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REMEDIATION WORK PLAN PCB CLEANUP AND AOC 7 CLEANUP

FOR CITY OF CARIBOU, MAINE

27 Birdseye Avenue | Caribou, Maine

August 2021
JN: 10963.005

Report Prepared By:

Haley Ward

549 Main Street | Presque Isle, Maine 04769



**REMEDIATION WORK PLAN
PCB CLEANUP AND AOC 7 CLEANUP
27 BIRDSEYE AVENUE
CARIBOU, MAINE**

On behalf of the City of Caribou, Maine, hereinafter referred to as “Owner”, Haley Ward, Inc. (Haley Ward) has prepared this Remediation Work Plan for Area of Concern (AOC) 5 - Polychlorinated Biphenyl (PCB) Cleanup and AOC 7 Cleanup, at 27 Birdseye Avenue, Caribou, ME. This Remediation Work Plan addresses the following:

- Removal and disposal of soils and a concrete slab contaminated with PCBs at levels above one part per million (ppm) and below 50 ppm, associated with a former electrical transformer (AOC 5);
- Removal and disposal of soils associated with a former demolition debris pile located in AOC 7; and,
- Restoration of both areas.

1.0 BACKGROUND

The Site consists of approximately 21.6 acres and is located at the southwest corner of the Route 1 and Fort Street intersection in Caribou, Maine as shown on the Site Plan (Figure 1). The property is located within the Industrial 2 Zone, was formerly used as an agricultural product processing facility, and is currently vacant. Previously reviewed records indicated that public water lines, sanitary sewer lines, and stormwater lines, as well as process waste piping, are located at the Site. Other various subsurface structures (tunnels, access ways, etc.) associated with past facility operations may still exist at the Site.

General topography at the Site is flat, with regional topography gradually sloping eastward towards the Aroostook River. The area surrounding the Site consists of commercial and residential properties served by municipal water and sewer. Two inactive bedrock wells are located on-site, north and south of the former facility; however, the Site is serviced by municipal water and sewer.

The specific areas of the Site that are addressed by this Remediation Work Plan are 1) soils and a concrete slab contaminated with PCBs at levels below 50 ppm, associated with a former electrical transformer in AOC 5, and 2) soils associated with a former demolition debris pile located in AOC 7. The objective of the cleanup activities at AOC 5 is to remove the concrete slab and adjacent soils containing PCB concentrations above the EPA TSCA high occupancy area concentration of 1 mg/kg. Remediation of soils below the 1 mg/kg threshold will allow unrestricted use. The objective of the cleanup activities at AOC 7 is to remove two feet of soil located within the footprint of a former



demolition debris pile. Surface soil samples from this area indicate low levels of a semi volatile organic compound; however, at a level that exceeds the Maine Department of Environmental Protection (MDEP) residential risk assessment guideline (RAG). Remediation of soils below the MDEP RAG, or soil removal to a depth of two feet below ground surface, will allow unrestricted use within this area.

The scope and sequence of the work to be completed under this Work Plan is presented in **Section 3.0**.

2.0 PERMITS, NOTIFICATIONS, AND REQUIRED PLANS

The Remediation Contractor will be responsible for coordinating site activities with Digsafe. The Owner will notify the USEPA and MDEP regarding project schedule.

3.0 SCOPE OF WORK

3.1 AOC 5 Work

The removal and disposal of the concrete slab and surrounding soils in AOC 5 shall be completed in accordance with the *Notification for Self-Implementing Cleanup Plan for PCB Remediation Waste, Former Birdseye Food Processing Facility, Caribou, ME* (Notification), dated February 2021, attached. This Notification has been approved by the USEPA in an undated letter titled, *PCB Cleanup and Disposal Approval under 40 CFR § 761.61(a) City of Caribou / Caribou, ME*, (Approval), also attached. The selected remediation contractor will be required to submit a signed certification stating that the contractor(s) has read and understands the Notification and agrees to abide by the conditions specified in the Approval.

In summary the work includes removing and disposing of the concrete slab that once was the foundation for a former transformer, as well as the surrounding soils to a depth of 24 inches in an area shown in the attached Notification. If confirmation soil samples result in additional soils or a portion of the adjacent concrete foundation requires additional soil or concrete removal, the contractor shall continue to remove and dispose of soils and concrete (including adjacent foundation walls if necessary), until the cleanup goal has been met. For bidding purposes, a separate unit cost price shall be provided for the removal and disposal of additional soils and concrete (beyond the initial Scope of Work). All soils and concrete shall be disposed of at Tri Community Landfill.



3.2 AOC 7 Work

The work includes removal and disposal of soil that remains where a former debris pile was removed in 2020. The debris pile appeared to consist of either former plant operations debris or process debris. The surface soil was sampled after the debris was removed and was found to contain low levels of benzopyrene (2.60 and 2.90 mg/kg), which exceed only the "Residential" RAG of 1.6 mg/kg. A summary of the debris removal and soil sample results are found in the attached *Limited Soil Investigation Report | Former Birdseye Plant | 27 Birdseye Avenue, Caribou, Maine*, dated September 4, 2020.

Soils shall be removed in an area approximately 40 feet by 60 feet (See **Attachment 2** of the attached report for the area of the AOC 7 debris pile) and to a depth of 24 inches. The remediation area will be identified on site by the Haley Ward. All soil shall be disposed of at Tri Community Landfill. Upon completion of the soil removal, Haley Ward will collect confirmation soil samples for laboratory analysis. After sampling, the Contractor shall place orange plastic construction fencing as a marker and backfill the excavation with clean granular material similar to Maine DOT Type D and Type A gravel (see **Section 3.4** below).

3.3 REGULATORY REQUIREMENTS

Work shall be performed in accordance with applicable Maine Department of Environmental Protection (MDEP), U.S. Environmental Protection Agency (USEPA), U.S. Department of Transportation (DOT), and the Occupational Safety and Health Administration (OSHA) regulations.

The Contractor shall:

- A. Conform to applicable regulations and this Remediation Work Plan for safety of adjacent property, residual waste materials removal, dust and odor control, and runoff control and disposal.
- B. Obtain required permits from authorities.
- C. Notify Dig Safe and affected utility companies before starting work and comply with their requirements.
- D. Not close or obstruct roadways.
- E. The selected remediation contractor will be required to submit a signed certification stating that the contractor(s) has read and understands the Notification and agrees to abide by the conditions specified in the Approval.



