☐Yes ☑No	7.
Sufficient Volume:		8.
For Analysis: ☑Yes ☐No MS/MSD:	☐Yes ☑No ☐N/A	
Correct Containers Used:	☑Yes ☐No	9.
Correct Type: Pace Green Bay, Pace IR, Non-Pace		
Containers Intact:	☑Yes ☐No	10.
Filtered volume received for Dissolved tests	☐Yes ☐No ☑N/A	11.
Sample Labels match COC:	☑Yes ☐No ☐N/A	12.
-Includes date/time/ID/Analysis Matrix: S, W		
Trip Blank Present:	☑Yes ☐No ☐N/A	13. ~~Trip blank cure expired~~
Trip Blank Custody Seals Present	☑Yes ☐No ☐N/A	
Pace Trip Blank Lot # (if purchased): 492		mtl 9/15/25

Client Notification/ Resolution: If checked, see attached form for additional comments ☐

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

PM Review is documented electronically in LIMs. By releasing the project, the PM acknowledges they have reviewed the sample logi

H-3 – Annual Shingle Report

Asphalt Shingle Management

1.1 Summary of Tonnages of Recycled Asphalt Shingles and Shingles Received

A total of 6,917.90 of recycled asphalt shingles were received in 2023.

1.2 Tabulate the Location and Amount of Shingles Used by Individual Paving Project

For 2023, 4,412.61 tons of processed shingles were sent out for incorporation into hot mix asphalt or aggregate. Processed shingles also included asphalt shingles accepted and processed in 2023, which was an additional 2,207.91 tons. Mathy Construction received a total of 9,235.79 tons of processed shingles, produced at the La Crosse County Landfill, from St. Joseph Construction. The material was incorporated into aggregate material at two separate locations shown below. Unprocessed shingles received in 2023 of 4,709.99 tons will be processed in 2024.

Milestone Materials Swanson Pit
Milestone Materials Isle La Plume

1.3 Describe the Asbestos Testing Program

In 2023, 6,917.90 tons of residential asphalt shingles were accepted and stockpiled in the shingle processing area. Samples were collected monthly by operations staff at the La Crosse County landfill. Samples taken were based off of tonnage subtotals, at the rate of one sample per one hundred tons. Periodically, samples were prepared and shipped by the landfill scale attendant to Micro Analytical Incorporated for asbestos testing. The bulk asbestos analytical report and testing was prepared utilizing PLM and dispersion stain technique.

1.4 Summarized Test Results of Ground Recycled Asphalt Shingles

Samples Sent 2023

DATE	# OF LOADS	TONS	TOTAL SAMPLES REQUIRED	TOTAL SAMPLES SENT	TOTAL SAMPLES NON-ASBESTOS	TOTAL SAMPLES W/ASBESTOS	Date Shipped and Quantity
January	4	8.83	0	0	0	0	0
February	8	10.59	0	0	0	0	0
March	46	127.82	2	2	2	0	4/5/2023
April	162	553.58	6	6	6	0	5/8/2023
May	237	737.89	8	8	8	0	7/8/2023
June	236	769.22	8	8	8	0	7/8/2023
July	156	457.12	5	5	5	0	8/9/2023
August	318	1078.55	11	11	11	0	9/21/2023
September	376	1364.82	14	14	14	0	10/5/2023
October	368	1161.59	12	12	12	0	11/7/2023
November	191	596.13	6	6	6	0	12/11/2023
December	18	51.78	1	1	1	0	
TOTALS	**2120**	**6917.90**	**73**	**73**	**73**	0	

1.5 Discuss the Positive Aspects of the Program

In 2019, La Crosse County received approval to incorporate processed RAS into aggregate materials. Processed shingles will be used as an unbonded base course material for driveways, roads, parking lots and general fill applications when mixed with native aggregates or recycled concrete and/or bituminous if the mixture contains less than 15% by weight of RAS. The purpose of the RAS is to provide a fines replacement in the aggregate base course. This application will provide an additional technical and economically feasible option for RAS material.

The two most significant beneficial aspects of the residential asphalt shingle recycling program have been to minimize materials placed in the landfill and to provide a product that has been incorporated into hot mix or substituted for gravel road sub-base. Since the shingles weigh approximately one ton per yard after processing, approximately 6,917 cubic yards of air space use will be avoided. The use of the ground shingles as a substitute for road base has minimized fuel consumption associated with the transport of materials from quarries and resulted in a product that produces less dust, less tracking of mud on roads and saved the County significant costs. Some additional benefits of the recycling program have been increased public acceptance of waste diversion concepts and the reduced cost to customers. Shingles suitable for recycling are charged at a rate of $40/ton in 2023.

In January of 2013, the La Crosse County Solid Waste Department requested and was granted approval by the WDNR West Central Region, for the storage of preprocessed and post processed shingles of up to 15,000 tons, with a maximum windrow height of 20 feet.