Portland, Maine



Yes. Life's good here.

Danielle P. West-Chuhta Corporation Counsel

Jennifer L. Thompson Associate Counsel Lawrence C. Walden Associate Counsel Trish McAllister Neighborhood Prosecutor

December 18, 2013

Mr. Alan Lerman, President E. Perry Iron and Metal Co., Inc. 115-139 Lancaster St. Portland, ME 04101

Re: Scrap Metal Recycling Facilities license for E. Perry Iron and Metal, Inc.

Dear Mr. Lerman:

Recently, my office was informed that your business still has not filed a completed application and received a Scrap Metal Recycling Facilities license. You had started working on an application with Rick Knowland in 2008. In 2009, Gary Wood contacted you and your attorney stating that because of the failure of the negotiations to relocate your facility you needed to file an application and obtain a scrap metal facility license.

Your facility must prepare and file a license application and come into compliance with the scrap metal recycling facilities ordinance and the related rules and regulations within thirty (30) business days from the date of this letter.

I have attached a copy of both the ordinance and the regulations to assist you. Please note that section 31-6(c) states that the necessary license runs from October 1st to September 31st, but that the Council can issue a temporary license for less than the full calendar year if the applicant is making a good-faith effort to comply with the requirements of the ordinance.

Please contact Rick Knowland in the Planning Department immediately and complete the application so that we can put the license on the Council agenda for approval. If you fail to comply, the City will be forced to pursue all legal remedies available to it including, but not limited to, the filing of an action in court to enforce the provisions of the enclosed ordinance and remedy this matter.

Thank you for your cooperation.

Sincerely,

Danielle West-Chuhta Corporation Counsel

Encl.

cc: Mark Rees, City Manager

Jeff Levine, Director, Planning & Urban Development

Rick Knowland, Senior Planner Katherine Jones, City Clerk Business License Administrator

Alan Wolf, Esq.

Chapter 31 SCRAP METAL RECYCLING FACILITIES

Sec. 31-1. Purpose.

The purpose of this ordinance is to protect the public's health, safety, and general welfare by controlling scrap metal recycling facilities.

(Ord. No. 255-03/04, 9-8-04)

Sec. 31-2. Authority.

This ordinance is enacted pursuant to the Home Rule Authority conferred on Maine municipalities by Art. VIII, Part Second., Sec.1 of the Maine Constitution and the Statutory Authority conferred by 30-A M.R.S.A. § 3001 and 30-A M.R.S.A. §§ 3751-3760. (Ord. No. 255-03/04, 9-8-04)

Sec. 31-3. Applicability.

This ordinance shall apply to the licensing and renewal of licenses all scrap metal recycling facilities, as defined in this ordinance.

(Ord. No. 255-03/04, 9-8-04; Ord. No. 286-05/06, 6-19-06)

Sec. 31-4. Definitions.

Department: means the department of planning and development or its designee.

Scrap metal recycling facility: means an area used to receive, process, or store any form of metal that is already scrap for recycling or reuse and which handles, removes, or disposes of waste as part of the processing. The definition shall include the area within an automobile recycling facility as defined in 30-A M.R.S.A. § 3752 (1-A) within which vehicles are drained, dismantled, sorted or recycled. The definition shall not include a transfer station licensed by the State.

Motor vehicle: shall mean any self-propelled vehicle originally manufactured to include an engine of any kind which propels the vehicle across the ground on wheels, tracks or any combination thereof.

Ordinary view: means the unaided visual access from any point within six feet of ground level that a person has of a scrap metal recycling facility from the side that is furthest away from the facility of any immediately adjacent public road or 50 feet from an abutting property line. Recycled metal or metal awaiting processing

Scrap Metal Recycling Facilities
Chapter 31
Rev. 7-19-06

or recycling shall be construed to not be in ordinary view from a public road or abutting property line when it is located more than 1000 feet from the abutting property lines or the applicant has constructed a screen between the storage area and the public road or property line in accordance with regulations promulgated by the department.

"Abutting property line" in this definition shall not include side or back property lines on or in any property zoned I-H unless the property abuts other property on which a residential use is permitted by the applicable zoning.

Public road: shall mean a road, street, highway, easement or way over which the public has a legal right to travel. The term shall not include roads that are part of the federal interstate highway system.

Waste: means hazardous waste as defined or identified in Chapter 850, oily waste, as defined or identified in Chapter 405, Sec. 6(c) (3), special waste as defined or identified in Chapter 405, Sec. 6, and universal waste as defined in Chapter 850, Sec. 3A (13) of the Regulations of the Maine Department of Environmental Protection and shall include any amendment to those regulations after the effective date of this ordinance or regulations promulgated hereunder.

Waterbody: is any lake, pond, or reservoir of standing water one acre or more in surface area, but not including any man-made waterbodies where the entire perimeter is owned by the same landowner.

Watercourse: is any river, stream or brook which acts as the drainage mechanism for watershed areas of 100 acres or more.

Wetland: is any land area of five or more acres characterized by wetland soils (Vassalboro, Togus, Rifle or Biddeford Fibrous or Mucky Peats; Ridgebury, Scantic or Limerick V.S.T.F. sandy loams or silts; or Saco soils); wetland vegetation (plum grass, cutgrass, carex, cattails, arrowheads, pickerel weeds, cranberries, wild rice, pond weeds, coontail, spatterdock, wild celery, water milfoil, water lilies, sphagnum moss, etc.); a high water table less than 6" from surface; or any land area mapped as wetlands by the Maine Department of Environmental Protection, the Maine Department of Conservation, or the Maine Department of Inland Fisheries and Wildlife.

(Ord. No. 255-03/04, 9-8-04; Ord. No. 286-05/06, 6-19-06; Ord. No. 7-06/07, 7-17-06)

Sec. 31-5. License Required.

1-F-3

City of Portland Code of Ordinances Sec. 31-5 Scrap Metal Recycling Facilities
Chapter 31
Rev. 7-19-06

No person may establish, operate or maintain a scrap metal recycling facility without first obtaining a nontransferable license from the city council. Any scrap metal recycling facility must also receive site plan review approval by the planning board pursuant to the site plan review ordinance prior to receiving a license from the city council.

(Ord. No. 255-03/04, 9-8-04)

Sec. 31-6. Administration.

- (a) This ordinance shall be administered by the department of planning and development, which department shall have the authority to promulgate rules to implement this ordinance utilizing the rulemaking procedure described in section 25-117 of the city code. No scrap metal recycling facility license shall be issued unless the provisions of this ordinance are met.
- (b) Before approving an application, the city council shall hold a public hearing regarding the licensing or license renewal of a scrap metal recycling facility. The city shall post a notice of the hearing at least seven and not more than 14 days before the hearing in at least two public places in the municipality or unorganized territory and publish a notice in one newspaper having general circulation in the municipality or unorganized territory in which the scrap metal recycling facility is located or to be located. The city shall give written notice of the application to the Department of Transportation and abutters by mailing a copy of the application, at least seven and not more than 14 days before the hearing.
- (c) Licenses must be renewed annually or triennially, when allowed, on or before October 1st of each license year. In any calendar year, the city council may issue a temporary license to operate for less than the full calendar year if an applicant is making a good-faith effort to comply with the requirements of this ordinance.
- (d) The applicant shall test the site of the facility for pollution annually pursuant to regulations promulgated by the department and provide the test results to the department. The department may also annually inspect and test an applicant's site for soil or groundwater pollution, or cause the site to be tested and inspected by a consultant hired by the department, all at the applicant's expense, to ensure compliance with the provisions of this ordinance and state law. The department, at its discretion, and upon reasonable notice may also test, cause to be tested, or require the applicant to test abutting property for hazardous and special waste, at the applicant's expense, when on-site test results

1-5-4

Scrap Metal Recycling Facilities
Chapter 31
Rev. 7-19-06

City of Portland Code of Ordinances Sec. 31-6

show levels of waste that exceed the limits of state law or the regulations promulgated hereunder, whichever are stricter, and the abutting property owner consents to such testing.

(e) The department shall collect annually, in advance from the applicant, a \$515 fee for each license for a scrap metal recycling facility, plus all costs associated with posting or publishing notice of public hearing, plus all costs to conduct the inspecting or testing allowed by this ordinance and deemed necessary or appropriate by the department pursuant to its regulations and this ordinance.

The department shall charge an applicant's account for allowed costs and expenditures and to the extent an account has funds remaining after all costs have been paid, either credit or reimburse the balance to the applicant at the applicant's discretion.

The fee for a late application is \$1,500.

The fee for any license that applies to more than a one-year period shall be \$515 for each year or part thereof.

(f) An application for a scrap metal recycling facility license or a renewal of such license must be filed at least 90 days before October of the license year. If the department determines that an application is not complete, it shall not process the application but shall inform the applicant in writing of the deficiencies. Any delays related to the filing of an incomplete application shall not extend the deadlines established in this ordinance or rules promulgated hereunder unless such deadlines are waived by the department for good cause shown.

The department may determine in its sole discretion that the lateness of a filing or an incomplete application makes it impossible to complete the inspection and testing required or allowed by the ordinance prior to the renewal date of the license and may issue a written order to the owner and operator of the facility that it must cease operation on the date on which the current license expires and remain out of operation until the new license is issued.

(Ord. No. 255-03/04, 9-8-04; Ord. No. 247-05/06, 5-15-06; Ord. No. 286-05/06, 6-19-06)

Sec. 31-7. Submission requirements.

Any application for a scrap metal recycling facility license shall contain the following information and any additional information required by rules promulgated by the department:

Scrap Metal Recycling Facilities Chapter 31 Rev. 7-19-06

City of Portland Code of Ordinances Sec. 31-7

- (a) The property owner's name, address and telephone number and the name, address and telephone number of the person or entity who will operate the site. If the property is owned by more than one person or entity, the name, address and telephone number of each owner must be listed. If the property is owned in whole or in part by a corporation, the name, address and telephone number of the corporation's registered agent in Maine must be listed. The name, address and telephone number of the person or entity to whom the city should send official notices or correspondence must also be listed.
- (b) The maximum storage height of any piles of metal or other material.
- (c) The location of any areas on the site used for processing, preparing or storage of materials.
- (d) The location of any sand and/or gravel aquifer and/or any sand and gravel aquifer recharge area as described on the Maine Geological Survey significant aquifer map for the Portland West Quadrangle (GSM Map No. 99-11) or as mapped by a State of Maine certified geologist or other competent professional.
- (e) The location of any residences, schools, public parks, public playgrounds, public bathing beaches, places of worship, or cemeteries within 500 feet of the area where metal and/or materials will be stored or processed.
- (f) The boundaries of the 100-year floodplain.
- (g) A site plan that complies with chapter 14, section 525(b) of the city code and also includes such other information as required by the rules promulgated by the department.
- (h) Soil tests. Results and data from soil sampling and testing will be required for licensing of scrap metal recycling facilities within the 90-day period prior to the end of the licensing period. Such testing shall comply with rules promulgated by the department.
- (i) Groundwater tests. Results and data from groundwater sampling and testing will be required for licensing of scrap metal recycling facilities within the 90-day period prior to the expiration of the licensing period. Such

Scrap Metal Recycling Facilities
Clapter 31
Rev. 7,19-06

testing shall comply with rules promulgated by the department.

(j) Other information.

- The types of metal processed on the site;
- 2. The types of waste handled and the average volume per year per material;
- 3. A description of the protocol for handling waste and the destination to which that waste is sent;
- 4. An operations manual as described in chapter 402 of the Maine Department of Environmental Protection regulations;
- 5. Operational records as described in chapter 402 of the Maine Department of Environmental Protection regulations;
- 6. An annual report as described in chapter 402 of the Maine Department of Environmental Protection regulations.

(Ord. No. 255-03/04, 9-8-04; Ord. No. 286-05/06, 6-19-06)

Sec. 31-8. Performance standards.

The city council shall not issue a license to operate a scrap metal recycling facility unless the applicant can demonstrate that all of the following performance standards have been and will be met:

- (a) Operation. The facility is operated so that it does not contaminate soil or groundwater or surface water to a level prohibited by state law or rules promulgated by the department, whichever is stricter.
- (b) Approval and Coordination with site plan review. For facilities established after the effective date of this ordinance, the facility has received site plan approval by the planning board pursuant to the site review ordinance, and the operation of the facility is in compliance with the approved site plan.

For facilities established prior to the effective date of this ordinance, the facility has received site plan approval by the department and the operation of the facility is in compliance with the approved site plan.

Scrap Metal Recycling Facilities
Chapter 31
Rev. 7-19-06

City of Portland Code of Ordinances Sec. 31-8

- (c) Aquifer location prohibited. No scrap metal recycling facility shall be located over a sand and gravel aquifer or aquifer recharge areas as mapped by the Maine Geological Survey or by a licensed geologist.
- (d) Flood plain location prohibited. No scrap metal recycling facility shall be located within a 100-year flood plain.
- (e) Dismantling motor vehicles. All dismantling of motor vehicles shall e done in compliance with rules promulgated by the department.
- (f) Storage/handling of batteries and fluids from motor vehicles. All batteries and fluids shall be handled as required by rules promulgated by the department.
- (g) Storage and handling of waste. All waste shall be handled as required by rules promulgated by the department.
- (h) Noise impact. To reduce the impact of noise, all mechanized sorting, baling or processing of metals shall be done after 7 a.m. and before 6 p.m. Mondays through Saturdays.
- (i) Setback from public areas. No scrap metal recycling facility shall be located within 500 feet of any public park, public playground, and public bathing beach, school, places of worship or cemetery.
- (j) Setback from waterways and water supplies. No scrap metal recycling facility shall be located within 100 feet of any waterbody, watercourse or wetland, or within 300 feet of a well that serves as a public or private water supply.
- (k) Road/property line setbacks. No scrap metal recycling facility shall be located within 1,000 feet of the right-of-way of any highway incorporated in both the interstate system and primary system or within 600 feet of the right-of-way of any other highway or within 1,000 feet of an abutting property line except for a scrap metal recycling facility entirely screened from ordinary view from that public road or abutting property line at all times in accordance with the screening standards in the rules promulgated by the department.

Scrap Metal Recycling Facilities
Chapter 31
Rev. 7-19-06

- (1) Visual impact. Metal or other material in a scrap metal recycling facility shall be located in such a way so as not to be in ordinary view.
- (m) Screening. Screening may be accomplished by natural or man-made objects, planting or properly constructed fences, or any combination thereof, any of which must entirely screen the scrap metal recycling facility from ordinary view throughout the year. Screening shall be accomplished according to the standards prescribed by rules promulgated by the department.
- (n) Remedial action plan required. A remedial action plan will be required of the applicant or a licensee whenever the department determines that, based upon testing data or other information it has received and verified that the applicant or licensee is not in compliance with the requirements of this ordinance or regulations promulgated hereunder. Within 30 days after the department's written request to do so, the licensee shall submit a remedial action plan and schedule to the department, for its review and approval that removes, remediates, or abates waste contamination or any other violation of this ordinance or the rules promulgated hereunder.
- (o) Implementation of remedial action plan. Beginning thirty (30) days after the department's review and approval of the remedial action plan and schedule required by paragraph 31-8(n) of this article, implement the remedial action plan and schedule as modified and approved by the department.
- (p) Exemption from specific requirements. The requirements in subparagraphs 8(c), (d), (i) and (j) above shall not apply to facilities existing on or before the effective date of this ordinance.