3.4 TYPICAL SITE RESTORATION AND CLEANUP

- A. Site restoration work will include, but not be limited to, the following:
- Removal of waste materials, rubbish, tools, equipment, machinery, and surplus materials.
 - Repair, patching, and touch up of marred or otherwise damaged surfaces.
 - Inspection of surfaces, and all work areas, to verify that the entire site is in an orderly condition prior to handing over the completed project,
 - Backfilling the excavation with granular borrow that meets the requirements of MDOT type D gravel. Compact in nine-inch lifts with a vibratory smooth drum roller to 95% compaction. Contractor shall engage the compaction testing services. The final six-inch lift shall be MDOT type A. Slope final grade to drain. Permanently stabilize with four inches of loam, seed, and mulch.
 - Removal of silt fencing once site stabilized.
- B. All damage to existing properties (public and private) shall be repaired to the satisfaction of the Owner and/or the City of Caribou. Such damage could include pavement, curbs, buildings, drainage structures, utilities, etc.

ATTACHMENTS

- A. Birdseye Final Approval June 1, 2021
- B. Final – Birdseye Caribou Self Implementing PCB
- C. Limited Site Investigation Report



ATTACHMENT A

BIRDSEYE FINAL APPROVAL JUNE 1, 2021



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION I

5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

TRANSMITTED VIA ELECTRONIC MAIL

Mr. Dennis L. Marker
City Manager
City of Caribou
25 Hall Street
Caribou, ME 04736
citymanager@cariboumaine.org

Re: PCB Cleanup and Disposal Approval under 40 CFR § 761.61(a)
City of Caribou / Caribou, ME

Dear Mr. Marker:

This is in response to the Notification¹ by the City of Caribou (the City) for approval of a proposed plan to address PCB contamination identified in Area of Concern (AOC) 5 (the "Site") located on the former Birdseye Food Processing Facility at 27 Birdseye Avenue, Caribou, Maine. Specifically, PCB-contaminated soil has been found on the Site at concentrations that exceed the allowable PCB level for unrestricted use under 40 CFR § 761.61(a).

The City is proposing the following PCB cleanup and disposal activities on the Site under 40 CFR § 761.61(a) to meet the *high occupancy area* PCB cleanup level without further conditions:

- Remove *PCB remediation waste* (i.e., soil) with greater than ($>$) 1 ppm but less than ($<$) 50 ppm and dispose as a $<$ 50 ppm PCB waste in accordance with 40 CFR § 761.61(a)(5)(i)(B)(2)(ii)
- Conduct verification sampling of the soil and adjacent building foundation in accordance with 40 CFR Part 761 Subpart O to confirm that the less than or equal to (\leq) 1 ppm PCB cleanup level has been met

The City's Notification meets the requirements at 40 CFR § 761.61(a)(3) with exception of the concrete pad sampling. The City may proceed with its proposed plan in accordance with 40 CFR § 761.61(a), its Notification, and this Approval, subject to the conditions of Attachment 1.

¹ The Notification was prepared by Haley Ward, Inc. (Haley Ward) on behalf of the City of Caribou to satisfy the requirements under 40 CFR § 761.61(a)(3). Information was submitted dated February 22, 2021 (Self-Implementing Cleanup Plan for PCB Remediation Waste); March 31, 2021 (Response to EPA comments); and April 12, 2021 (email transmitting photo log of Site). These submittals together shall be referred to as the "Notification".

Please be advised that this Approval requires more stringent sampling on the concrete pad, submittal of a figure with the proposed sampling locations, and submittal of a plan to address PCBs > 1 ppm that are identified on the concrete pad or the former building foundation. See Attachment 1, Condition 14.

This Approval does not release the City from any applicable requirements of federal, state or local law, including the requirements related to cleanup and disposal of PCB-contaminated waste under the Maine Department of Environmental Protection (MDEP) regulations.

Questions and correspondence regarding this Approval should be directed to:

Katherine A. Woodward, PE, Project Manager
United States Environmental Protection Agency
5 Post Office Square, Suite 100, Mail Code: LCRD07-2
Boston, Massachusetts 02109-3912
Telephone: (617) 918-1353
woodward.katherine@epa.gov

EPA encourages the compliance with greener cleanup practices for all cleanup projects and recommends adherence to the ASTM Standard Guide to Greener Cleanups E2893-16 ("Guide") for work conducted under this Approval and the Notification. Greener Cleanups is the practice of integrating options that minimize the environmental impacts of cleanup actions in order to incorporate practices that maximize environmental and human benefit. Please see Section 6 of the Guide for the Best Management Practices ("BMP") Process dated May 2016. (See www.astm.org/Standards/E2893.htm for additional information). EPA encourages you to review the Guide and implement any practices that are feasible. If implemented, the PCB completion report (see Attachment 1, Condition 22) should include a section on BMP Documentation, as described in Section 6.6.5 of the Guide.

EPA shall not consider this project to be complete until it has received all submittals required under this Approval. Please be aware that upon receipt and review of the submittals, EPA may request any additional information necessary to establish that the work has been completed in accordance with 40 CFR Part 761, the Notification, and this Approval.

Sincerely,

Ginny Lombardo, Chief
Land, Chemicals and Redevelopment Branch

Attachment 1: PCB Cleanup and Disposal Approval Conditions

cc: David S. Hopkins, Jr., Haley Ward, Inc. dhopkins@haleyward.com
Nick Hodgkins, MDEP nick.hodgkins@maine.gov
File

ATTACHMENT 1

**PCB CLEANUP AND DISPOSAL APPROVAL CONDITIONS
CITY OF CARIBOU
FORMER BIRDSEYE FOOD PROCESSING FACILITY
AREA OF CONCERN (AOC) 5 (THE “SITE”)
CARIBOU, MAINE**

GENERAL CONDITIONS

1. This Approval is granted under the authority of Section 6(e) of the Toxic Substances Control Act (TSCA), 15 U.S.C. § 2605(e), and the PCB regulations at 40 CFR Part 761, and applies solely to the *PCB remediation waste* located in Area of Concern (AOC) 5 (the “Site”) as identified in the Notification.
 - a. In the event that the City identifies other PCB-contaminated wastes (i.e., PCBs not identified in the Notification) subject to cleanup and disposal under the PCB regulations, the City will be required to notify EPA and to clean up the PCB-contaminated wastes in accordance with 40 CFR Part 761.
 - b. The City may submit a separate plan to address the other PCB contamination or may propose to modify the Notification to incorporate cleanup of the PCBs under this Approval in accordance with Condition 17.
2. The City shall conduct on-site activities in accordance with the conditions of this Approval and with the Notification.
3. In the event that the cleanup plan described in the Notification differs from the conditions specified in this Approval, the conditions of this Approval shall govern.
4. The terms and abbreviations used herein shall have the meanings as defined in 40 CFR § 761.3 unless otherwise defined within this Approval.
5. The City must comply with all applicable federal, state and local regulations in the storage, handling, and disposal of all PCB wastes, including PCBs, PCB Items and decontamination wastes generated under this Approval. In the event of a new spill during response actions, the City shall contact EPA within 24 hours for direction on PCB cleanup and sampling requirements.
6. The City is responsible for the actions of all officers, employees, agents, contractors, subcontractors, and others who are involved in activities conducted under this Approval. If at any time the City has or receives information indicating that the City or any other person has failed, or may have failed, to comply with any provision of this Approval, it must report the information to EPA in writing within 24 hours of having or receiving the information.