(Ord. No. 255-03/04, 9-8-04; Ord. No. 136-05/06, 12-19-05; Ord. No. 286-05/06, 6-19-06)

Sec. 31-9. Process and standards for renewal of a license.

- (a) An application for a renewal of a license submitted pursuant to § 31-6(c) shall identify which information, if any, required on the original application pursuant to § 31-7, has been changed or modified since the last application was filed.
- (b) The applicant shall submit evidence that it conducted any soil and groundwater testing required under the scrap metal

Scrap Metal Recycling Facilities Chapter 31 Rev. 7-19-06

recycling facilities ordinance and its prior license and that it submitted the results of such testing to the department.

- (c) If the results of the prior required testing resulted in the city requiring that the applicant submit and implement a remedial action plan, then the applicant must submit evidence that it implemented the remedial action plan.
- (d) If the city council finds that the standard of subsections(a), (b) and (c) above have been met, the city council shall issue a renewal of the license.
- (e) If the applicant can demonstrate that its license has been issued and renewed for a term of three (3) consecutive operating years starting from the first day of operation, the subsequent renewal of that license, assuming that subsection (d) above has been met, shall be for a three (3) year term, with consecutive three (3) year terms for renewal being issued thereafter subject to the conditions in (1) below.
 - (1) Environmental testing. If environmental testing in three consecutive operating years starting from the first day of operation demonstrates that the facility meets the environmental standards of the ordinance and any rules promulgated hereunder then environmental testing shall be conducted once every three years. If the triennial testing demonstrates that the environmental standards have not been met then the applicant must conduct annual testing until such time as the testing shows compliance for three consecutive years.

Nothing in this subparagraph (1) shall prevent the city from conducting environmental testing at its own expense in any year in which the applicant is not required to test on reasonable notice to and with the consent of the license holder, which consent shall not be unreasonably withheld.

(Ord. No. 286-05/06, 6-19-06)

Sec. 31-10. Rulemaking authority.

The department shall have the authority to make any rules necessary to effect the purpose of this ordinance, including but not limited to, rules that remove or add substances or allowable limits for waste, as defined herein. The department shall follow the rulemaking procedure in chapter 12, section 12-105(b) and (b) (1) of the city code. Any proposed rules resulting from that process shall be brought to the City Council for final review and action. (Ord. No. 255-03/04, 9-8-04; Ord. No. 286-05/06, 6-19-06)

Scrap Metal Recycling Facilities
Chapter 31
Rev. 7-19-06

Sec. 31-11. Appeals.

- (a) Interpretation appeal. An interpretation appeal may be taken by an applicant from an interpretation by the department of this ordinance or any rule promulgated hereunder to the board of appeals, but the board may only overturn the department's interpretation if it is clearly erroneous or without any basis in the record. The decision of the board of appeals on interpretation appeals is final and may not be appealed.
- (b) Appeals of license denial, suspension or revocation. If the city council denies, suspends, or revokes a license, the applicant may appeal to the Maine Superior Court pursuant to Rule 80B of the Maine Rules of Civil Procedure. (Ord. No. 255-03/04, 9-8-04; Ord. No. 286-05/06, 6-19-06)

Sec. 31-12. Enforcement.

- (a) This ordinance shall be enforced by the department. An applicant or licensee shall cooperate fully with the department and allow such site inspections, record review and testing as the department deems necessary to assure compliance with this ordinance. The department shall give an applicant or licensee written notice of a site inspection, record review or testing at least five (5) business days before the site inspection, record review or testing takes place.
- (b) This ordinance shall be liberally construed to accomplish its purpose of preventing environmental contamination, visual impairment and unnecessary noise. Whenever this ordinance references existing state or federal regulations, the department shall have the same authority as the Maine Department of Environmental Protection or the Federal Environmental Protection Agency as is conferred on those agencies by the relevant state or federal regulations.

(Ord. No. 255-03/04, 9-8-04; Ord. No. 286-05/06, 6-19-06)

Sec. 31-13. Penalties.

Any violation of this ordinance shall also be deemed a nuisance within the meaning of 17 M.R.S.A. § 2802, and any violator shall be subject to the penalties set forth in 30-A M.R.S.A. § 4452 and any other remedy available at law. Violation of any condition, restriction or limitation inserted in a license by the city council or imposed by this ordinance or the rules promulgated hereunder is cause for revocation or suspension of that license by the city council. The revocation process shall be conducted in accordance

Scrap Metal Recycling Facilities
Chapter 31
Rev. 7-19-06

with the notice and hearing provisions found in 30-A M.R.S.A. § 3758(3). (Ord. No. 255-03/04, 9-8-04; Ord. No. 286-05/06, 6-19-06)

Sec. 31-14. Transitional provision for calendar year 2005.

In calendar year 2005 only, the license required by this ordinance must be obtained on or before April 1, 2005. The submission requirements and application described in Sec. 31-7 must be filed on or before February 18, 2005. (Ord. No. 134-04/05, 1-3-05, enacted as an emergency; Ord. No. 286-05/06, 6-19-06)

Sec. 31-15. Waiver.

Where the city council makes written findings of fact that there are special circumstances of a particular site proposed to become a scrap metal recycling facility, it may waive some or all of the submission requirements or the standards, unless otherwise indicated in the regulations, to permit a more practical and economical development, provided the public health, safety and welfare are protected and provided the waivers do not have the effect of nullifying the intent and purpose of the official map, the comprehensive plan, this chapter 31 and the regulations issued thereunder, and the land use code.

(Ord. No. 286-05/06, 6-19-06)

Order 183-06/07
Postponed on 4/30/07
Passage: 6/18/07, 9-0
NICHOLAS M. MAVODONES (MAYOR)
KEVIN J. DONOGHUE (1)
DAVID A. MARSHALL (2)
DONNA J. CARR (3)
CHERYL A. LEEMAN (4)

CITY OF PORTLAND

IN THE CITY COUNCIL

JAMES I. COHEN (5)
JAMES F. CLOUTIER (A/L)
JILL C. DUSON (A/L)
EDWARD J. SUSLOVIC (A/L)

ORDER APPROVING AMENDMENTS TO SCRAP METAL RECYCLING FACILTIES RULES

ORDERED, that the Portland City Council, pursuant to Section 31-10 of the Portland City Code, hereby amends the Scrap Metal Recycling Facilities Rules as Promulgated by the Department of Planning and Development, as indicated on the form attached hereto.

Amendments to Scrap Metal Recycling Facilities Rules Promulgated by the Department of Planning and Development Pursuant to the Scrap Metal Recycling Facilities Ordinance

The following amendments to the scrap metal recycling facilities rules are promulgated pursuant to Section 31-10 of the Scrap Metal Facilities Ordinance and all terms, conditions and requirements in that ordinance are hereby incorporated by reference.

Rule #1 Baseline Testing:

- (a) An environmental waste baseline sampling plan is required which shall include the location of soil sampling and groundwater sampling locations to establish waste baseline environmental conditions at the site.
- (b) A minimum of three on-site surficial soil samples, on the upper six (6) inches and three Geoprobe-installed or conventionally-installed overburden monitoring wells are required for all sites.
- (c) The Department shall review and approve the number and location of soil samples and monitoring wells after reviewing the waste baseline exploration and sampling plan in accordance with generally accepted environmental standards and after consulting with the applicant's environmental consultant, if necessary.
- (d) Initial waste baseline evaluation of the scrap metal recycling facility requires a waste management compliance audit of the facility by a qualified professional and the results of the audit shall be submitted to the City of Portland for evaluation prior to issuance of the license for the facility.

Rule #2 Soil Testing:

- (a) Initial waste baseline testing shall consist of five on-site soil samples collected according to a sampling plan developed by a qualified environmental professional and submitted to the Department for review and approval as part of the application.
- (b) Of the five on-site samples three shall be taken from soils in the principle outdoor work areas, i.e., in which metals to be recycled are received, processed and stored. The two additional on-site samples shall be taken in areas that are down-gradient from the principal work areas and are adjacent to property boundaries at which metals to be recycled are received, processed or stored. The soil samples shall represent a composite of the upper six-inches of soil at the sampling location.
- (c) The soil samples shall be analyzed for volatile organic compounds (EPA Method 8260), semi-volatile organic compounds (EPA Method 8270), PCBs (EPA Method 8082), the eight RCRA metals (EPA Methods 3010/6010), and nickel (Ni), zinc (Zn) and copper (Cu) (EPA Method 6010) diesel-range organics (MDEP Method 4.1.25), and gasoline-range organics (MDEP Method 4.2.17).
- (d) The criteria for evaluation of soil samples shall be the Maine DEP Remedial Action Guidelines for Soils (RAGS) of May 20, 1997 (the "Remedial Action Guidelines".
- (e) The City of Portland reserves the right to request split samples of soil taken as part of the licensing procedure. The split samples taken by the City of Portland shall be analyzed by an independent laboratory in order to provide corroboration of results.

In the event that the results of waste baseline soil sampling exceed the Remedial Action Guidelines, the City may require additional sampling at the metal recycling facility or off-site and/or a plan for remediation of contaminated soils at on-site or off-site locations.

Notwithstanding any other provision of the Scrap Metal Recycling Ordinance or these Rules, in the event that a scrap metal recycling facility is located on or has relocated to an existing industrial, commercial or retail site and the baseline test results for that site exceed certain parameters that either are consistent with a use known to exist at the site prior to the scrap metal recycling facility's operation on the site, or shown to have occurred prior to the scrap metal recycling facility's operation on the site, then no remediation plan for those parameters shall be required of the owner or operator of the scrap metal recycling facility so long as the previously existing baselines or the state regulatory guidelines as incorporated, whichever are higher, are not exceeded.

If a remediation plan is implemented by an entity other than the owner or operator of the scrap metal recycling facility or voluntarily implemented by such owner or operator and the remediation lowers the previously existing baselines, the lower baselines or the state regulatory guidelines as incorporated, whichever are higher, shall be used for the purpose of future testing and remediation requirements.

For the purpose of this rule an "owner or operator" includes any prior owners or operators in which a controlling interest was held by the same individuals or legal entities, or any person or entity acting in their behalf.

Rule #3 Groundwater Testing:

- (a) Initial waste baseline testing shall consist of three on-site overburden monitoring wells installed by Geoprobe or conventional drilling methods. The location and the rationale for the location of the three monitoring wells shall be developed by a qualified environmental professional and submitted to the Department for review and approval as part of the application.
- (b) The three monitoring wells shall be located so as to monitor groundwater emanating from the principle outdoor work areas, i.e., areas in which metals to be recycled are received, processed and stored. Ten-foot well screens in the monitoring wells shall be placed so as to intersect the groundwater table. Groundwater samples shall be taken from the three monitoring wells in according with MDEP Low-Flow Groundwater Sampling Guidance, June 1996.
- (c) The water samples shall be analyzed for volatile organic compounds (EPA Method 8260), semi-volatile organic compounds (EPA Method 8270), PCBs (EPA Method 8082), the eight RCRA metals (EPA Methods 6010/7470), and nickel (Ni, zinc (Zn), copper (Cu), and antimony (Sb) (EPA Method 6010) diesel-range organics (MDEP Method 4.1.25), and gasoline-range organics (MDEP Method 4.2.17).
- (d) The criteria for evaluation of water samples shall be the Maine DHS Maximum Exposure Guidelines of January 20, 2000 ("MEGs") and the Procedural Guidelines for Establishing Action Levels and Remediation Goals for the Remediation of Oil-Contaminated Soil and Groundwater in Maine, March 13, 2000 (a/k/a "Decision Tree analysis").
- (e) The City of Portland reserves the right to request split samples of groundwater taken as part of the licensing procedure. The split samples taken by the City of Portland shall be analyzed by an independent laboratory in order to provide corroboration of results.

In the event that the waste baseline groundwater sampling exceeds the Maximum Exposure Guidelines or the guidelines of the decision tree, the City may require additional sampling at the metal recycling facility and a plan for remediation of contaminated groundwater at the on-site locations.

Notwithstanding any other provision of the Scrap Metal Recycling Ordinance or these Rules in the event that a scrap metal recycling facility is located on or has relocated to another existing industrial, commercial, or retail site and the baseline test results for that site exceed of certain parameters that either are consistent with a use known to exist at that site prior to the scrap metal recycling facility's operation on the site, or are shown to have occurred prior to the scrap metal recycling facility's operation on the site, then no remediation plan for those parameters shall be required of the owner or operator of the scrap metal recycling facility so long as the previously existing baselines ore the state regulatory guidelines as incorporated, whichever are higher, are not exceeded.

If a remediation plan is implemented by an entity other than the owner or operator of the scrap metal recycling facility or voluntarily implemented by such owner or operator and the remediation lowers the previously existing baselines, the lower baselines or the state regulatory guidelines as incorporated, whichever are higher, shall be used for the purpose of future testing and remediation requirements.

For the purpose of this rule an "owner or operator" includes any prior owners or operators in which a controlling interest was held by the same individuals or legal entities, or any person or entity acting in their behalf.

Rule #4 Dismantling Motor Vehicles and Other Items Containing Waste:

The dismantling of items containing waste shall take place in a building with an impervious floor and appropriate equipment and containers to properly extract and store waste and recover any spilled or escaped waste in compliance with state and federal laws.

Upon receiving a motor vehicle, the battery shall be removed and located in such a ways as to ensure the battery's contents will not spill onto the ground.

When any engine lubricant, transmission fluid, brake fluid and/or engine coolant is removed from a vehicle, those fluids shall be drained into watertight containers which shall be kept covered and secured by containment in a storage building designed to contain spills. Any fluids from the motor vehicle shall be stored, recycled or disposed of according to all applicable federal and state laws. No discharge of any fluids from any motor vehicle shall be permitted into or onto the ground.

Rule #5 Storage and Handling of Waste:

Waste shall be stored and handled pursuant to and in compliance with state law and applicable regulations of the Maine Department of Environmental Protection and any amendments thereto.

Hazardous substances and hazardous waste, including PCBs, solvents, and degreasers, and mercury and special wastes, including petroleum-related products shall be received, handled, processed, stored and disposed of in accordance with State of Maine Hazardous Waste Management Rules (06-096 CMR 850, Chapter 850 and 851, January 23, 2001) and Solid Waste Management Regulations (06-096 CMR Chapter 400 et seq., September 1, 1999).

Rule #6 Setback Requirement; Visual Screening and Limitation on the Height of Piles of Metal or Other Material.

In no event shall the scrap metal recycling facility be located closer than 100 feet from a public road. The setback provision shall apply to temporary or permanent storage, weighing, or processing areas for any metal or material within the scrap metal recycling facility, but shall not apply to any driveways or administrative buildings, and shall not apply to the fences or screening which may be established to keep the facility screened from ordinary view, except such fences or screening must be outside the public road right-of-way. For the purposes of the Rules, the term "from a public road" shall mean from the far side of any immediately adjacent public road.

Visual impact standards can be met through buildings, plantings, fences, berms, setbacks, or other screening, or a combination thereof; however, the screening shall in no case exceed 15 feet in height and any piles of metal or other material shall not exceed 30 feet in height except as allowed by this Rule.

- (a) Fencing. Fences shall be so located and of sufficient height to entirely screen those portions of the metal recycling facility or any piles of material within the facility used to receive, process or store any form of metal from ordinary view. The minimum height of any fence is six feet, although the actual height must be sufficient to accomplish the complete screening from ordinary view but in no case may the height of the fence exceed 15 feet. All fences shall be well constructed and maintained. All fences shall be uniform in appearance, erected in a workmanlike manner, and constructed of sound, undamaged material.
- (b) Plantings. Screening may be accomplished through the planting and/or maintenance of trees, shrubs, or other vegetation of sufficient height, density and depth of planting or growth to entirely screen

those portions of the metal recycling facility used to receive, process or store any form of metal from ordinary view throughout the calendar year.

- (c) Natural or man-made screening. Screening may be accomplished by use of the following natural or man-made screens provided those portions of the scrap metal recycling facility used to receive, process or store any form of metal are entirely screened from ordinary view.
 - (1) Hills, gullies, or embankments. Where man-made, such screens must be constructed to blend with the landscape with loaming and seeding or other treatment as may be necessary to establish a natural appearance; or
 - (2) Building or other installations; or
 - (3) A combination of the above.

If buildings or other installations are used, they are not subject to the 15 foot height limitation on fences or other types of screening.

*

For the purpose of this rule the phrase "entirely screened" shall not be interpreted to apply to piles of metal or other material that exceed 30 ft. on 5 days or less in a 30 consectuve day period unless the owner or operator applies for additional time and shows good cause for the request, or to openings used for entrances or exits to and from the facility or that are on abutting property.

Rule #7 Exemption from Specific Requirements:

The following requirements shall not apply to facilities existing on or before the effective date of this Ordinance.

(a) Rule 6, 100' setback requirement.

Rule #8 Annual Testing Requirements

The annual testing required under Section 31-6(d) of the Scrap Metal Recycling Facilities Ordinance shall conform to the following requirements.

- (a) Groundwater samples shall be taken from the existing three on-site overburden monitoring wells on an annual basis in conformance with Rule #3(b)-(c).
- (b) For those facilities that were required to undertake a remedial action plan after the initial waste baseline sampling, annual soil sampling shall be conducted in conformance with Rule #2(b)-(c), if the department demonstrates that the remedial action plan was not implemented in accordance with its terms. Said sampling shall be limited to those areas identified in either the initial waste baseline sampling plan or through further testing previously required by the department.
- (c) After a facility can demonstrate for three consecutive years that the results of any sampling that it conducted are within the regulatory guidelines as outlined above, that facility shall be allowed to test once every three years for those substances the levels of which were below the regulatory guidelines.



Hydrogeologic and Engineering Consultants

January 6, 2012

Mr. Alan Lerman E. Perry Iron & Metal Co., Inc. 115 Lancaster Street Portland, Maine 04101

Subject: Groundwater Sampling Results - Lancaster & Somerset Street Properties

Dear Mr. Lerman:

At your request, Drumlin Environmental, LLC (Drumlin) has completed groundwater sampling and analysis at your Scrap Metal Recycling Facility properties on Lancaster and Somerset Streets. Previous groundwater monitoring has been conducted at these properties in 2005 by Woodard & Curran and in 2008 by Acadia Environmental Technology. This letter describes the methodology and results of the groundwater analysis and is intended to comply with the City of Portland Code Chapter 31-1 regarding Scrap Metal Recycling Facilities.

Sampling Methodology. Prior to conducting the sampling, Drumlin contacted Tewhey Associates, who represents the City of Portland, and reviewed the wells to be sampled and the analyses to be performed. Mr. Tewhey indicated that the sampling should include the same wells as were sampled in 2008. These included MW-3, MW-5 and MW-7 on the Lancaster Street property and wells MW-A, MW-B and MW-C on the Somerset Street property. (The locations of these wells are shown on Figures 1 and 2, prepared for the 2005 samples conducted by Woodard & Curran and attached to this letter report.) Mr. Tewhey requested that the groundwater samples be analyzed for the same parameters as in 2008, including metals, polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), semivolatile organic compounds (SVOCs), diesel range organic compounds (DRO) and gasoline range organic compounds (GRO).

Groundwater sampling was conducted on November 2, 2011. Prior to beginning sampling at each well, Drumlin measured the depth to groundwater and inserted new, dedicated low-density polyethylene (LDPE) tubing into the well. Each well was purged with a variable speed peristaltic GeoPump. The pumping rates were set to induce low drawdown where feasible. Wells MW-3, MW-5, MW-7 and MW-B were capable of maintaining a constant drawdown at a pumping rate between 200 and 300 ml/min. Wells MW-A and MW-C would not sustain a constant drawdown at 200 ml/min or less. Therefore these wells were sampled using a hybrid grab sample approach. The well was purged for a minimum of 10 minutes, before sampling was begun. When the well ran dry, the pump was shut off and allowed to recharge before sampling was continued. Due to the slow recharge rate of MW-A and MW-C, Drumlin collected water samples for several parameters on 11/3/11, as noted on the field sheets.

| | эц <u>і</u> 2 | | | - | | | | | · | | |] | | | | | | , | | | | | | | · | | |
|-------|---------------------------|----|---|---|----|----|---|---|----|-----|---|---|----|---|---|-----|---|----|---|---|---|------|---|-----|----|---|-----|
| | шпіроs | Ħ | | | | | | | | | | | | | | | | | | | | | | | | | |
| ľ | snuinala2 | | | | • | ſ | | · | | • | | · | | , | | | , | , | | • | | , | | | | | |
| | mulssedog | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ſ | i tiickel | #3 | | | | ٠, | | | | ſ'. | | | • | | | | , | t) | | , | | t. J | | | | 7 | |
| ſ | muizangsM | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | besd | | | | • | | | , | • | | | ſ | | | | · | · | ſ | | | | | | , | | | |
| 10. | ยอง | | | - | | | | | | | | | | | | | | | | | | | | , | | | |
| | соррег | | | | ŀ | ٦. | | | , | ſ | | | • | 7 | | | ٠ | ٠. | | | | 7 | | | | - | |
| | Colbalt | | | | | | | | | | | • | | | | - | | | | • | | | | ٠ | | | |
| | Chromium | | L | · | | - | | | Ŀ | - | | | | Ŀ | | ٠ | | ŕ | | · | Ŀ | 7. | | · | | | |
| I | Calcium | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ľ | mulmbe2 | | l | ŀ | ١. | - | l | ŀ | ŀ | F | l | : | | - | | - | - | ŀ | | | : | : | Г | | | | |
| ľ | ភារា(ទេស | | | ŀ | | 7 | | r | Ī | | ľ | | l | | Γ | | ŀ | · | | Г | | Γ | Γ | | | Ī | İ |
| - | эілэглА | | ľ | ŀ | ŀ | ŀ | Ī | F | -: | = | Γ | · | Ī | | | | ŀ | | | ŀ | ŀ | ŀ | Г | - | | | |
| Ī | ynombnA | | | Ŀ | : | ŀ | T | ŀ | ŀ | _ | Γ | | ŀ | Ī | Γ | 7 | | : | | | ŀ | , | | ŀ | · | : | |
| T | ONO | | ľ | Ī | ľ | Γ | Ī | | ĺ | Ī | | | | | | | | | | Г | | Γ | | | , | | |
| T | ояа | | | | | | Ī | Γ | Γ | Γ | Γ | | Γ | | | | | | | | | | | | | | |
| Ī | PCBs (Arochior 1254) | | | ŀ | ŀ | | | | | Ī | | | ŀ | | | ŀ | ŀ | ŀ | | Γ | ŀ | ŀ | | 7. | · | , | |
| Ī | sqsdtsorolddi1T | | Γ | Ī | Ī | ŀ | | | | ŀ | Ī | | -: | - | | | | ŀ | | | Γ | ŀ | | | | | |
| Ī | Terdary-amyl methyl ether | | Γ | Γ | Ī | | Ī | Γ | Ī | Γ | Ī | Γ | | Ī | | | | | | | | | | | | | |
| Ī | anethamolrbhT L.L.i | | | | | ŀ | | | | - | | | Γ | | | | | ŀ | | | | | | | | · | |
| | enertre on old siGS, £-25 | | | | | ŀ | | | - | | | | | | | | | | | | | · | | | | | |
| 72 7, | Sthyl terlary-butyl ether | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Į. | 1,1 Okhloroethane | ŧ | | | | · | | | | ŀ | | | F | ŀ | | | | | | | | | | | | , | |
| | Terityi tert-butyi ether | | | | | ŀ | Γ | | | [| | | | _ | | | | - | | | | | | | +- | - | |
| | Tert butyl ether | | | | | | | | | | | | | | | | | | L | L | L | L | L | L | L | | |
| | Acetone | ¥ | | | | F | | | Ĺ | F | | Ĺ | | F | | | F | Ē | Ĺ | Ĺ | | | | Ĺ | - | - | |
| | <u>.</u> | | | | | | | | | | | | | | | | | | | | | | | | | | - # |
| Ī | | | | 1 | | | ľ | | | | | 1 | | | | t t | | | | = | | 1 | 1 | 1,1 | | | |

at the Boll
Metals: Metals were detected in the groundwater samples from all of the wells at concentrations that ranged from less than 1 ug/L (estimated) to 2,000 ug/L.

...e .eC&. Gineut Comparison of the 2011 groundwater data with the earlier 2005 and 2008 data does not indicate significant changes or deterioration of groundwater quality. Water quality at the site appears to be steady or improving for most organic parameters. VOCs were all low and below the applicable Maine Maximum Exposure Guideline (MEG) and USEPA Maximum Contaminant Level (MCL) values. GRO constituents, which were detected in MW-7 and MW-C during 2008, were not detected in any wells during 2011. DRO concentrations dropped significantly in MW-7 and MW-A between 2008 and 2011, and varied by only a small amount in the other wells.

There were several parameters that were measured in concentrations that exceeded the MEG and/or MCL values during the 2011 groundwater sampling. These are summarized below.

| w nuG | aep,eeGrG | aeGnOt tt | | | |
|-------|-----------|-----------|---------|--|--|
| | | () | () | | |
| MW-3 | Antimony | 4 (J) | 3/6 | | |
| MW-5 | Arsenic | 76 | 10 / 10 | | |
| | Cadmium | 1.7 (J) | 1/5 | | |
| MW-7 | Arsenic | 25 | 10 / 10 | | |
| | Cadmium | 1.4 (J) | 1/5 | | |
| | Nickel | 20.8 (J) | 20 / | | |
| MW-A | Antimony | 26 | 3/6 | | |
| | Arsenic | 25 | 10 / 10 | | |
| | Nickel | 87.8 | 20 / | | |
| MW-B | Antimony | 3 (J) | 3/6 | | |
| | Cadmium | 10.8 | 1/5 | | |
| | Nickel | 28.4 (J) | 20 / | | |
| | Zinc | 2000 | 2000 / | | |
| MW-C | Antimony | 36 | 3/6 | | |
| | Arsenic | 14 | 10 / 10 | | |
| | Nickel | 25.9 (J) | 20 / | | |

Note: (J) indicates an estimated concentration detected below the laboratory reporting limit.

It should be noted that the MEG values published by the Maine Center for Disease Control (CDC) in September 2011 include several changes relevant to compounds detected at the E. Perry properties. The cadmium MEG value was changed from 3.5 mg/L in 2008 to 1 mg/L in 2011. The nickel MEG was changed from 140 mg/L in 2008 to 20 mg/L in 2011. Additionally, the Maine CDC formerly listed MEGs of 50 ug/L for gasoline (i.e., GRO) and fuel oil (i.e., DRO). These criteria are not included in the 2011 MEG listing and have been replaced by values for individual petroleum fractions.

Wep p wo. n In November 2011 groundwater samples were collected from properties on Somerset Street and Lancaster Street in Portland that are operated by E. Perry Iron & Metal Company. Groundwater samples had also been collected from monitoring wells on these properties in 2005 and in 2008.

The 2011 groundwater quality data indicate that organic compounds including VOCs, SVOCs and PCBs were either not detected or were detected at concentrations significantly below the MEG and MCL values. Diesel range organic compounds are present in groundwater at all locations sampled. In 2011, the DRO concentrations were significantly lower in well MW-7 at the Lancaster Street property and at MW-A at the Somerset Street property. A small increase in DRO concentration was measured in well MW-B, and small decreases in DRO concentrations were measured in other wells.

Several metals were detected in groundwater at concentrations that equaled or exceeded the MEG and/or MCL values, including antimony (4 of 6 wells), arsenic (4 of 6 wells), cadmium (3 of 6 wells), nickel (4 of 6 wells) and zinc (1 of 6 wells).

The E. Perry properties are located in an area of Portland that has been industrialized for many years. Public drinking water is provided throughout the area by the Portland Water District and there are not known to be any groundwater users who might be exposed to constituents detected in the groundwater at the E. Perry properties. According to a July 20, 2005 correspondence from Tewhey Associates to the City of Portland, the area of Portland where the E. Perry properties are located has been designated as a groundwater non-attainment zone by the Maine Department of Environmental Protection and there is no requirement to conduct remediation of groundwater.

If there are any questions regarding the information described in this letter or the data include in the attachments, please do not hesitate to call me at any time.

Very truly yours,

DRUMLIN ENVIRONMENTAL, LLC

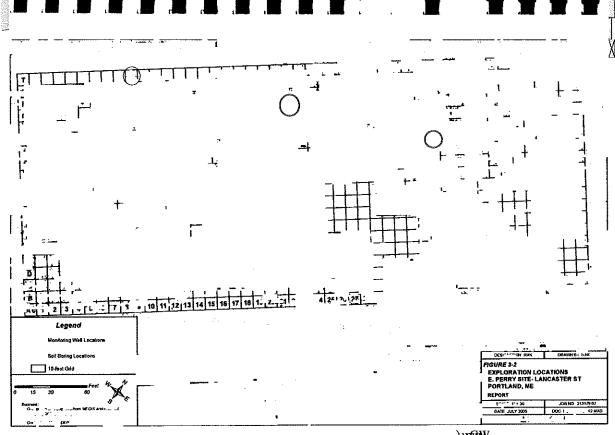
MATTHEW TO CE OF A MATTHEW TO CE

Matthew D. Reynolds, P.E., C.G. Senior Member

Encl: Figures 1 & 2
Attachments A & B

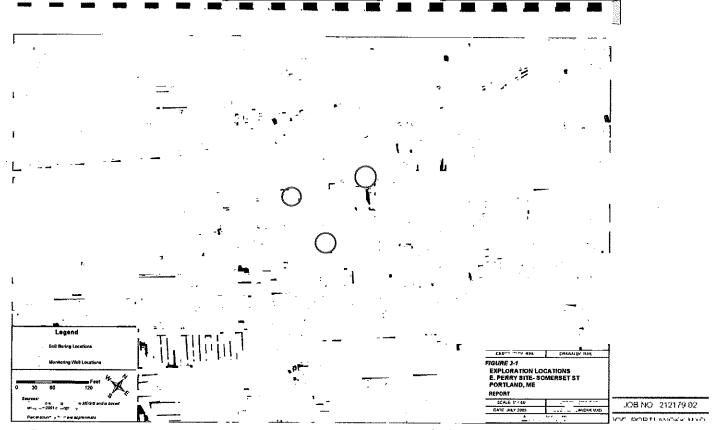
Cc: Alan Wolf, Esq.