7. This Approval does not constitute a determination by EPA that the transporters or disposal facilities selected by the City are authorized to conduct the activities set forth in the Notification. The City is responsible for ensuring that its selected transporters and disposal facilities are authorized to conduct these activities in accordance with all applicable federal, state and local statutes and regulations.
8. This Approval does not: 1) waive or compromise EPA's enforcement and regulatory authority; 2) release the City from compliance with any applicable requirements of TSCA or of other federal, state or local law; or, 3) release the City from liability for, or otherwise resolve any violations of TSCA or of any other federal, state or local law.
9. Failure to comply with the Approval conditions specified herein shall constitute a violation of the requirement in 40 CFR § 761.50(a) to store or dispose of PCB waste in accordance with 40 CFR Part 761 Subpart D.

NOTIFICATION AND CERTIFICATION CONDITIONS

10. This Approval may be revoked if the EPA does not receive written notification from the City of its acceptance of the conditions of this Approval within 10 business days of receipt.
11. The City shall notify EPA in writing of the scheduled date of commencement of on-site activities at least 1 business day prior to conducting any work under this Approval. Such notification shall include an estimated schedule for completion of the PCB cleanup and disposal actions authorized under this Approval.
12. Prior to initiation of work authorized under this Approval, the City shall submit the following information to EPA:
 - a. a certification signed by its selected remediation contractor, stating that the contractor(s) has read and understands the Notification, and agrees to abide by the conditions specified in this Approval;
 - b. a certification signed by the selected analytical laboratory, stating that the laboratory has read and understands the extraction and analytical method requirements and quality assurance requirements specified in the Notification and in this Approval; and,
 - c. a figure of its proposed concrete pad sample locations with a minimum of three samples collected in accordance with 40 CFR Part 761 Subpart N. If present, biased sampling shall be conducted in those areas where visible concrete staining is observed.

CLEANUP AND DISPOSAL CONDITIONS

13. To the maximum extent practical, engineering controls shall be utilized to minimize the potential for PCB releases during work within the Site. In addition, to the maximum extent possible, disposable equipment and materials, including PPE, will be used to reduce the amount of decontamination necessary.
14. The cleanup level for *PCB remediation waste* (i.e., soil, concrete pad, and building foundation) at the Site shall be less than or equal to (\leq) 1 part per million (ppm) to meet the *high occupancy area* PCB cleanup standard without further restriction under 40 CFR § 761.61(a)(4)(i)(A).
 - a. Soil samples shall be collected on a bulk basis (i.e., mg/kg) and PCB analytical results shall be reported on a dry-weight basis. Samples shall be collected in accordance with 40 CFR Part 761 Subpart O to confirm PCB concentrations that remain are \leq 1 ppm. Soil samples shall be collected from both excavation bottoms and sidewalls, as applicable.
 - b. Sampling of the former building foundation shall be performed on a bulk basis (i.e., mg/kg). Samples shall be collected in accordance with the EPA Region 1 *Standard Operating Procedure For Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs) Revision 4*, dated May 5, 2011, at a maximum depth interval of 0.5 inches and in accordance with the 40 CFR Part 761 Subpart O sampling frequency.
 - c. A minimum of three samples shall be collected from the concrete pad in accordance with the EPA Region 1 *Standard Operating Procedure For Sampling Porous Surfaces for Polychlorinated Biphenyls (PCBs) Revision 4*, dated May 5, 2011, at a maximum depth interval of 0.5 inches. The samples shall be biased toward areas exhibiting staining if present.
 - d. Chemical extraction for PCBs shall be conducted using Methods 3500B/3540C of SW-846 for solid matrices and Method 3500B/3510C of SW-846 for aqueous matrices; and, chemical analysis for PCBs shall be conducted using Method 8082 of SW-846, unless another extraction or analytical method(s) is validated according to Subpart Q.
 - e. In the event any sample collected from the *porous surfaces* (i.e., concrete pad and building foundation) contains PCBs greater than ($>$) 1 ppm, the City shall notify EPA to discuss potential options or shall submit a proposed cleanup plan for the contaminated *porous surface(s)* in accordance with Condition 17.
15. All PCB waste (regardless of concentration) generated as a result of the activities described in the Notification, excluding any decontaminated materials, shall be marked in accordance with CFR 40 CFR § 761.40; stored in a manner consistent with 40 CFR § 761.65; and, disposed of in accordance with 40 CFR § 761.61(a)(5), unless otherwise specified below.

- a. Decontamination wastes and residues shall be disposed of in accordance with 40 CFR § 761.79(g).
- b. Moveable equipment, tools, and sampling equipment shall be decontaminated in accordance with either 40 CFR § 761.79(b)(3)(i)(A), § 761.79(b)(3)(ii)(A), or § 761.79(c)(2).
- c. PCB-contaminated water generated during decontamination shall be decontaminated in accordance with 40 CFR § 761.79(b)(1) or disposed of under § 761.60.

INSPECTION, MODIFICATION AND REVOCATION CONDITIONS

- 16. The City shall allow any authorized representative of the Administrator of the EPA to inspect the Site and to inspect records and take samples as may be necessary to determine compliance with the PCB regulations and this Approval. Any refusal by the City to allow such an inspection (as authorized by Section 11 of TSCA) shall be grounds for revocation of this Approval.
- 17. Any proposed modification(s) in the plan, specifications, or information in the Notification must be submitted to EPA no less than 14 calendar days prior to the proposed implementation of the change. Such proposed modifications will be subject to the procedures of 40 CFR § 761.61(a)(3)(ii).
- 18. Any departure from the conditions of this Approval without prior, written authorization from the EPA may result in the revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.
- 19. Any misrepresentation or omission of any material fact in the Notification or in any records or reports may result in the EPA's revocation, suspension and/or modification of the Approval, in addition to any other legal or equitable relief or remedy the EPA may choose to pursue.
- 20. Approval for these activities may be revoked, modified or otherwise altered: if EPA finds a violation of the conditions of this Approval or of 40 CFR Part 761, including EPA's PCB Spill Cleanup Policy, or other applicable rules and regulations; or, if EPA finds that these activities present an unreasonable risk of injury to health or the environment.

RECORDKEEPING AND REPORTING CONDITIONS

21. The City shall prepare and maintain all records and documents required by 40 CFR Part 761, including but not limited to the records required under Subparts J and K. A written record of the cleanup and disposal and the analytical sampling shall be established and maintained by the City in one centralized location, until such time as EPA approves in writing a request for an alternative disposition of such records. All records shall be made available for inspection to authorized representatives of EPA.
22. The City shall submit a PCB completion report as both a hard copy and electronic version (e.g., CD-ROM), to the EPA within 60 days of completion of the activities authorized under this Approval. At a minimum, this completion report shall include: a short narrative of the project activities with photographic documentation and Greener Cleanups BMP documentation, if implemented; characterization and confirmation sampling analytical results; copies of the accompanying analytical chains of custody; field and laboratory quality control/quality assurance checks; an estimate of the quantity of PCB waste disposed of; copies of manifests and bills of lading; copies of certificates of disposal or similar certifications issued by the disposer; and, the estimated cost of the PCB remediation work conducted under this Approval.
23. Required submittals shall be mailed in hard and electronic copy to:

Katherine A. Woodward, PE, Project Manager
United States Environmental Protection Agency
5 Post Office Square, Suite 100
Mail Code: LCRD07-2
Boston, Massachusetts 02109-3912
Woodward.katherine@epa.gov
24. No record, report or communication required under this Approval shall qualify as a self-audit or voluntary disclosure under EPA audit, self-disclosure or penalty policies.

END OF ATTACHMENT 1



ATTACHMENT B

FINAL – BIRDSEYE CARIBOU SELF IMPLEMENTING PCB



HALEY WARD

FORMERLY:
CES INC

February 22, 2021

Ms. Kimberly N. Tisa
Regional PCB Coordinator
EPA New England, Region 1
5 Post Office Square, Suite 100
Boston, MA 02109-3912

RE: Self-Implementing Cleanup Plan for PCB Remediation Waste | Former Birdseye Processing Facility | 27 Birdseye Avenue, Caribou, Maine

Dear Ms. Tisa:

On behalf of the City of Caribou (City), Haley Ward, Inc. (Haley Ward) has prepared this Notification for Self-Implementation of Polychlorinated Biphenyl (PCB) Remediation Waste (Notification) identified at the former Birdseye Food Processing Facility (The Site) in Caribou, Maine. The remediation will occur at the Site located at 27 Birdseye Avenue in Caribou, Maine. This self-implementing plan has been developed in accordance with 40 CFR 761.1 to address the removal of Polychlorinated Biphenyl (PCB) contaminated soil and concrete which likely originated from PCB-containing oil present in an electrical transformer formerly located on the concrete transformer pad.

The remediation work is being completed as part of the hazardous waste closure process being completed in conjunction with the transfer of the property and in compliance with the self-implementing on-site cleanup and disposal of PCB remediation waste provisions of the Toxic Substances Control Act of 1976 (TSCA).





This plan summarizes the sampling results associated with the characterization of soil adjacent to the concrete transformer pad and includes a proposed remediation plan for removal and disposal of the PCB-containing soil as well as the concrete pad.

The PCB remediation work is scheduled for July 2021, assuming approval of the Notification in May 2021.

In accordance with 40 CFR 761.61(a)(3), a copy of this Notification is being provided to the Maine Department of Environmental Protection (MDEP). Please do not hesitate to contact me at (207) 227-3446 or via e-mail at dhopkins@haleyward.com if you have any questions, comments, or require additional information.

Sincerely,
Haley Ward, Inc.



David S. Hopkins, Jr., P.E.
Senior Project Manager

WEH/DSH/ahh



HALEY WARD

ENGINEERING | ENVIRONMENTAL | SURVEYING

SELF-IMPLEMENTING CLEANUP PLAN FOR PCB REMEDIATION WASTE FORMER BIRDSEYE PROCESSING FACILITY BIRDSEYE AVENUE, CARIBOU, MAINE

FOR CITY OF CARIBOU

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FEBRUARY 22, 2021

JN: 10963.002

Report Prepared By:

Haley Ward

549 Main Street, PO Box 827 | Presque Isle, Maine 04769



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FIGURES

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APPENDIX

Appendix A	Laboratory Analytical Results
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**NOTIFICATION FOR SELF-IMPLEMENTING CLEANUP PLAN
FOR PCB REMEDIATION WASTE
FORMER BIRDSEYE FOOD PROCESSING FACILITY
CARIBOU, MAINE**

1.0 | INTRODUCTION

On behalf of the City of Caribou (City), Haley Ward, Inc. (Haley Ward) has prepared this Notification for Self-Implementation of Polychlorinated Biphenyl (PCB) Remediation Waste (Notification) identified at the former Birdseye Food Processing Facility (The Site) in Caribou, Maine.

Based on soil characterization activities completed at the Site, Haley Ward has determined that soils present around the east and west sides of the on-site transformer pad are PCB-contaminated. The source of the PCBs identified likely originated from PCB-containing oil which was present in an electrical transformer formerly located on the concrete transformer pad.

The City intends to remove the former transformer pad and PCB-contaminated soil to less than (<) 1 milligram per kilogram (mg/kg) in accordance with 40 CFR 761.61.

1.1 Outreach Activities

The subject site is located within a fenced and gated abandoned industrial site, under the control of the City with no buildings or employees; therefore, outreach activities are not necessary.

1.2 Contact and Certification

The person providing this notification and certification who will be responsible for this project is Mr. Dennis Marker, Authorized Signatory for Caribou. Contact information is provided below:

Mr. Dennis L. Marker
City Manager
City of Caribou
25 Hall Street
Caribou, ME 04736
Office: (207) 493-3324
citymanager@cariboumaine.org



I certify that I am the person in charge of this PCB cleanup, representing the Owner/Operator where the PCB remediation waste is located. I certify that project associated sampling plans and collection procedures, laboratory analytical procedures, and analytical results used to assess or characterize the PCB contamination at the clean-up site are on file at the location indicated above and are available for U.S. Environmental Protection Agency (USEPA) inspection.