G G



O . e Carry Green Carry Common & November 2011

).uptikW vaesauvOktow. e. Gau vCo wa.cu ,rComm & NoveWeer 2011



. e Channellia. ea Carpachaean, r Carma a November 2011

).ipGio x-vGvexGve e Gae vGvu.eu ,rGGmm & NoveWoer 2011 e e G. u. u

FIELD SAMPLING RECORDS

| SITE: <i>£</i> | E Perr | y | JOE | No: <u>//</u> _ | DATE: 11-2-11 | | | | | | | | | | |
|---|------------|---|--------------|--------------------------------------|---------------|------------------|----------------|----------------|--|--|--|--|--|--|--|
| SAMPLE I | LOCATIO | n: Mu | 1-7 | | TIME: St | art: <u>04/5</u> | End:/ | 035 | | | | | | | |
| WELL DA | TA: | | | | | | · | | | | | | | | |
| WELL DE | PTH (ft):_ | 12.65 | - | | | | : <u>X</u> PVC | | | | | | | | |
| WELL DIAMETER (in): 2-inch LOCKED: YES NO CASING INTACT: YES NO | | | | | | | | | | | | | | | |
| CASING INTACT: VES NO HEIGHT OF WATER (ft): | | | | | | | | | | | | | | | |
| SAMPLING AND DECONTAMINATION: | | | | | | | | | | | | | | | |
| PURGE EQUIPMENT: PUMP: Peristaltic Geopump TUBING: LDPE Dedicated: Yes No SAMPLING EQUIPMENT: Peristaltic GeoPump Intake: | | | | | | | | | | | | | | | |
| DECONTAMINATION PROCEDURES: Detergent & Potable Water | | | | | | | | | | | | | | | |
| PURGE DATA: | | | | | | | | | | | | | | | |
| Elasped Time (min) | | Flow Rate Vol. Wa (mL/min) Purged De (L) (i | | Temp (°C) | рH | Spec Cond | ORP (mV) | D.O. (mg/L) | | | | | | | |
| 5 | 200 | 13 | 4.58 | 13.6 | 6.Y | 770 | 87 | | | | | | | | |
| 10 | 1 | 2 | 4.58 | 12.9 | 6.5 | 740 | 54 | _ | | | | | | | |
| 15 | | 3 | 4.58 | 13.4 | 6.5 | 790 | 733 | _ | | | | | | | |
| 20 | | 7 | | 13.5 | 6.5 | 770 | 20 | | | | | | | | |
| 25 | | 5 | X.58 | 13.6 | 6.6 | 770 | -3 | _ | | | | | | | |
| 30 | 1 | 6 | 4.58 | 13.6 | 6.6 | 770 | -6 | | | | | | | | |
| 35 | 200 7 | | 4.58 | 13.7 | 6.6 | 779 | ~/0 | 0.3 | | | | | | | |
| PURGE OF | SERVAT | IONS: W | ate cle | or-no | color | or oda | | | | | | | | | |
| | | | | | | | | | | | | | | | |
| SAMPLES; | PCB- | 5VBA - (01 | 20 - 62 | SAMPLES: PCB-5VDA-ORO-6RO-1,0A-Molls | | | | | | | | | | | |

| SITE:_ <i>_£</i> ,_ | SITE: <u>E. Perry</u> JOB NO: 1/-020 DATE: 1/-Z-11 | | | | | | | | | | | | |
|--|---|-------------------|------------------------|--------------|----------|--------------|-------------|----------------|--|--|--|--|--|
| SAMPLE I | OCATION | : MW | .5 | | TIME: St | art: 1045 | End:/ | 145 | | | | | |
| WELĻ DA | TA: | | | | | | | | | | | | |
| WELL DEI | WELL DEPTH (ft): 12.30 WELL MATERIAL: X PVC SS WELL DIAMETER (in): 2-inch | | | | | | | | | | | | |
| DEPTH TO | DEPTH TO WATER (ft): 4.6/ LOCKED: YES NO CASING INTACT: YES NO | | | | | | | | | | | | |
| CASING INTACT: YES NO HEIGHT OF WATER (ft): | | | | | | | | | | | | | |
| SAMPLIN | G AND DE | CONTA | MINATI | ON: | | | | | | | | | |
| PURGE EQUIPMENT: PUMP: Peristaltic Geopump TUBING: LDPE Dedicated: Yes No Intake: DECONTAMINATION PROCEDURES: Detergent & Potable Water PURGE DATA: | | | | | | | | | | | | | |
| Elasped Time (min) | Flow Rate (mL/min) | Vol. Purged (L) | Water Depth (ft) | Temp (°C) | pН | Spec Cond | ORP (mV) | D.O. (mg/L) | | | | | |
| 5 | 300 | 1.5 | 4.69 | 15.Z | 6.9 | 770 | +2 | | | | | | |
| 15 | 1 | 4.5 | 4.78 | 15.3 | 6.7 | 620 | -38 | | | | | | |
| 70 | | 6,0 | | 15.2 | 6.7 | 600 | -42_ | | | | | | |
| 25 | V | 7.5 | 4.78 | 15:3 | 67 | 610 | -45 | 0.2 | | | | | |
| | | | | | | | | | | | | | |
| | : | | | | | | | | | | | | |
| PURGE OB | SERVATIO | DNS: u | pater c | ler-po | wh | or od | lar | | | | | | |
| | · · · · · · · · · · · · · · · · · · · | | | | | | | | | | | | |
| SAMPLES: | SAMPLES: PCB-SVM-DRO-GRO-VOA-Mobels | | | | | | | | | | | | |
| | SAMPLER: POR | | | | | | | | | | | | |

| ç | SITE: <u> </u> | Perry | | JOB | NO: <u>#</u> | -020 | ····· | DATE: 6 | C-Z-17 | | | | | |
|------|--|-----------------------|-----------------------|------------------------|--|--|---------------------------|--|----------------|--|--|--|--|--|
| 4 | SAMPLE I | OCATION | : Mw | -C | TATO CONTRACTOR OF THE PARTY OF | TIME: St | art: 1200 | End: 16 | ,05 | | | | | |
| • | WELL DA | TA: | | | • | | | | | | | | | |
| , | WELL DEI | PTH (ft): <i>[</i> | 1.73 | | | WELL MATERIAL: X PVC SS WELL DIAMETER (in): 2-inch | | | | | | | | |
|] | ОЕРТН ТС | WATER (| ft): <u>3, c</u> | 17 | | LOCKED: YES NO CASING INTACT: YES NO | | | | | | | | |
| I | HEIGHT O | F WATER | (ft): | | , | CASING | INTACT: | | NO. | | | | | |
| \$ | SAMPLING AND DECONTAMINATION: | | | | | | | | | | | | | |
| | PURGE EQUIPMENT: PUMP: Peristaltic Geopump TUBING: LDPE Dedicated:YesNo SAMPLING EQUIPMENT: _Peristaltic GeoPumpIntake: | | | | | | | | | | | | | |
| I | DECONTAMINATION PROCEDURES: Detergent & Potable Water | | | | | | | | | | | | | |
| I | PURGE DATA: | | | | | | | | | | | | | |
| | Elasped Time (min) | Flow Rate (mL/min) | Vol. Purged (L) | Water Depth (ft) | Temp (°C) | рН | Spec Cond Malay for | ORP (mV) | D.O. (mg/L) | | | | | |
| 1208 | 5 | ~ Z00 | 1.0 | 6.1 | 19.1 | 6.8 | 71990 | - 92 | | | | | | |
| 1213 | 10 | ĸ | 7.0 | 9.1 | 15.3 | 6.8 | 1030 | -8/ | -1·1 | | | | | |
| 1218 | 15 | u | 3.0 | 12.1 | 15.1 | 6.7 | 71990 | -92 | | | | | | |
| 1222 | 19 | | ~4.0 | dry | 15.1 | 6.7 | 71990 | -107 | NM | | | | | |
| | Tun | /\\ ' ' | let | rechou | <i>3</i> | | . 0 | , , | <i></i> | | | | | |
| | 1335 | - sample sample | OX. VI DRO | A-GR. (250 | other | SKK | 2 Zest | 10 11 11 11 11 11 11 11 11 11 11 11 11 1 | louge | | | | | |
| | 113/11-1 | 215 kg - 5 | AH F | dark | - for F | CB son | p++fin | 134 F. K. | DES | | | | | |
| P | URGE OB | SERVATIO | DNS: W | uto s | 1. tw2 | hal for | - 18A3 | -6HD - | | | | | | |
| | , | e mobils | | - | | | | | | | | | | |
| | | WA, GR | | Els, Di | Ra, sn | 0/t + 1 | PCB's | | | | | | | |
| | • | · - / - / | , | | | | ER: | K | | | | | | |

| S | rte: <u>_€</u> | Romy | | JOB | <u> 20</u> | DATE: 1 | 1-2-71 | | | | | | |
|---|--|----------|---------------|---------------|------------|-----------|----------|---------|--------|--|--|--|--|
| | | OCATION | | 1-B | | ΓΙΜΕ: Sta | nt: 1230 | End:_/3 | 310 | | | | |
| V | WELL DATA: | | | | | | | | | | | | |
| V | WELL DEPTH (ft): 13.60 WELL MATERIAL: X PVC SS | | | | | | | | | | | | |
| WELL DIAMETER (in): 2-inch LOCKED: YES NO CASING INTACT: YES NO | | | | | | | | | | | | | |
| H | HEIGHT OF WATER (ft): | | | | | | | | | | | | |
| S | AMPLIN | G AND DE | CONTA | MINATI | ON: | | | | | | | | |
| S. | PURGE EQUIPMENT: PUMP: Peristaltic Geopump TUBING: LDPE Dedicated: Yes No SAMPLING EQUIPMENT: Peristaltic GeoPump Intake: DECONTAMINATION PROCEDURES: Detergent & Potable Water | | | | | | | | | | | | |
| r | URGE DA | YIA: | Vol. | Water | Тетр | wH. | Spec | ORP | D.O. | | | | |
| | Elasped Time (min) | (mL/min) | Purged (L) | Depth (ft) | (°C) | pН | Cond | (mV) | (mg/L) | | | | |
| | 5 | 30° 5 | 1,5 | 5.65 | 13.5 | 6.8 | 403 | -19 | | | | | |
| | 20 | | 6.≎ | 5.65 | 135 | 68 | YOO | 22 | | | | | |
| | 25 | | 7.5 | 5765 | 13.5 | 6.8 | 400 | 29 | | | | | |
| | 30 | V | 9.0 | 5.65 | 13.5 | 6.8 | 400 | 32 | 1.0 | | | | |
| | | | | | | ······ | | ., | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| PΊ | URGE OB | SERVATIO | ONS: 120 | hely | has t | 425 | odor-l | at this | | | | | |
| | | o- was | | | | | | | | | | | |
| | | PCB-51 | | | | | ctes | MIN. | | | | | |
| | SAMPLER: MAN | | | | | | | | | | | | |

| S | SITE: <u>Florry</u> JOB NO: 1/ | | | | | <u> </u> | | DATE: 11-2-1) | | | | | |
|---|---|-----------------------|-----------------------|------------------------|--------------|---|------------------|---------------|----------------|--|--|--|--|
| S | AMPLE L | OCATION | : <u>Mw</u> | -A | | ΓΙΜΕ: Sta | art: 1355 | End: | (630 | | | | |
| V | VELL DA | TA: | | | | | | | | | | | |
| V | VELL DEP | TH (ft): | 12.6 | | | WELL MATERIAL: X PVC SS | | | | | | | |
| D | ЕРТН ТО | WATER (| ft):_ <i>Y:2</i> | 26 | I | WELL DIAMETER (in): 2-inch LOCKED: YES NO CASING INTACT: YES NO | | | | | | | |
| Н | EIGHT O | F WATER | (ft): | | (| CASING | INTACT: | YES _ | NO | | | | |
| SAMPLING AND DECONTAMINATION: | | | | | | | | | | | | | |
| PURGE EQUIPMENT: PUMP: Peristaltic Geopump TUBING: LDPE Dedicated:YesNo SAMPLING EQUIPMENT: Peristaltic GeoPump Intake: | | | | | | | | | | | | | |
| | DECONTAMINATION PROCEDURES: Detergent & Potable Water | | | | | | | | | | | | |
| | URGE DA | | | | | | | | 10 . | | | | |
| | Elasped Time (min) | Flow Rate (mL/min) | Vol. Purged (L) | Water Depth (ft) | Temp (°C) | pН | Spec Cond | ORP (mV) | D.O. (mg/L) | | | | |
| 1902 | -5 | 300 | 1.5 | 9.8 | 165 | 69 | >1990 | -8/ | | | | | |
| 146 | redice | to ~12 | -77.5 | ~12.5 | | 7,0 | 7/983 | -120 | NA | | | | |
| | Tun of | S Pup - | VOM, | rechar GRO | se + med | els (| n 2 <i>5</i> 0 m | ey_ | sbot | | | | |
| • | | | | | | | 18 | 70 rec | loge | | | | |
| | | collect collect | | | | me) | | | , | | | | |
| | | | | | • | | o Kon | SVAA + | Pcos' | | | | |
| | 1-7,0 | | | | | _ | O, | | | | | | |
| rq | URGE OB | SERVATIO | DNS: | rate c | lear-l | as te | vbidet | -10 | cola- | | | | |
| | or or | | | | | • | | | | | | | |
| Sz | AMPLES: | VOA G | NO B | mol | es | | | | | | | | |
| | | 7 | , —. | | | CANADI | ED. K | 1 | | | | | |

| GICOUTED TO ZEE EXCENSES | J 1/2 1 1 1 1 | | w | | | | | | | | |
|---|------------------------|-----------------|---|--------------|-------------|----------------|--|--|--|--|--|
| SITE: <u>E Perry</u> | JOB | NO: <u>//</u> - | - ((Z&) | • | DATE:_ | 11-2-11 | | | | | |
| SAMPLE LOCATION: Mk | | | | | | | | | | | |
| WELL DATA: | | | | | | | | | | | |
| WELL DEPTH (ft): 12.36 | ı | | | ATERIAL: | | | | | | | |
| DEPTH TO WATER (ft): 4. | 56 | I | WELL DIAMETER (in): 2-inch LOCKED: YES NO | | | | | | | | |
| CASING INTACT:YES NO HEIGHT OF WATER (ft): | | | | | | | | | | | |
| SAMPLING AND DECONTA | MINATI | ON: | | | | | | | | | |
| PURGE EQUIPMENT: PUMP: Peristaltic Geopump TUBING: LDPE Dedicated: Yes No SAMPLING EQUIPMENT: Peristaltic GeoPump Intake: | | | | | | | | | | | |
| DECONTAMINATION PROCEDURES: Detergent & Potable Water | | | | | | | | | | | |
| PURGE DATA: | | | | | | | | | | | |
| Elasped Flow Rate Vol. Time (mL/min) Purged (L) | Water Depth (ft) | Temp (°C) | Hq | Spec Cond | ORP (mV) | D.O. (mg/L) | | | | | |
| 5 380 1.5 | 4.65 | 130 | 7.8 | 290 | 19 | | | | | | |
| 10 3.0 | 4.65 | 13.0 | 6.9 | 32D | 15 | | | | | | |
| 15 4.5 | 4.65 | 13.0 | 67 | 290 | 16 | | | | | | |
| 20 6.0 | 4.65 | 13.0 | 6,6 | 270 | 20 | | | | | | |
| 25 V 7.5 | 465 | 13.0 | 6.6 | 280 | 18 | Z, O | | | | | |
| | | | | | | | | | | | |
| | | | | | | | | | | | |
| PURGE OBSERVATIONS: | ate | clear- | p3 (| wlor o | عام مان | lar | | | | | |
| | | | | | | | | | | | |
| SAMPLES: PCB-SVOA-Z | 72-G | 120 - V | A-m | ebb | | | | | | | |
| | SAMPLER: 12/18 | | | | | | | | | | |