Authorized Representative (Signature)

Dennis Lynn Marker
Name of Authorized Representative (printed)

City Manager
Title

February 25, 2021
Date



2.0 | BACKGROUND

2.1 Site Description

The Site consists of approximately 21.6 acres and is located at the southwest corner of the Route 1 and Fort Street intersection in Caribou, Maine as shown on the Site Plan (**Figure 1**). Recently demolished structures included an 83,600-square foot concrete block industrial building (the Main Production Building), a Bioethane Building, oil silos, boiler house, Frozen Foods Building, Scale House, and a Sand Shed. The Site is identified by the City of Caribou Tax Assessor's Office as Lots 74, 74A, 74B, 74C, and 74E on Tax Map 27, Lot 57 on Map 28, and Lots 2B and 146 on Map 25. The property is located within the Industrial 2 Zone and is currently vacant. Previously reviewed records indicate that public water lines, sanitary sewer lines, and stormwater lines, as well as process waste piping, are located at the Site. Other various subsurface structures (tunnels, access ways, etc.) associated with past facility operations may still exist at the Site.

General topography at the Site is flat, with regional topography gradually sloping eastward towards the Aroostook River. The area surrounding the Site consists of commercial and residential properties served by municipal water and sewer. Two inactive bedrock wells are located on-site, north and south of the Plant; however, the Site is serviced by municipal water and sewer.

The specific area of the Site that is addressed by this Notification (Area of Concern (AOC) 5) is a concrete pad that once was the housekeeping slab for a transformer, and the surrounding soils.

2.2 Summary of Previous Investigations and Remediation Activities

2.2.1 Soil Sampling

In 2011, County Environmental Engineering, Inc. (CEE) completed a Phase II Environmental Site Assessment (ESA) on the Site for the Northern Maine Development Commission (NMDC). CEE reported that accessible (0 to 2 feet below ground surface) soil sample SS08, collected from Area of Concern (AOC) 5 north of the High-Pressure Boiler Room, contained 1.4 milligrams per kilogram (mg/kg) of the PCB Aroclor-1260 (refer to the attached Site Plan for AOC 5). CEE explained that the result was below the Maine Department of Environmental Protection (MDEP)'s Commercial Worker Remedial Action Guideline (RAG) concentration. However, the concentration reported is greater than the USEPA Toxic Substances Control Act (TSCA) High Occupancy Area (HOA) cleanup standard of 1 mg/kg.



Based upon the elevated result, Haley Ward, Inc. (Haley Ward, formerly CES, Inc.) subsequently recommended that the City conduct additional sampling and testing of soil samples to assess the extent of PCB contaminated soil that may exist above the USEPA TSCA HOA standard.

2.3 Summary of Remedial Actions

The former Site buildings were demolished by the City of Caribou. Haley Ward performed an asbestos identification survey and a hazardous building materials inventory prior to building demolition. According to City personnel, all ACM and hazardous materials/wastes and/or universal wastes were removed from all buildings prior to demolition. Following demolition activities at the Site, the City of Caribou had the debris piles transported off Site and disposed of accordingly.

3.0 | SITE CHARACTERIZATION BY CES

Based on the identification of soil with PCB concentrations above the EPA TSCA HOA standard of 1 mg/kg, Haley Ward conducted characterization of soil around the north, south, east, and west sides of the transformer pad. The sampling program included the collection of soil surrounding the concrete pad where an electrical transformer containing PCB oil was historically located to a maximum of six inches below ground surface (bgs).

The samples collected during Haley Ward's investigations were analyzed by Alpha Analytical (Alpha) of Westborough, Massachusetts for PCBs by USEPA Method SW-846-8082 and sample preparation Method SW-846 3540C (Soxhlet). The sample results are summarized on **Table 1**; laboratory data sheets including QA/QC reports are provided in **Appendix A**.

3.1 Bulk Soil Samples – December 3, 2014

Haley Ward created a soil sampling grid that focused on the area surrounding the approximate location of SS08 (as shown on CEE's Phase II ESA Site Diagram) and included a sample point on each side of the transformer pad. On December 03, 2014, Haley Ward personnel collected surficial soil samples (0-6" below ground surface) from ten discrete locations (SS100 through SS109) as shown on **Figure 2**. The samples were collected from below the topsoil layer to a depth of approximately six inches below ground surface. All samples were submitted to Alpha for PCB analysis using USEPA Method SW-846-8082 and sample preparation Method SW-846 3540C (Soxhlet). Analytical results identified three soil samples, SS-101 (6.651 mg/kg), SS-103 (1.54 mg/kg), and SS-107 (1.19 mg/kg) with



concentrations of PCBs above the EPA TSCA HOA standard of 1 mg/kg. PCB concentrations in remaining samples were below the 1 mg/kg standard. Analytical results from the December 3, 2014 are summarized on **Table 1**.

4.0 | PCB CLEANUP PLAN

4.1 Objective

The objective of the cleanup activities conducted under this Plan is to remove soil from adjacent to the electrical transformer pad in the area where soil with PCB concentrations above the EPA TSCA HOA of 1 mg/kg was identified during previous investigations at the Site. Following removal of these materials the property will continue to be used based upon the plans with the entirety of the property being available for redevelopment. Remediation of soils below the 1 mg/kg threshold will allow unrestricted use.

4.2 Cleanup Goal

The concrete pad and surrounding soil, with concentrations of greater than one mg/kg, will be excavated and properly disposed of as PCB Remediation Waste from the affected area. The affected area, as shown on **Figure 2**, is approximately 350 square feet (SF) and includes soil adjacent to the east and west of the transformer pad.

4.3 Necessary Permits

The City and Haley Ward are not aware of any required permits for this soil removal action.

4.4 Soil Removal

Soil will be removed to a minimum depth of 24 inches bgs in the designated area as shown on Figure 2. The concrete pad will also be excavated and taken off-site for disposal. Soil excavation will extend five feet beyond where previous soil sampling identified PCB concentrations in exceedance of one mg/kg.

Haley Ward will be on-site during the soil removal process to observe contractor removal of the concrete slab and soil from the property. PCB waste will be recovered using an excavator to remove the soil and place it in on-site “roll-off” containers or directly into dump trucks. The PCB Remediation Waste is scheduled to be disposed of at the Tri Community Landfill in Fort Fairfield, Maine.