.... e e G. uGu

LABORATORY REPORTS OF ANALYSIS

e G. e. Ch. e.n. uwa. ew. en w p. e. e e.n ap, wG r .wQi wQwQiuu o e e muur, an (wwn, GeeG). Co Go e e p. e. Co GW. umver WQG nwu Que., e muur, pwo u.. e pQw) .n .eo QwG pwo u G.n. w.w)n, e p. e.m





December 2, 2011

Mr. Matt Reynolds Drumlin Environmental, LLC 75 York St. PO Box 392 Portland,ME 04112-0342

RE: Katahdin Lab Number:

SE7341

Project ID:

EP#1120

Project Manager:

Ms. Shelly Brown

Sample Receipt Date(s):

November 03, 2011

Dear Mr. Reynolds:

Please find enclosed the following information:

- * Report of Analysis (Analytical and/or Field)
- * Quality Control Data Summary
- * Chain of Custody (COC)
- * Login Report

A copy of the Chain of Custody is included in the paginated report. The original COC is attached as an addendum to this report.

Should you have any questions or comments concerning this Report of Analysis, please do not hesitate to contact the project manager listed above. The results contained in this report relate only to the submitted samples. This cover letter is an integral part of the ROA.

We certify that the test results provided in this report meet all the requirements of the NELAC standards unless otherwise noted in an attached technical narrative or in the Report of Analysis.

We appreciate your continued use of our laboratory and look forward to working with you in the future. The following signature indicates technical review and acceptance of the data.

Please go to http://www.katahdinlab.com/cert.html for copies of Katahdin Analytical Services Inc. current certificates and analyte lists.

Sincerely,
KATAHDIN ANALYTICAL SERVICES

Deborah Madeau

12/02/2011

Date





TECHNICAL NARRATIVE

Organics Analysis

The samples of Work Order SE7341 were analyzed in accordance with "Test Methods for Evaluating Solid Wastes: Physical/Chemical Methods." SW-846, 2nd edition, 1982 (revised 1984), 3rd edition, 1986, and Updates I, II, IIA, III, IIIA, and IIIB 1996, 1998 & 2004, Office of Solid Waste and Emergency Response, U.S. EPA, and/or Maine HETL, Method 4.2.17, Modified Method for the Determination of GROs, 9/95, and/or for the specific methods listed below or on the Report of Analysis.

8260B Analysis

Samples SE7341-1, 2, and 4 had high recoveries for-one-or more-surrogates, which were outside of the laboratory established acceptance limits. Since a high recovery would indicate a high bias and there were no target analytes detected above the PQL in the aforementioned samples, the samples were not reanalyzed.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are statistically derived for the full list of spiked compounds. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances. The LCS report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

MEDEP 4.2.17 Analysis

Sample SE7341-6 had a high recovery the surrogate 4-bromofluorobenzene, which was outside of the laboratory established acceptance limits. Since a high recovery would indicate a high bias, and there was no GRO detected above the PQL in the sample, the sample was not reanalyzed.

8270C Analysis

Samples SE7341-1 through 6 had low or no recoveries for one or more surrogates, which were outside the laboratory established acceptance limits. Based on the sample chromatograms and similar surrogate deviation for other analyses, the samples were not reextracted.

The method blank WG100443-1 had a high response for the internal standard perylene-d12 that resulted in a %D which was outside the laboratory acceptance limit of -50% to +100% of the response of the 元 是一起的文件中的企业的操作可提供。 - Finternal standard of the daily calibration verification standard.

The reported percent recovery acceptance limits for the Laboratory Control Samples (LCSs) are statistically derived for the full list of spiked compounds. The recoveries of the spiked analytes in the LCS, Matrix Spike (MS) and Matrix Spike Duplicate (MSD) are compared to these acceptance limits. Katahdin standard operating procedure is to take corrective action only if the number of spiked analytes in the LCS that are outside of the QC limits is greater than the DoD QSM allowable number of exceedances.





The LCS report consists of the full list of spiked analytes, but only the client's list of target analytes are evaluated. If the associated MS/MSD has greater than the allowable number of exceedances, no corrective action is taken, as long as the LCS is acceptable.

8082 Analysis

Samples SE7341-1, 2, 4, 5, and 6, and the method blank WG100447-1 had low recoveries for the surrogates TCX and/or DCB, which were outside the laboratory established acceptance limits. The samples were reextracted nine days out of hold time and analyzed. The samples and the associated method blank had similar surrogate deviations. The results for both extractions are reported. Due to no additional aliquot, samples SE7341-4 and 5 were not able to be reextracted.

The LCSD WG100447-3 had a low recovery for Aroclor 1260, which was outside the laboratory established-acceptance limits. The associated LCS-was acceptable.

The LCS WG101328-2 had low recoveries for Aroclor 1016 and Aroclor 1260, which were outside the laboratory established acceptance limits. The associated LCSD was acceptable.

There were no other protocol deviations or observations noted by the organics laboratory staff.

The same of the sa

KATAHDIN ANALYTICAL SERVICES - ORGANIC DATA QUALIFIERS

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

- * Compound recovery outside of quality control limits.
- D Indicates the result was obtained from analysis of a diluted sample. Surrogate recoveries may not be calculable.
- E Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.
- J Estimated value. The analyte was_detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).

or

- J Used for Pesticides, PCBs, Herbicides, Formaldehyde, Explosives and Method 504.1 analytes when there is a greater than 40% difference for detected concentrations between the two GC columns.
- B Indicates the analyte was detected in the laboratory method blank analyzed concurrently with the sample.
- N Presumptive evidence of a compound based on a mass spectral library search.
- A Indicates that a tentatively identified compound is a suspected aldol-condensation product.
- P Used for Pesticide/Aroclor analyte when there is a greater than 25% difference for detected concentrations between the two GC columns. (for CLP methods only).

DM-002 - Revision 4- 11/01/2011

KATAHDIN ANALYTICAL SERVICES – INORGANIC DATA QUALIFIERS (Refer to BOD Qualifiers Page for BOD footnotes)

The sampled date indicated on the attached Report(s) of Analysis (ROA) is the date for which a grab sample was collected or the date for which a composite sample was completed. Beginning and start times for composite samples can be found on the Chain-of-Custody.

U Indicates the compound was analyzed for but not detected above the specified level. This level may be the Limit of Quantitation (LOQ)(previously called Practical Quantitation Level (PQL)), the Limit of Detection (LOD) or Method Detection Limit (MDL) as required by the client.

Note: All results reported as "U" MDL have a 50% rate for false negatives compared to those results reported as "U" PQL/LOQ or "U" LOD, where the rate of false negatives is <1%.

- Estimated value. This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis.
- J Estimated value. The analyte was detected in the sample at a concentration less than the laboratory Limit of Quantitation (LOQ)(previously called-Practical Quantitation Limit (PQL)), but above the Method Detection Limit (MDL).
- I-7 The laboratory's Practical Quantitation Level could not be achieved for this parameter due to sample composition, matrix effects, sample volume, or quantity used for analysis.
- A-4 Please refer to cover letter or narrative for further information.
- MCL Maximum Contaminant Level
- NL No limit
- NFL No Free Liquid Present
- FLP Free Liquid Present
- NOD No Odor Detected
- TON. Threshold Odor Number
- Please note that the regulatory holding time for pH is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. pH for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.
- Please note that the regulatory holding time for DO is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. DO for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.
- H3 __Please note that the regulatory holding time for sulfite is "analyze immediately". _ldeally, this analysis must be performed in the field at the time of sample collection. "Sulfite for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.
- Please note that the regulatory holding time for residual chlorine is "analyze immediately". Ideally, this analysis must be performed in the field at the time of sample collection. Residual chlorine for this sample was not performed at the time of sample collection. The analysis was performed as soon as possible after receipt by the laboratory.

DM-003 - Revision 3 - 04/13/2011

Katahdin Analytical Services SE7341 page 0000005 of 0000096

KATAHDIN ANALYTICAL SERVICES

Report of Analytical Results

Client: Drumlin Environment

Project: EP#1120

PO No:

Sample Date: 11/02/11 Received Date: 11/03/11

Extraction Date:

Analysis Date: 09-NOV-2011 21:43
Report Date: 12/13/2011

Matrix: WATER % Solids: NA

Lab ID: SE7341-1 Client ID: MW-7 SDG: SE7341 Extracted by:

Extraction Method: SW846 5030

Analyst: DJP

Analysis Method: SW846 8260B Lab Prep Batch: WG100773

Units: ug/l

| CAS# | Compound | Flags | Results | DF. | POL | Adj.PQL | Add.MDL |
|------------|------------------------------|-------|---------|-----|-----|---------|---------|
| 75-71-8 | Dichlorodifluoromethane | U | 0.2 | 1.0 | 10 | 10 | 0.2 |
| 74-87-3 | Chloromethane | U | 0.4 | 1.0 | 10 | 10 | 0.4 |
| 75-01-4 | Vinyl chloride | ד | 0,2 | 1.0 | 1.0 | 10 | 0.2 |
| 74-83-9 | Bromomethane | U | 0.5 | 1.0 | 10 | 10 | 0.5 |
| 75~00~3 | Chloroethane | υ | 0.6 | 1.0 | 10 | 10 | 0.6 |
| 75-69-4 | Trichlorofluoromethane | υ | 0.2 | 1.0 | 10 | 10 | 0.2 |
| 75-35-4 | 1,1-Dichloroethene | υ | 0.4 | 1.0 | 5 | 5 | 0.4 |
| 75-09-2 | Methylene Chloride | ซ | 1 | 1.0 | 5 | 5 | 1 |
| 156-60-5 | trans-1,2-Dichloroethene | σ | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 75-34-3 | 1,1-Dichloroethane | U | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 156-59-2 | cis-1,2-Dichloroethene | U | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 540-59-0 | 1,2-Dichloroethylene (total) | ซ | 0.2 | 1.0 | 10 | 10 | 0.2 |
| 594-20-7 | 2,2-Dichloropropane | U | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 67-66-3 | Chloroform | U | 0.3 | 1.0 | 5 | 5 | 0.3 |
| 74-97-5 | Bromochloromethane | v | 0.2 | 1,0 | 5 | 5 | 0.2 |
| 71-55-6 | 1,1,1-Trichloroethane | U | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 107-06-2 | 1,2-Dichloroethane | U | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 563-58-6 | 1,1-Dichloropropene | U | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 56-23-5 | Carbon Tetrachloride | ប | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 71-43-2 | Benzene | ប | 0.3 | 1.0 | 5 | 5 | 0.3 |
| 78-87-5 | 1,2-Dichloropropane | ט | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 79-01-6 | Trichloroethene | J | 0.9 | 1.0 | 5 | 5 | 0.3 |
| 74-95-3 | Dibromomethane | ช | 0.5 | 1.0 | 5 | 5 | 0,5 |
| 75-27-4 | Bromodichloromethane | ซ | 0.3 | 1.0 | 5 | 5 | 0.3 |
| 10061-01-5 | cis-1,3-dichloropropene | ប | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 108-88-3 | Toluene | υ | 0.3 | 1.0 | 5 | 5 | 0.3 |
| 10061-02-6 | trans-1,3-Dichloropropene | U | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 79-00-5 | 1,1,2-Trichloroethane | U | 0.3 | 1.0 | 5 | 5 | 0.3 |
| 142-28-9 | 1,3-Dichloropropane | U | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 124-48-1 | Dibromochloromethane | ซ | 0.3 | 1.0 | 5 | 5 | 0.3 |
| 127-18-4 | Tetrachloroethene | JB | 0.6 | 1.0 | 5 | 5 | 0.4 |
| 106-93-4 | 1,2-Dibromoethane | ซ | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 108-90-7 | Chlorobenzene | τ | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 630-20-6 | 1,1,1,2-Tetrachloroethane | σ | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 100-41-4 | Ethylbenzene | U | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 75-25-2 | Bromoform | U | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 100-42-5 | Styrene | U | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 79-34-5 | 1,1,2,2-Tetrachloroethane | U | 0.4 | 1.0 | 5 | 5 | 0.4 |
| 96-18-4 | 1,2,3-Trichloropropane | v | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 98-82-8 | Isopropylbenzene | υ | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 108-86-1 | Bromobenzene | υ | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 95-49-8 | 2-Chlorotoluene | ម | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 103-65-1 | N-Propylbenzene | ប | 0.3 | 1.0 | 5 | 5 | 0.3 |
| | | | | | | | |

Page 01 of 02 S5975.D

KATAHDIN ANALYTICAL SERVICES

Report of Analytical Results

Client: Drumlin Environment

Project: EP#1120

PO No:

Sample Date: 11/02/11 Received Date: 11/03/11

Extraction Date:

Analysis Date: 09-NOV-2011 21:43
Report Date: 12/13/2011

Matrix: WATER % Solids: NA

Lab ID: SE7341-1 Client ID: MW-7 SDG: SE7341 Extracted by:

Extraction Method: SW846 5030

Analyst: DJP

Analysis Method: SW846 8260B Lab Prep Batch: WG100773

Units: ug/l

| CAS# | Compound | Flags | Results | D F | PQL | Adj.PQL | Adj.MDL |
|------------|-----------------------------|-------|---------|------------|-----|---------|---------|
| 106-43-4 | 4-Chlorotoluene | σ | 0.3 | 1.0 | 5 | 5 | 0.3 |
| 108-67-8 | 1,3,5-Trimethylbenzene | σ | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 98-06-6 | tert-Butylbenzene | U | 0.3 | 1.0 | 5 | 5 | 0.3 |
| 120-82-1 | 1,2,4-Trichlorobenzene | v | 0.4 | 1.0 | 5 | - 5 | 0.4 |
| 135~98~8 | sec-Butylbenzene | σ | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 541-73-1 | 1,3-Dichlorobenzene | σ | 0.3 | 1.0 | 5 | 5 | 0.3 |
| 99-87-6 | P-Isopropyltoluene | U | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 106-46-7 | 1,4-Dichlorobenzene | ប | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 95-50-1 | 1,2-Dichlorobenzene | U | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 104-51-8 | N-Butylbenzene | U | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 96-12-8 | 1,2-Dibromo-3-Chloropropane | บ | 0.5 | 1.0 | 5 | 5 | 0.5 |
| 95-63-6 | 1,2,4-Trimethylbenzene | ช | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 91-20-3 | Naphthalene | U | 0.3 | 1.0 | 5 | 5 | 0.3 |
| 87-68-3 | Hexachlorobutadiene | U | 0.5 | 1.0 | 5 | 5 | 0,5 |
| 87-61-6 | 1,2,3-Trichlorobenzene | บ | 0.3 | 1.0 | 5 | 5 | 0.3 |
| 1634-04-4 | Methyl tert-butyl ether | J | 3 | 1.0 | 5 | 5 | 0.4 |
| 67-64-1 | Acetone | J | 3 | 1.0 | 25 | 25 | 2 |
| 78-93-3 | 2-Butanone | U | 1 | 1.0 | 25 | 25 | 1 |
| 108-10-1 | 4-methyl-2-pentanone | U | 1 | 1.0 | 25 | 25 | 1 |
| 591-78-6 | 2-Hexanone | U | 2 | 1.0 | 25 | 25 | 2 |
| | m+p-Xylenes | U | 0.6 | 1.0 | 10 | 10 | 0.6 |
| 95-47-6 | o-Xylene | σ | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 1330-20-7 | Xylenes (total) | υ | 0.2 | 1.0 | 15 | 15 | 0.2 |
| 108-70-3 | 1,3,5-Trichlorobenzene | ŭ | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 108-05-4 | Vinyl Acetate | U | 0.4 | 1.0 | 5 | 5 | 0.4 |
| 75-15-0 | Carbon Disulfide | U | 0.2 | 1.0 | 5 | 5 | 0.2 |
| 60-29-7 | Diethyl Ether | J | 2 | 1.0 | 5 | 5 | 0.4 |
| 109-99-9 | Tetrahydrofuran | U | 2 | 1.0 | 25 | 25 | 2 |
| 1868-53-7 | Dibromofluoromethane | | 101% | | | | |
| 17060-07-0 | 1,2-Dichloroethane-D4 | | 101% | | | | |
| 2037-26-5 | Toluene-D8 | | 107% | | | | |
| 460-00-4 | P-Bromofluorobenzene | | *142% | | | | |

Page 02 of 02 s5975.p

Client: Drumlin Environment

Project: EP#1120

PO No:

Sample Date: 11/02/11 Received Date: 11/03/11 Extraction Date: 11/04/11 Analysis Date: 23-NOV-2011 14:56

Report Date: 12/01/2011

Matrix: WATER % Solids: NA Lab ID: SE7341-1 Client ID: MW-7 SDG: SE7341 Extracted by: EC

Extraction Method: SW846 3510

Analyst: WAS

Analysis Method: SW846 8270C Lab Prep Batch: WG100443

Units: ug/L

| Compound | Flags | Results | DF | POL | Adj.PQL |
|------------------------------|-------|---------|-----|-----|---------|
| Phenol | T.ags | 9 | 1.0 | 10 | 9 |
| Bis (2-Chloroethyl) ether | TT | 9 | 1.0 | 10 | 9 |
| 2-Chlorophenol | U | 9 | 1.0 | 10 | 9 |
| 1,3-Dichlorobenzene | T | 9 | 1.0 | 10 | 9 |
| 1,4-Dichlorobenzene | U | 9 | 1.0 | 10 | 9 |
| 1.2-Dichlorobenzene | ש | 9 | 1.0 | 10 | 9 |
| 2-Methylphenol | u | 9 | 1.0 | 10 | 9 |
| 2,2'-Oxybis(1-chloropropane) | 17 | 9 | 1.0 | 10 | 9 |
| N-Nitrosc-di-n-propylamine | U | 9 | 1.0 | 10 | 9 |
| 3&4-Methylphenol | | 9 | 1.0 | 10 | 9 |
| Hexachloroethane | T | 9 | 1.0 | 10 | 9 |
| Nitrobenzene | ซ | 9 | 1.0 | 10 | 9 |
| Isophorone | บ | 9 | 1.0 | 10 | 9 |
| 2-Nitrophenol | T | 9 | 1.0 | 10 | 9 |
| 2.4-Dimethylphenol | U | 9 | 1.0 | 10 | 9 |
| Bis(2-Chloroethoxy)methane | U | 9 | 1.0 | 10 | g |
| 2,4-Dichlorophenol | v | 9 | 1.0 | 10 | 9 |
| 1.2.4-Trichlorobenzene | U | 9 | 1.0 | 10 | 9 |
| Naphthalene | U | 9 | 1.0 | 10 | 9 |
| 4-Chloroaniline | U | 9 | 1.0 | 10 | 9 |
| Hexachlorobutadiene | u | 9 | 1.0 | 10 | 9 |
| 4-Chloro-3-Methylphenol | U | 9 | 1.0 | 10 | 9 |
| 2-Methylnaphthalene | U | 9 | 1.0 | 10 | 9 |
| Hexachlorocyclopentadiene | u | 9 | 1.0 | 10 | 9 |
| 2,4,6-Trichlorophenol | ש | 9 | 1.0 | 10 | 9 |
| 2,4,5-Trichlorophenol | U | 24 | 1.0 | 25 | 24 |
| 2-Chloronaphthalene | ט | 9 | 1.0 | 10 | 9 |
| 2-Nitroaniline | U | 24 | 1.0 | 25 | 24 |
| Dimethyl Phthalate | ע | 9 | 1.0 | 10 | 9 |
| 2,6-Dinitrotoluene | ਹ | 9 | 1.0 | 10 | 9 |
| Acenaphthylene | U | 9 | 1.0 | 10 | 9 |
| 3-Nitroaniline | ਬ | 24 | 1.0 | 25 | 24 |
| Acenaphthene | ซ | 9 | 1.0 | 10 | 9 |
| 2,4-Dinitrophenol | ซ | 24 | 1.0 | 25 | 24 |
| Dibenzofuran | U | 9 | 1.0 | 10 | 9 |
| 4-Nitrophenol | a | 24 | 1.0 | 25 | 24 |
| 2,4-Dinitrotoluene | U | 9 | 1.0 | 10 | 9 |
| Diethylphthalate | ซ | 9 | 1.0 | 10 | 9 |
| Fluorene | ช | 9 | 1.0 | 10 | 9 |
| 4-Chlorophenyl-phenylether | U | 9 | 1.0 | 10 | 9 |
| 4-Nitroaniline | บ | 24 | 1.0 | 25 | 24 |
| 4,6-Dinitro-2-Methylphenol | ប | 24 | 1.0 | 25 | 24 |
| N-Nitrosodiphenylamine | σ | 9 | 1.0 | 10 | 9 |
| | | | | | |

Page 01 of 02 U8762.D

Client: Drumlin Environment

Project: EP#1120

PO No:

Sample Date: 11/02/11 Received Date: 11/03/11 Extraction Date: 11/04/11 Analysis Date: 23-NOV-2011 14:56

Report Date: 12/01/2011 Matrix: WATER

Wattax: WATER % Solids: NA Lab ID: SE7341-1 Client ID: MW-7 SDG: SE7341 Extracted by: EC

Extraction Method: SW846 3510

Analyst: WAS

Analysis Method: SW846 8270C

Lab Prep Batch: WG100443

Units: ug/L

| Compound | Flags | Results | DF | POL | Adi.Pol |
|------------------------------|--------|---------|-----|-----|---------|
| 4-Bromophenyl-phenylether | ט | 9 | 1.0 | 10 | 9 |
| Hexachlorobenzene | Ū | 9 | 1.0 | 10 | 9 |
| Pentachlorophenol | Ū | 24 | 1.0 | 25 | 24 |
| Phenanthrene | - U | 9 | 1.0 | 10 | 9 |
| Anthracene | Ū | 9 | 1.0 | 10 | 9 |
| Carbazole | บ | 9 | 1.0 | 10 | 9 |
| Di-n-butylphthalate | ש | 9 | 1.0 | 10 | 9 |
| Fluoranthene | Ū | 9 | 1.0 | 10 | 9 |
| Pvrene | T | 9 | 1.0 | 10 | 9 |
| Butylbenzylphthalate | U | 9 | 1.0 | 10 | 9 |
| Benzo (a) anthracene | σ | 9 | 1.0 | 10 | 9 |
| 3,3'-Dichlorobenzidine | π | 9 | 1.0 | 10 | 9 |
| Chrysene | U | 9 | 1.0 | 10 | 9 |
| bis (2-Ethylhexyl) phthalate | บ | 9 | 1.0 | 10 | 9 |
| Di-n-octylphthalate | บ | 9 | 1.0 | 10 | 9 |
| Benzo(b) fluoranthene | ע | 9 | 1.0 | 10 | 9 |
| Benzo(k) fluoranthene | U | 9 | 1.0 | 10 | 9 |
| Benzo(a)pyrene | ū | 9 | 1.0 | 10 | 9 |
| Indeno(1,2,3-cd) pyrene | U | 9 | 1.0 | 10 | 9 |
| Dibenzo (a, h) anthracene | υ | 9 | 1.0 | 10 | 9 |
| Benzo(g,h,i)perylene | U | 9 | 1.0 | 10 | 9 |
| 2-Fluorophenol | | 10% | | 20 | _ |
| Phenol-D6 | | * 9% | | | |
| Nitrobenzene-D5 | | 57% | | | |
| 2-Fluorobiphenyl | | 64% | | | |
| 2,4,6-Tribromophenol | | 40% | | | |
| Terphenyl-D14 | | 86% | | | |
| | | | | | |

Page 02 of 02 U8762.D

Client: Drumlin Environment

Project: EP#1120

PO No:

Sample Date: 11/02/11 Received Date: 11/03/11 Extraction Date: 11/04/11

Analysis Date: 14-NOV-2011 13:38

Report Date: 12/01/2011

Matrix: WATER % Solids: NA Lab ID: SE7341-1 Client ID: MW-7 SDG: SE7341

Extracted by: EC

Extraction Method: SW846 3510

Analyst: CB

Analysis Method: SW846 8082 Lab Prep Batch: WG100447

Units: ug/L

| Compound | Flags | Results | DF | PQL | Adj.pqL |
|----------------------|-------|---------|-----|------|---------|
| Aroclor-1016 | U | 0.47 | 1.0 | 0.50 | 8.47 |
| Aroclor-1221 | υ | 0.47 | 1.0 | 0.50 | 0.47 |
| Aroclor-1232 | U | 0.47 | 1.0 | 0.50 | 0.47 |
| Aroclor-1242 | ช | 0.47 | 1.0 | 0.50 | 0.47 |
| Aroclor-1248 | ט | 0.47 | 1.0 | 0.50 | 0.47 |
| Aroclor-1254 | ซ | 0.47 | 1.0 | 0.50 | 0.47 |
| Aroclor-1260 | U | 0.47 | 1.0 | 0.50 | 0.47 |
| Tetrachloro-m-xylene | | 67% | | | |
| Decachlorobiphenvl | | * 36% | | | |

Page 01 of 01 7EK534.D

Client: Drumlin Environment

Project: EP#1120

PO No:

Sample Date: 11/02/11 Received Date: 11/03/11 Extraction Date: 11/04/11

Analysis Date: 12-NOV-2011 00:55

Report Date: 11/15/2011

Matrix: WATER % Solids: NA

Lab ID: SE7341-1DL Client ID: MW-7 SDG: SE7341 Extracted by: EC

Extraction Method: SW846 3510

Analyst: AC

Analysis Method: MEDEP 4.1.25

Lab Prep Batch: WG100439

Unite: ug/L

Compound

Diesel Range Organics

Flags Results DF

3400

PQL Adj.PQL 190

O-Terphenyl

76%

01 of 01 AEK2119.d

Client: Drumlin Environment

Project: EP#1120

PO No:

Sample Date: 11/02/11 Received Date: 11/03/11

Extraction Date:

Analysis Date: 08-NOV-2011 15:02

Report Date: 11/16/2011

Matrix: WATER % Solids; NA

Lab ID: SE7341-1 Client ID: MW-7

SDG: SE7341 Extracted by:

Extraction Method: SW846 5030B

Analyst: EKC Analysis Method: MEDEP 4.2.17

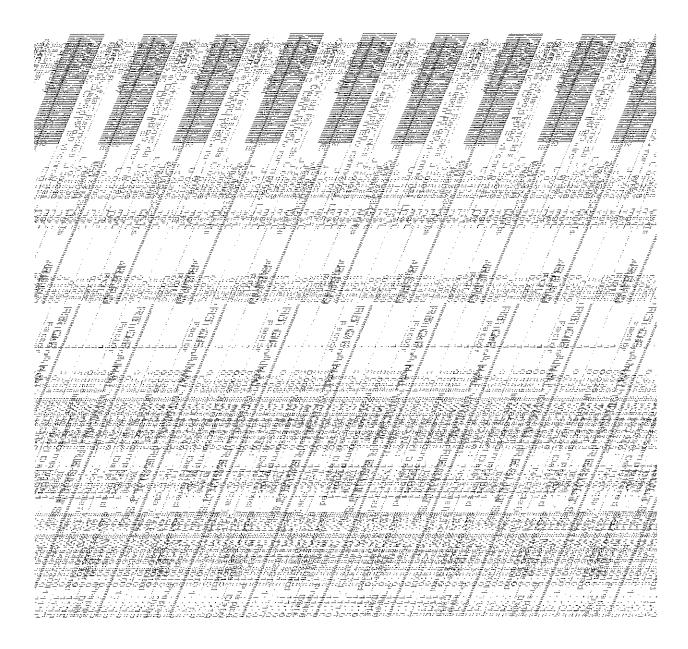
Lab Prep Batch: WG100677

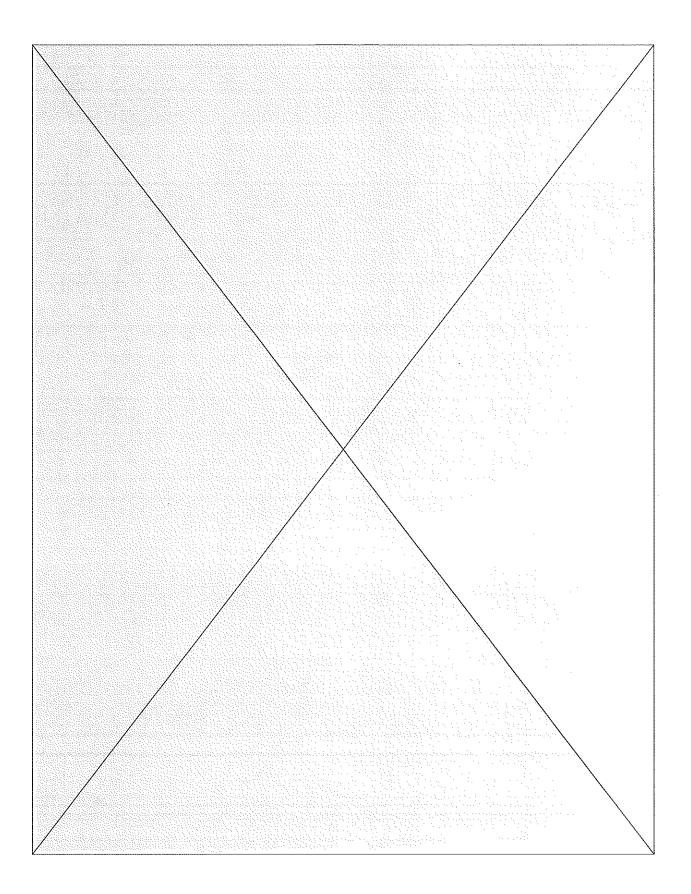
Units: ug/L

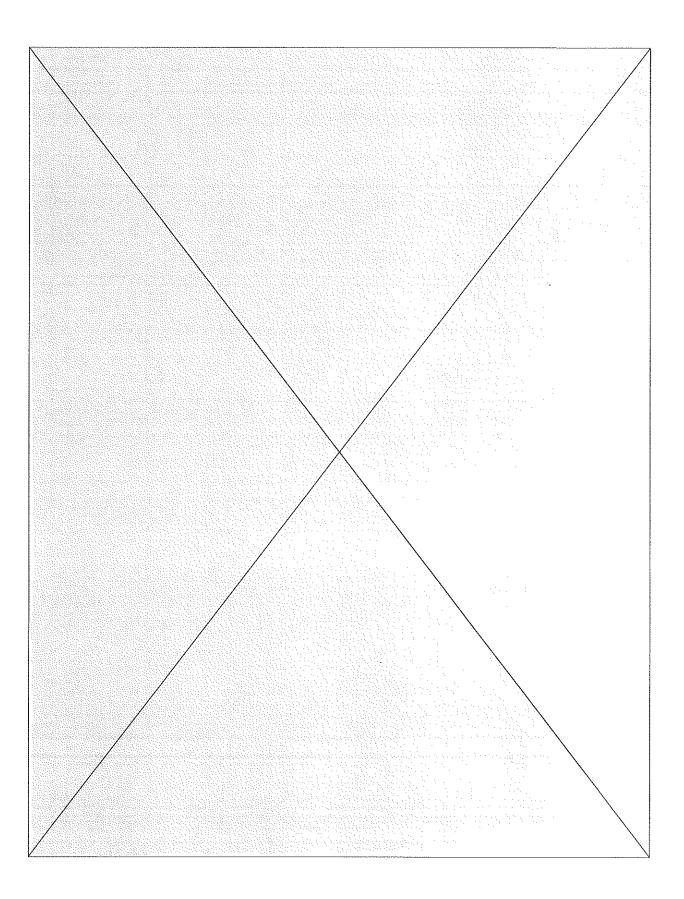
Flags Results DF FQL Adj.FQL Compound Gasoline Range Organics tr 10 1.0 10 10

4-Bromofluorobenzene 103%

Page 01 of 01 2EK10076.D







Client: Drumlin Environment

Project: EP#1120

PO No:

Sample Date: 11/02/11 Received Date: 11/03/11 Extraction Date: 11/04/11

Analysis Date: 23-NOV-2011 15:42

Report Date: 12/01/2011

Matrix: WATER % Solids: NA

Lab ID: SE7341-2 Client ID: MW-5 SDG: SE7341 Extracted by: EC

Extraction Method: SW846 3510

Analyst: WAS

Analysis Method: SW846 82700 Lab Prep Batch: WG100443

Units: ug/L

| d | 797 | Results | DF | 707 | 1.4.4 DOT |
|----------------------------------|------------|---------|------------|------------|--------------|
| Compound Phenol | Flags U | Resurcs | 1.0 | PQL 10 | Adj.PQL 9 |
| Bis(2-Chloroethyl)ether | U | 9 | 1.0 | 10 | 9 |
| 2-Chlorophenol | u | 9 | 1.0 | 10 | 9 |
| 1,3-Dichlorobenzene | τr | 9 | 1.0 | 10 | 9 |
| 1,4-Dichlorobenzene | מ | 9 | 1.0 | 10 | 9 |
| 1.2-Dichlorobenzene | 0 | 9 | 1.0 | 10 | 9 |
| 2-Methylpheno1 | | 9 | 1.0 | 10 | 9 |
| 2,2'-0xybis(1-chloropropane) | σ | 9 | 1.0 | 10 | 9 |
| N-Witroso-di-n-propylamine | ซ | 9 | 1.0 | 10 | 9 |
| 3&4-Methylphenol | u U | 9 | 1.0 | 10 | 9 |
| Hexachloroethane | מ | 9 | 1.0 | 10 | 9 |
| Nitrobenzene | U | 9 | 1.0 | 10 | 9 |
| | tr | 9 | 1.0 | 10 | 9 |
| Isophorone 2-Nitrophenol | U | 9 | 1.0 | 10 | 9 |
| - | Tr | 9 | 1.0 | 10 | 9 |
| 2,4-Dimethylphenol | T. | 9 | 1.0 | 10 | 9 |
| Bis (2-Chloroethoxy) methane | - | 9 | 1.0 | | 9 |
| 2.4-Dichlorophenol | U U | 9 | 1.0 | 10 | _ |
| 1,2,4-Trichlorobenzene | U | 9 | | 10 10 | 9 |
| Naphthalene | _ | 9 | 1.0 1.0 | | _ |
| 4-Chloroaniline | T T | 9 | 1.0 | 10 10 | 9 |
| Hexachlorobutadiene | - | - | | | - |
| 4-Chloro-3-Methylphenol | U | 9 | 1.0 | 10 | 9 |
| 2-Methylnaphthalene | U | 9 | 1.0 | 1.0 | 9 |
| Hexachlorocyclopentadiene | U | 9 | 1.0 | 10 | 9 |
| 2,4,6-Trichlorophenol | U | _ | 1.0 | 10 | 9 |
| 2,4,5-Trichlorophenol | U | 24 | 1.0 | 25 | 24 |
| 2-Chloronaphthalene | u | 9 | 1.0 | 10 | 9 |
| 2-Nitroaniline | U | 24 | | 25 | 24 |
| Dimethyl Phthalate | u | 9 | 1.0 | 10 | 9 |
| 2,6-Dinitrotoluene | | 9 9 | 1.0 | 1.0 1.0 | 9 9 |
| Acenaphthylene 3-Nitroaniline | ש | - | | 25 | 9 24 |
| | <u>u</u> | 24 | 1.0 | | 24 9 |
| Acenaphthene | u | 9 | | 10 25 | - |
| 2,4-Dinitrophenol | U | 24 | 1.0 | | 24 |
| Dibenzofuran | υ | 9 | 1.0 | 10 | 9 |
| 4-Nitrophenol | u | 24 | 1.0 | 25 | 24 |
| 2,4-Dinitrotoluene | u | 9 | 1.0 | 10 | 9 |
| Diethylphthalate | U | 9 | 1.0 | 10 | 9 |
| Fluorene | U | 9 | 1.0 | 10 | 9 |
| 4-Chlorophenyl-phenylether | <u>a</u> | 9 | 1.0 | 10 | 9 |
| 4-Nitroaniline | U | 24 | 1.0 | 25 | 24 |
| 4,6-Dinitro-2-Methylphenol | U | 24 | 1.0 | 25 | 24 |
| N-Nitrosodiphenylamine | U | 9 | 1.0 | 10 | 9 |

01 of 02 U8763.D Page

Client: Drumlin Environment

Project: EP#1120

PO No:

Sample Date: 11/02/11
Received Date: 11/03/11
Extraction Date: 11/04/11
Analysis Date: 23-NOV-2011 15:42
Report Date: 12/01/2011

Matrix: WATER % Solids: NA Lab ID: SE7341-2 Client ID: MW-5 SDG: SE7341 Extracted by: EC

Extraction Method: SW846 3510

Analyst: WAS

Analysis Method: SW846 8270C Lab Prep Batch: WG100443

Units: ug/L

| Compound | Flags | Results | DF | PQL | Adj.PQL |
|----------------------------|-------|---------|-----|-----|---------|
| 4-Bromophenyl-phenylether | σ | 9 | 1.0 | 10 | 9 |
| Hexachlorobenzene | U | 9 | 1.0 | 10 | 9 |
| Pentachlorophenol | σ | 24 | 1.0 | 25 | 24 |
| Phenanthrene | ប | 9 | 1.0 | 10 | 9 |
| Anthracene | U | g | 1.0 | 10 | 9 |
| Carbazole | ប | 9 | 1.0 | 10 | 9 |
| Di-n-butylphthalate | U | 9 | 1.0 | 10 | 9 |
| Fluoranthene | σ | 9 | 1.0 | 10 | 9 |
| Pyrene | U | 9 | 1.0 | 10 | 9 |
| Butylbenzylphthalate | ប | 9 | 1.0 | 10 | 9 |
| Benzo (a) anthracene | U | 9 | 1.0 | 10 | 9 |
| 3,3'-Dichlorobenzidine | U | 9 | 1.0 | 10 | 9 |
| Chrysene | U | 9 | 1.0 | 10 | 9 |
| bis(2-Ethylhexyl)phthalate | ซ | 9 | 1.0 | 10 | 9 |
| Di-n-octylphthalate | υ | 9 | 1.0 | 10 | 9 |
| Benzo(b) fluoranthene | U | 9 | 1.0 | 10 | 9 |
| Benzo(k)fluoranthene | ប | 9 | 1.0 | 10 | 9 |
| Benzo(a)pyrene | U | 9 | 1.0 | 10 | 9 |
| Indeno(1,2,3-cd)pyrene | τ | 9 | 1.0 | 10 | 9 |
| Dibenzo (a, h) anthracene | ប | 9 | 1.0 | 10 | 9 |
| Benzo(g,h,i)perylene | ซ | 9 | 1.0 | 10 | 9 |
| 2-Fluorophenol | | * 6% | | | |
| Phenol-D6 | | * 0% | | | |
| Nitrobenzene-D5 | | 57% | | | |
| 2-Fluorobiphenyl | | 65% | | | |
| 2,4,6-Tribromophenol | | * 29% | | | |
| Terpheny1-D14 | | 101% | | | |
| | | | | | |

Page 02 of 02 U8763.D

Client: Drumlin Environment

Project: EP#1120

PO No:

Sample Date: 11/02/11 Received Date: 11/03/11 Extraction Date: 11/04/11 Analysis Date: 14-NOV-2011 14:04

Report Date: 12/01/2011

Matrix: WATER % Solids: NA Lab ID: SE7341-2 Client ID: MW-5 SDG: SE7341 Extracted by: EC

Extraction Method: SW846 3510

Analyst: CB

Analysis Method: SW846 8082 Lab Prep Batch: WG100447

Units: ug/L

| Compound | Flags | Results . | DF | PQL | Adj.PQL |
|----------------------|-------|-----------|-----|------|---------|
| Aroclor-1816 | u | 0.47 | 1.0 | 0.50 | 0.47 |
| Aroclor-1221 | ŭ | 0.47 | 1.0 | 0.50 | 0.47 |
| Aroclor-1232 | σ | 0.47 | 1.0 | 0.50 | 0.47 |
| Aroclor-1242 | U | 0.47 | 1.0 | 0.50 | 0.47 |
| Aroclor-1248 | ש | 0.47 | 1.0 | 0.50 | 0.47 |
| Aroclor-1254 | σ | 0.47 | 1.0 | 0.50 | 0.47 |
| Aroclor-1260 | υ | 0.47 | 1.0 | 0.50 | 0.47 |
| Tetrachloro-m-xylene | | * 56% | | | |
| Decachlorobiphenyl | | ★ 22% | | | |

Page 01 of 01 7EK535.D

KATAHDIN ANALYTICAL SERVICES

Report of Analytical Results

Client: Drumlin Environment

Project: EP#1120

PO No:

Sample Date: 11/02/11 Received Date: 11/03/11 Extraction Date: 11/04/11

Analysis Date: 09-NOV-2011 00:43

Report Date: 11/15/2011

Diesel Range Organics

Matrix: WATER % Solids: NA

Lab ID: SE7341-2 Client ID: MW-5 SDG: SE7341 Extracted by: EC

Extraction Method: SW846 3510

Analyst: AC

Analysis Method: MEDEP 4.1.25

Lab Prep Batch: WG100439

Units: ug/L

Compound

O-Terphenyl

Flags

Results DF 1200 1.0

PQL Adj.PQL 50 47

69¥

Page 01 of 01

AEK2055.d

Client: Drumlin Environment

Project: EP#1120

PO No:

Sample Date: 11/02/11 Received Date: 11/03/11

Extraction Date:

Analysis Date: 08-NOV-2011 16:32

Report Date: 11/16/2011

Matrix: WATER % Solids: NA Lab ID: SE7341-2 Client ID: MW-5 SDG: SE7341 Extracted by:

Extraction Method: SW846 5030B

Analyst: EKC

Analysis Method: MEDEP 4.2.17

Lab Prep Batch: WG100677

Units: ug/L

Compound Gasoline Range Organics Plags U

Page

Results DF 10 1.0 101% PQL Adj.PQL 10 10

4-Bromofluorobenzene

01 of 01

2EK10077.D



REPORT OF ANALYTICAL RESULTS

Client: Matt Reynolds
Drumlin Environmental, LLC
75 York St.
PO Box 392

Portland, ME 04112-0342

Lab Sample ID: SE7341-002

Report Date: PO No.:

12/13/2011 11-020

Project:

EP#1120

| Sample Description | | | | | | Matrix | Filtered | i | Date Sample | ed | _ | ate eived | |
|--------------------|----------|-------|-----------------|--------------------|-------|----------------------|------------------|-----|----------------|-----------------|------|--------------|-------|
| MW-5 | | | | | | AQ | No(Tota | ll) | 11/02/20 | 111 | 11/0 | 3/2011 | |
| Parameter | Result | Units | Adjusted PQL | Dilution Factor | PQL | Analytical Method | Analysis Date | Ву | Prep Method | Prepped Date | Ву | СС | Notes |
| ANTIMONY | U 0.0013 | mg/L | 0.008 | 1 | 0.008 | SW848 6010 | 11/10/11 | EAM | SW846 301 | 0 11/10/11 | NAT | BK10ICW2 | |
| ARSENIC | 0,076 | mg/L | 0.008 | 1 | 0.008 | SW846 6010 | 11/10/11 | EAM | SW846 301 | 0 11/10/11 | NAT | BK10ICW2 | |
| BARIUM | 0.120 | mg/L | 0.0050 | 1 | 0.005 | SW846 6010 | 11/10/11 | EAM | SW846 301 | 0 11/10/11 | NAT | BK10CW2 | |
| CADMIUM | J 0.0017 | mg/L | 0.0100 | 1 | 0.01 | SW846 6010 | 11/10/11 | EAM | SW846 301 | 0 11/10/11 | NA? | BK10ICW2 | |
| CHROMIUM | J 0.0008 | mg/L | 0.0150 | 1 | 0.015 | SW846 6010 | 11/10/11 | EAM | SW846 301 | 0 11/10/11 | NA. | BK10ICW2 | |
| COPPER | J 0.0090 | mg/L | 0.0250 | 1 | 0.025 | SW846 6010 | 11/10/11 | EAM | SW846 301 | 0 11/10/11 | NAT | BK10ICW2 | |
| LEAD | 800,0 | mg/L | 0.005 | 1 | 0.005 | SW846 6010 | 11/10/11 | EAM | SW846 301 | 0 11/10/11 | NAT | BK10ICW2 | |
| MERCURY | J 0.04 | ug/L | 0.20 | 1 | 0.2 | SW848 7470 | 11/8/11 | NAT | SW846 747 | 0 11/7/11 | NAT | BK07HGW3 | |
| NICKEL | J 0.0169 | mg/L | 0.0400 | 1 | 0.04 | SW846 6010 | 11/10/11 | EAM | SW846 301 | 0 11/10/11 | NA | BK10ICW2 | |
| SELENIUM | U 0.0024 | mg/L | 0.010 | 1 | 0.01 | SW846 6010 | 11/10/11 | EAM | SW846 301 | 0 11/10/11 | NA | BK10ICW2 | |
| SILVER | J 0.0004 | mg/L | 0.0150 | 1 | 0.015 | SW846 6010 | 11/10/11 | EAM | SW846 301 | 0 11/10/11 | NAT | BK10ICW2 | |
| ZINC | 0.672 | mg/L | 0.0250 | 1 | 0.025 | SW848 6010 | 11/10/11 | EAM | SW846 301 | 0 11/10/11 | NAT | BK10ICW2 | |

| 20.00 | | Section with the | 400 | Same of the Same | Grandon. | 4 | | 1000 | 4.3 | Carlo Line | Section : | Carrier Carr | | 2.5.4 | 1200 | | 200 | 7-7/- | 45.0 | Part Section | 100 | - CV | 10000 | 7.0 | 100 | 435.30 | S 3- | C. N | | 4.5 | 4. 44.14 | **** | A |
|-------|-------------|------------------|--------------------|----------------------|----------|----------------------|-----------|---------------|------------------|------------|-----------|--------------|---------|--------|-------|---------------|-------|--------|-------------|--------------|------|--------------|---------------------|----------|-------|----------|----------|-------------|-------------|-------------|----------|----------|-------|
| 1 | S-14- | 151.25 | Transfer | 4.5 | ÷ (2.) | $\Sigma X T \gtrsim$ | A | 1.2 | T4 (1) | 1.3 | 4 | 经海 | S DE | 100 | 但一般 | . \ 24 | 14. | 至3500 | 2.0 | S-14 | | | . T. | 40.00 | | 20.7 | 1.1 | y service | 144 | 1000 36 | 3.0 | 44.5 | 2.60 |
| 4.20 | 40 | elek All | and the | rus to ci | ester : | R. Sec | 100 | recity. | ·7>_4 | を事業が | 15.00 | 5-32 | X27- | 14 J | 200 | m ferry | 定を発 | £ 00 | 420-2 | r. 0.5% | 1 | BACK. | a 🖦 | Act free | nina. | 12. | T-10 | <u>-</u> >: | | te 🗀 | 1.00 | | 1.0 |
| | | 南阳湖 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 150 | | July Chi. | 290.4 | 100 | 30 | SF 12 | ACCESS OF | 4.215 | doù re | 1 | de la | er Park | 3161511 | * (| ar in | 4.5 | 31. | 11.0 | 可要 你 | $=k_0$ at | Met. | 10 | () (2 2) | 15.00 | A TOP | 1.31. Ar | 无证券几 | A,756 | \$15,72 | | -X-4- | - | 657 V |
| S | (4) and (4) | 15 7 | - 英語的 | 4. | e do | 東大学 | Sec. 14. | -534× | 12 | 数上字子 | 4 | 100 | - 63 | 1 | 40.00 | - 24 | 44.14 | 14. | 4-1-1-1 | N.J. | 17.1 | 2200 | £ 1. 7. 24 | 44.5 | 海姆 | 1000 | 40.00 | 1300 | -5 | of the said | 100 | 21. 6.11 | S |
| | 11 P | 100 | والمراجعة والمتناء | 医线动脉炎 | | ti di di | 10 | التجنيا الكوا | الجر والإنتاج ال | *بدين | 3.7 | 3 | 40.64 | -6-7-7 | 500 | SEASON. | 4.5 | har es | 100 | 3 50 | 1 | ه والمواجع ا | 1 | 272 | 超越多 | 63 AV | 43 M | 1 | 建程 张 | 100 | 1.4 | | 6 |
| FA4 | T | 70.22 | | 100 | | 45.00 | -1, | -5-5 X | 200 | | | بدوس | 100 | | 27-17 | | 的连经 | ir or | | 77.4 | | 937. 25 | - | 1.25 | - | - N | 2000 | | | 4500 | | | 4-0 |
| - · | | | 2 | | | | | | | | | - : | | | | <u>:</u> ' | | | _ | | | | | | | | <i>=</i> | | | | | | |

32 25

盍

<u>.</u>

<u>.</u>..

.â.

| | ## | | | | |
|---|---|--|--|--|--|
| | | | and the same of th | | |
| | | | | | |
| | 2 7 7 2 2 2 2 2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | | | | |
| Languaguaguaguaguaguaguaguaguaguaguaguaguag | | | | | |
| | | | | | |

Client: Drumlin Environment

Project: EP#1120

PO No:

Sample Date: 11/02/11 Received Date: 11/03/11 Extraction Date: 11/04/11 Analysis Date: 23-NOV-2011 16:28

Report Date: 12/01/2011

Matrix: WATER % Solids: NA Lab ID: SE7341-3 Client ID: MW-B SDG: SE7341 Extracted by: EC

Extraction Method: SW846 3510

Analyst: WAS

Analysis Method: SWB46 8270C

Lab Prep Batch: WG100443

Units: ug/L

| Compound | Flags | Results | DF | POL | Adj.PQL |
|------------------------------|----------|---------|-----|-----|---------|
| Phenol | T TO S D | 9 | 1.0 | 10 | 9 |
| Bis (2-Chloroethyl) ether | σ | 9 | 1.0 | 10 | 9 |
| 2-Chlorophenol | σ | 9 | 1.0 | 10 | 9 |
| 1,3-Dichlorobenzene | บ | 9 | 1.0 | 10 | 9 |
| 1,4-Dichlorobenzene | ซ | 9 | 1.0 | 10 | 9 |
| 1,2-Dichlorobenzene | ū | ģ | 1.0 | 10 | 9 |
| 2-Methylphenol | σ | 9 | 1.0 | 10 | 9 |
| 2,2'-0xybis(1-chloropropane) | | 9 | 1.0 | 10 | 9 |
| N-Nitroso-di-n-propylamine | U | 9 | 1.0 | 10 | و |
| 3&4-Methylphenol | ū | 9 | 1.0 | 10 | 9 |
| Hexachloroethane | U | ģ | 1.0 | 10 | 9 |
| Nitrobenzene | Ū | 9 | 1.0 | 10 | وُ |
| Isophorone | U | 9 | 1.0 | 10 | 9 |
| 2-Nitrophenol | U | 9 | 1.0 | 10 | 9 |
| 2,4-Dimethylphenol | บ | 9 | 1.0 | 10 | 9 |
| Bis(2-Chloroethoxy)methane | u | 9 | 1.0 | 10 | 9 |
| 2,4-Dichlorophenol | TZ | 9 | 1.0 | 10 | 9 |
| 1,2,4-Trichlorobenzene | U | 9 | 1.0 | 10 | 9 |
| Naphthalene | u | 9 | 1.0 | 10 | 9 |
| 4-Chloroaniline | ם | 9 | 1.0 | 10 | 9 |
| Hexachlorobutadiene | ם | 9 | 1.0 | 10 | 9 |
| 4-Chloro-3-Methylphenol | บ | 9 | 1.0 | 10 | 9 |
| 2-Methylnaphthalene | ש | 9 | 1.0 | 10 | 9 |
| Hexachlorocyclopentadiene | u | 9 | 1.0 | 10 | 9 |
| 2,4,6-Trichlorophenol | ש | 9 | 1.0 | 10 | 9 |
| 2,4,5-Trichlorophenol | ū | 24 | 1.0 | 25 | 24 |
| 2-Chloronaphthalene | U | 9 | 1.0 | 10 | 9 |
| 2-Nitroaniline | ש | 24 | 1.0 | 25 | 24 |
| Dimethyl Phthalate | ע | 9 | 1.0 | 10 | 9 |
| 2,6-Dinitrotoluene | u ע | 9 | 1.0 | 10 | g |
| Acenaphthylene | ซ | 9 | 1.0 | 10 | ģ |
| 3-Nitroaniline | ซ | 24 | 1.0 | 25 | 24 |
| Acenaphthene | ש | 9 | 1.0 | 10 | 9 |
| 2,4-Dinitrophenol | . ד | 24 | 1.0 | 25 | 24 |
| Dibenzofuran | บ | 9 | 1.0 | 10 | 9 |
| 4-Nitrophenol | u | 24 | 1.0 | .25 | 24 |
| 2,4-Dinitrotoluene | T T | 9 | 1.0 | 10 | 9 |
| Diethylphthalate | U | و | 1.0 | 10 | 9 |
| Fluorene | u | وَ | 1.0 | 10 | 9 |
| 4-Chlorophenyl-phenylether | ช | 9 | 1.0 | 10 | 9 |
| 4-Nitroaniline | Π | 24 | 1.0 | 25 | 24 |
| 4,6-Dinitro-2-Methylphenol | ש | 24 | 1.0 | 25 | 24 |
| N-Nitrosodiphenylamine | ש | 9 | 1.0 | 10 | 9 |
| | - | | | | - |

Page 01 of 02 U8764.D

Client: Drumlin Environment

Project: EP#1120

PO No:

Sample Date: 11/02/11
Received Date: 11/03/11
Extraction Date: 11/04/11
Analysis Date: 23-NOV-2011 16:28

Report Date: 12/01/2011

Matrix: WATER % Solids: NA Lab ID: SE7341-3 Client ID: MW-B SDG: SE7341 Extracted by: EC

Extraction Method: SW846 3510

Analyst: WAS

Analysis Method: SW846 8270C Lab Prep Batch: WG100443

Units: ug/L

| Compound | Flags | Results | DF | POL | Adi.POL |
|----------------------------|-------|---------|-----|-----|---------|
| 4-Bromophenyl-phenylether | u | 9 | 1.0 | 10 | 9 |
| Hexachlorobenzene | ינו | 9 | | 10 | 9 |
| Pentachlorophenol | ם | 24 | 1.0 | 25 | 24 |
| Phenanthrene | ע | 9 | 1.0 | 10 | 9 |
| Anthracene | ט | 9 | 1.0 | 10 | 9 |
| Carbazole | U | 9 | 1.0 | 10 | 9 |
| Di-n-butylphthalate | σ | 9 | 1.0 | 10 | 9 |
| Fluoranthene | υ | 9 | 1.0 | 10 | 9 |
| Pyrene | ij | 9 | 1.0 | 10 | 9 |
| Butylbenzylphthalate | σ | 9 | 1.0 | 10 | 9 |
| Benzo (a) anthracene | υ | 9 | 1.0 | 10 | 9 |
| 3,3'-Dichlorobenzidine | U | 9 | 1.0 | 10 | 9 |
| Chrysene | υ | 9 | 1.0 | 10 | 9 |
| bis(2-Ethylhexyl)phthalate | σ | 9 | 1.0 | 10 | 9 |
| Di-n-octylphthalate | U | 9 | 1.0 | 1.0 | 9 |
| Benzo(b) fluoranthene | σ | 9 | 1.0 | 10 | 9 |
| Benzo(k)fluoranthene | U | 9 | 1.0 | 10 | 9 |
| Benzo(a)pyrene | σ | 9 | 1.0 | 10 | 9 |
| Indeno(1,2,3-cd)pyrene | U | 9 | 1.0 | 10 | 9 |
| Dibenzo(a,h)anthracene | U | 9 | 1.0 | 10 | 9 |
| Benzo(g,h,i)perylene | U | 9 | 1.0 | 10 | 9 |
| 2-Fluorophenol | | 114 | | | |
| Phenol-D6 | | * 6% | | | |
| Nitrobenzene-D5 | | 42% | | | |
| 2-Fluorobiphenyl | | 53% | | | |
| 2,4,6-Tribromophenol | | 45% | | | |
| Terphenyl-D14 | | 43% | | | |
| | | | | | |

Page 02 of 02

U8764.D

Client: Drumlin Environment

Project: EP#1120

PO No:

PO No:
Sample Date: 11/02/11
Received Date: 11/03/11
Extraction Date: 11/04/11
Analysis Date: 14-NOV-2011 14:30

Report Date: 12/01/2011

Matrix: WATER % Solids: NA Lab ID: SE7341-3 Client ID: MW-B SDG: SE7341 Extracted by: EC

Extraction Method: SW846 3510

Analyst: CB

Analysis Method: SW846 8082 Lab Prep Batch: WG100447

Units: ug/L

| Compound | Flags | Results | DF | FQL | Adj.PQL |
|----------------------|-------|---------|-----|------|---------|
| Aroclor-1016 | σ | 0.47 | 1.0 | 0.50 | 0.47 |
| Aroclor-1221 | U | 0.47 | 1.0 | 0.50 | 0.47 |
| Aroclor-1232 | U | 0.47 | 1.0 | 0.50 | 0.47 |
| Aroclor-1242 | σ | 0.47 | 1.0 | 0.50 | 0.47 |
| Aroclor-1248 | υ | 0.47 | 1.0 | 0.50 | 0.47 |
| Aroclor-1254 | U | 0.47 | 1.0 | 0.50 | 9.47 |
| Aroclor-1260 | บ | 0.47 | 10 | 0,50 | 0.47 |
| Tetrachloro-m-xylene | | 76% | | | |
| Decachlorobiphenyl | | 57% | | | |

Client: Drumlin Environment

Project: EP#1120

PO No:

Sample Date: 11/02/11 Received Date: 11/03/11 Extraction Date: 11/04/11 Analysis Date: 09-NOV-2011 01:20

Report Date: 11/15/2011

Matrix: WATER % Solids: NA

Lab ID: SE7341-3 Client ID: MW-B SDG: SE7341 Extracted by: EC

Extraction Method: SW846 3510

Analyst: AC

Analysis Method: MEDEP 4.1.25

Lab Prep Batch: WG100439

Units: ug/L

Compound

Diesel Range Organics

O-Terphenyl

Flags Results 370

Page

DF POL Adj.POL 1.0

58

47

01 of 01

50%

AEK2056.d

Katahdin Analytical Services SE7341 page 0000030 of 0000096