4.4.1 Contractor Training and Supervision

Work on this project will be performed by a Remediation Contractor experienced in the remediation and handling of hazardous materials and waste. The Remediation Contractor employees shall comply with the following requirements:

- A. Personnel performing PCB-contaminated soil removal activities must have required training, medical examinations and respirator fit testing, as necessary and as specified by the Occupational Safety and Health Administration (OSHA). Training will include, but may not be limited to, the contents and implementation of this Work Plan and other health and safety training relative to the removal, handling and disposal of PCB-contaminated soil.
- B. The Remediation Contractor shall have a qualified project superintendent with appropriate training (as identified above) and knowledge of applicable TSCA regulations on site during all work involving removal/disturbance of PCB-contaminated soils. The Remediation Contractor shall submit proof of experience and knowledge of applicable TSCA regulations. This proof will be provided in the form of training documentation and summary of experience.

4.4.2 Security and Work Area Access

The Remediation Contractor shall be responsible for work area security. Untrained workers and trespassers shall not be permitted within the work area as established by barrier tape (or other means approved by the City).

4.5 Confirmatory Sampling and Cleanup Verification

Following the removal of the PCB-contaminated soil, Haley Ward will conduct verification sampling of the remaining soil to assess the potential for residual PCBs in accordance with 40 CFR 761 Subpart O. A grid, five feet on center will be laid out to delineate sampling points. See **Figure 3** for a proposed verification sampling plan. Should PCBs be identified at concentrations greater than one mg/kg, additional soil will be removed and disposed of properly and resampled until the results are less than one mg/kg.

All soil samples collected will be sampled for PCBs and prepared using USEPA Method SW-846-8082 and sample preparation Method SW-846 3540C (Soxhlet).



4.6 Contingencies

The City and the Remediation Contractor are prepared to collect and properly dispose of additional PCB Remediation Waste if actual volumes exceed the estimates detailed herein.

4.7 Project Documentation, Recordkeeping and Reporting

4.7.1 Remediation Contractor

The Remediation Contractor shall maintain, as a minimum, the following:

- Daily field reports documenting completed work, disposal container status, and the names of workers in contact with PCB-containing soil or concrete.
- Training records of employees in contact with PCB-containing soil or concrete.
- Waste disposal records.

4.7.2 Owner

- A. The City shall prepare and maintain all records and documents required by 40 CFR Part 761, including, but not limited to the records required under Subparts J and K.
- B. A written record of the decontamination and the analytical sampling shall be established and maintained by the City in one centralized location, until such time as USEPA approves in writing a request for alternative disposition of such records.
- C. All such records shall be made available for inspection to authorized representatives of USEPA.
- D. The City shall submit a final report to USEPA within 60 days of completion of remediation activities. This final report shall include, but may not be limited to:
 - A short narrative of project activities;
 - Characterization and confirmation sampling analytical results;
 - Copies of the accompanying analytical chains of custody;
 - Field and laboratory quality control/quality assurance checks;
 - An estimate of the quantity of PCB waste disposed of and the size of the decontaminated area(s);
 - Copies of manifests; and
 - Copies of certificates of disposal or similar certifications issued by the disposer.



E. Required submittals shall be mailed to:

USEPA Region 1 PCB Coordinator
United States Environmental Protection Agency
5 Post Office Square, Suite 100
Boston, Massachusetts 02109-3912

4.8 Project Schedule

The City proposes the following implementation schedule for the Plan:

<u>Activity</u>	<u>Estimated Completion Date</u>
Submittal of Plan	March 2021
U.S. EPA Approval (Expected)	May 2021
Material Removal	July 2021



TABLES

SOIL SAMPLE RESULTS – DECEMBER 3, 2014



TABLE 1										
PCB COMPOUND	SAMPLE IDENTIFICATION AND PCB CONCENTRATIONS (mg/kg)									
	SS100	SS101	SS102	SS103	SS104	SS105	SS106	SS107	SS108	SS109
AROCLOR-1016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AROCLOR-1221	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AROCLOR-1236	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AROCLOR-1242	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AROCLOR-1248	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AROCLOR-1254	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
AROCLOR-1260	0.976	6.51	0.877	1.54	0.0858	0.248	0.0835	1.19	0.0922	0.103

Note: **BOLD** values exceed the USEPA TSCA HOA threshold concentration of 1 mg/kg.

Samples collected on December 3, 2014



FIGURES



FIGURE 1
SITE PLAN




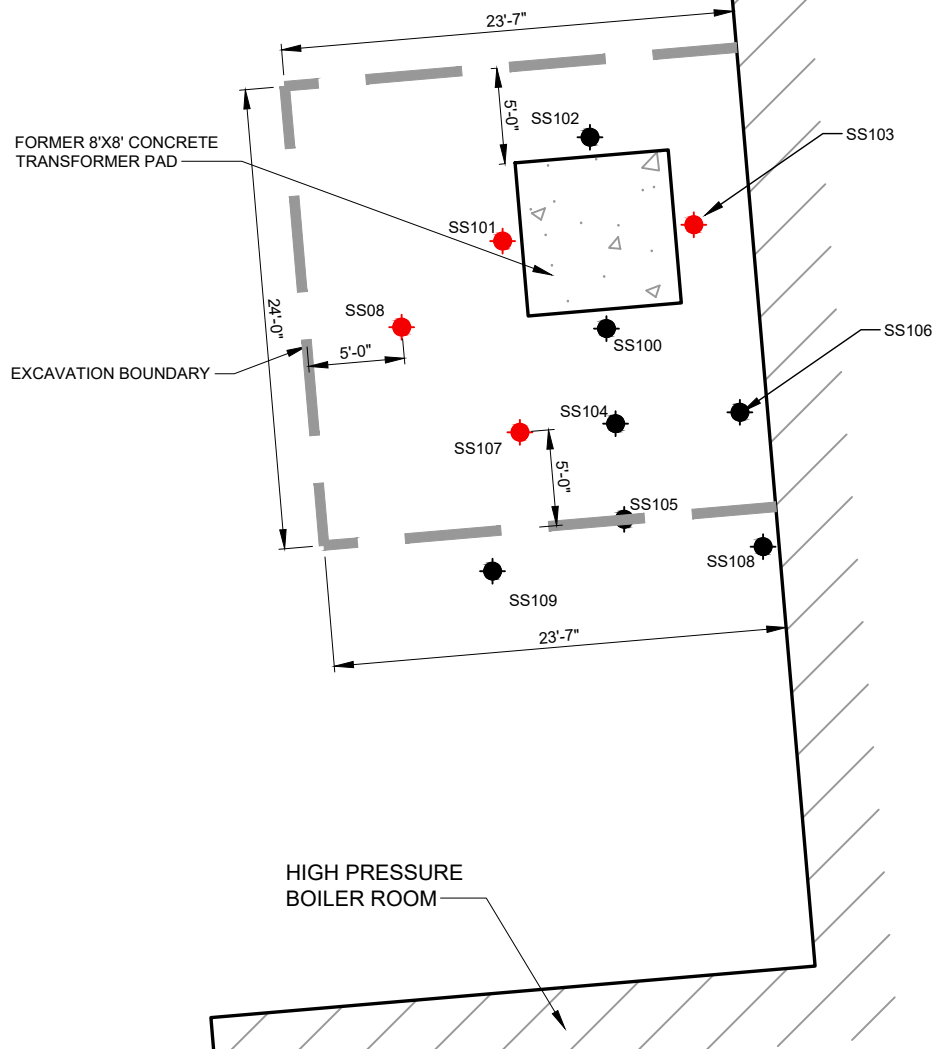
PROJECT TITLE: LIMITED PCB SOIL TESTING CARIBOU, MAINE	DWG: C101	BY: BTH	
SHEET TITLE: FORMER BIRDSEYE FACILITY SITE PLAN	JN: 10963.002	DATE: 1/23/2011	
	SCALE: 1"=200'	REV: REV DATE:	



FIGURE 2
SOIL SAMPLE LOCATION PLAN



- SOIL SAMPLE WITH PCBs > 1mg/kg
- SOIL SAMPLE WITH PCBs < 1mg/kg



EXISTING BUILDING

PROJECT TITLE:

**LIMITED PCB SOIL TESTING
CARIBOU, MAINE**

DWG:

C102

BY:

BTH

DATE:

2021.02.18

SHEET TITLE:

**FORMER BIRDSEYE FACILITY
SAMPLING SKETCH**

JN:

10963.002

SCALE:

1"=10'

REV:

REV DATE:





FIGURE 3

PROPOSED SOIL VERIFICATION SAMPLING PLAN

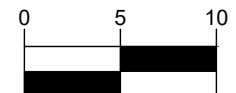
● VERIFICATION SAMPLE LOCATION

NOTE:
EXCAVATION SHALL BE TO A DEPTH
OF 24"

FORMER 8'X8' CONCRETE
TRANSFORMER PAD
(TO BE EXCAVATED)

EXCAVATION BOUNDARY

FORMER
SLAB/
FOUNDATION



PROJECT TITLE:

**LIMITED PCB SOIL TESTING
CARIBOU, MAINE**

DWG:

C103

BY:

BTH

DATE:

2021.02.18

SHEET TITLE:

**FORMER BIRDSEYE FACILITY
INITIAL CONFIRMATION SAMPLE LOCATIONS**

JN:

10963.002

SCALE:

1"=10'

REV:

REV DATE:


HALEY WARD
ENGINEERING | ENVIRONMENTAL | SURVEYING



APPENDICES



APPENDIX A

LABORATORY ANALYTICAL RESULTS



ANALYTICAL REPORT

Lab Number:	L1429085
Client:	CES, Inc 640 Main St Lewiston, ME 04240
ATTN:	John Cressey
Phone:	(207) 795-6009
Project Name:	FORMER BIRDSEYE PLANT
Project Number:	10963.002.2014
Report Date:	12/11/14

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NY (11148), CT (PH-0574), NH (2003), NJ NELAP (MA935), RI (LAO00065), ME (MA00086), PA (68-03671), USDA (Permit #P-330-11-00240), NC (666), TX (T104704476), DOD (L2217), US Army Corps of Engineers.

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: FORMER BIRDSEYE PLANT
Project Number: 10963.002.2014

Lab Number: L1429085
Report Date: 12/11/14

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L1429085-01	SS100	SOIL	CARIBOU, ME	12/03/14 09:06	12/04/14
L1429085-02	SS101	SOIL	CARIBOU, ME	12/03/14 09:15	12/04/14
L1429085-03	SS102	SOIL	CARIBOU, ME	12/03/14 09:22	12/04/14
L1429085-04	SS103	SOIL	CARIBOU, ME	12/03/14 09:26	12/04/14
L1429085-05	SS104	SOIL	CARIBOU, ME	12/03/14 09:30	12/04/14
L1429085-06	SS105	SOIL	CARIBOU, ME	12/03/14 09:37	12/04/14
L1429085-07	SS106	SOIL	CARIBOU, ME	12/03/14 09:45	12/04/14
L1429085-08	SS107	SOIL	CARIBOU, ME	12/03/14 09:48	12/04/14
L1429085-09	SS108	SOIL	CARIBOU, ME	12/03/14 09:55	12/04/14
L1429085-10	SS109	SOIL	CARIBOU, ME	12/03/14 10:01	12/04/14

Project Name: FORMER BIRDSEYE PLANT
Project Number: 10963.002.2014

Lab Number: L1429085
Report Date: 12/11/14

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Project Name: FORMER BIRDSEYE PLANT
Project Number: 10963.002.2014

Lab Number: L1429085
Report Date: 12/11/14

Case Narrative (continued)

PCBs

L1429085-02: The surrogate recoveries are below the acceptance criteria for 2,4,5,6-tetrachloro-m-xylene (0%) and decachlorobiphenyl (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:  Bryan Vangel

Title: Technical Director/Representative

Date: 12/11/14

ORGANICS

PCBS

Project Name: FORMER BIRDSEYE PLANT
Project Number: 10963.002.2014

Lab Number: L1429085
Report Date: 12/11/14

SAMPLE RESULTS

Lab ID: L1429085-01 D
 Client ID: SS100
 Sample Location: CARIBOU, ME
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/10/14 21:57
 Analyst: JT
 Percent Solids: 88%

Date Collected: 12/03/14 09:06
 Date Received: 12/04/14
 Field Prep: Not Specified
 Extraction Method: EPA 3540C
 Extraction Date: 12/05/14 13:45
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/08/14
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/08/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
PCB by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	44.9	--	2	A
Aroclor 1221	ND		ug/kg	44.9	--	2	A
Aroclor 1232	ND		ug/kg	44.9	--	2	A
Aroclor 1242	ND		ug/kg	44.9	--	2	A
Aroclor 1248	ND		ug/kg	29.9	--	2	A
Aroclor 1254	ND		ug/kg	44.9	--	2	A
Aroclor 1260	976		ug/kg	29.9	--	2	B
Aroclor 1262	ND		ug/kg	15.0	--	2	A
Aroclor 1268	ND		ug/kg	15.0	--	2	A
PCBs, Total	976		ug/kg	15.0	--	2	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	69		30-150	A
Decachlorobiphenyl	63		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	69		30-150	B

Project Name: FORMER BIRDSEYE PLANT
Project Number: 10963.002.2014

Lab Number: L1429085
Report Date: 12/11/14

SAMPLE RESULTS

Lab ID: L1429085-02 D
 Client ID: SS101
 Sample Location: CARIBOU, ME
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/10/14 22:10
 Analyst: JT
 Percent Solids: 85%

Date Collected: 12/03/14 09:15
 Date Received: 12/04/14
 Field Prep: Not Specified
 Extraction Method: EPA 3540C
 Extraction Date: 12/05/14 13:45
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/08/14
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/08/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
PCB by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	226	--	10	A
Aroclor 1221	ND		ug/kg	226	--	10	A
Aroclor 1232	ND		ug/kg	226	--	10	A
Aroclor 1242	ND		ug/kg	226	--	10	A
Aroclor 1248	ND		ug/kg	151	--	10	A
Aroclor 1254	ND		ug/kg	226	--	10	A
Aroclor 1260	6510		ug/kg	151	--	10	B
Aroclor 1262	ND		ug/kg	75.4	--	10	A
Aroclor 1268	ND		ug/kg	75.4	--	10	A
PCBs, Total	6510		ug/kg	75.4	--	10	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	A
Decachlorobiphenyl	0	Q	30-150	A
2,4,5,6-Tetrachloro-m-xylene	0	Q	30-150	B
Decachlorobiphenyl	0	Q	30-150	B

Project Name: FORMER BIRDSEYE PLANT
Project Number: 10963.002.2014

Lab Number: L1429085
Report Date: 12/11/14

SAMPLE RESULTS

Lab ID: L1429085-03 D
 Client ID: SS102
 Sample Location: CARIBOU, ME
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/10/14 22:23
 Analyst: JT
 Percent Solids: 87%

Date Collected: 12/03/14 09:22
 Date Received: 12/04/14
 Field Prep: Not Specified
 Extraction Method: EPA 3540C
 Extraction Date: 12/05/14 13:45
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/08/14
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/08/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
PCB by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	44.5	--	2	A
Aroclor 1221	ND		ug/kg	44.5	--	2	A
Aroclor 1232	ND		ug/kg	44.5	--	2	A
Aroclor 1242	ND		ug/kg	44.5	--	2	A
Aroclor 1248	ND		ug/kg	29.6	--	2	A
Aroclor 1254	ND		ug/kg	44.5	--	2	A
Aroclor 1260	877		ug/kg	29.6	--	2	B
Aroclor 1262	ND		ug/kg	14.8	--	2	A
Aroclor 1268	ND		ug/kg	14.8	--	2	A
PCBs, Total	877		ug/kg	14.8	--	2	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	72		30-150	A
Decachlorobiphenyl	70		30-150	A
2,4,5,6-Tetrachloro-m-xylene	72		30-150	B
Decachlorobiphenyl	73		30-150	B

Project Name: FORMER BIRDSEYE PLANT
Project Number: 10963.002.2014

Lab Number: L1429085
Report Date: 12/11/14

SAMPLE RESULTS

Lab ID: L1429085-04 D
 Client ID: SS103
 Sample Location: CARIBOU, ME
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/10/14 22:35
 Analyst: JT
 Percent Solids: 88%

Date Collected: 12/03/14 09:26
 Date Received: 12/04/14
 Field Prep: Not Specified
 Extraction Method: EPA 3540C
 Extraction Date: 12/05/14 13:45
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/08/14
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/08/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
PCB by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	111	--	5	A
Aroclor 1221	ND		ug/kg	111	--	5	A
Aroclor 1232	ND		ug/kg	111	--	5	A
Aroclor 1242	ND		ug/kg	111	--	5	A
Aroclor 1248	ND		ug/kg	73.8	--	5	A
Aroclor 1254	ND		ug/kg	111	--	5	A
Aroclor 1260	1540		ug/kg	73.8	--	5	B
Aroclor 1262	ND		ug/kg	36.9	--	5	A
Aroclor 1268	ND		ug/kg	36.9	--	5	A
PCBs, Total	1540		ug/kg	36.9	--	5	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	71		30-150	A
Decachlorobiphenyl	76		30-150	A
2,4,5,6-Tetrachloro-m-xylene	77		30-150	B
Decachlorobiphenyl	80		30-150	B

Project Name: FORMER BIRDSEYE PLANT
Project Number: 10963.002.2014

Lab Number: L1429085
Report Date: 12/11/14

SAMPLE RESULTS

Lab ID: L1429085-05
Client ID: SS104
Sample Location: CARIBOU, ME
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 12/09/14 15:43
Analyst: JT
Percent Solids: 88%

Date Collected: 12/03/14 09:30
Date Received: 12/04/14
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 12/05/14 13:45
Cleanup Method: EPA 3665A
Cleanup Date: 12/08/14
Cleanup Method: EPA 3660B
Cleanup Date: 12/08/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
PCB by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	21.4	--	1	A
Aroclor 1221	ND		ug/kg	21.4	--	1	A
Aroclor 1232	ND		ug/kg	21.4	--	1	A
Aroclor 1242	ND		ug/kg	21.4	--	1	A
Aroclor 1248	ND		ug/kg	14.3	--	1	A
Aroclor 1254	ND		ug/kg	21.4	--	1	A
Aroclor 1260	85.8		ug/kg	14.3	--	1	B
Aroclor 1262	ND		ug/kg	7.14	--	1	A
Aroclor 1268	ND		ug/kg	7.14	--	1	A
PCBs, Total	85.8		ug/kg	7.14	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	74		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	80		30-150	B
Decachlorobiphenyl	97		30-150	B

Project Name: FORMER BIRDSEYE PLANT
Project Number: 10963.002.2014

Lab Number: L1429085
Report Date: 12/11/14

SAMPLE RESULTS

Lab ID: L1429085-06
Client ID: SS105
Sample Location: CARIBOU, ME
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 12/09/14 15:59
Analyst: JT
Percent Solids: 87%

Date Collected: 12/03/14 09:37
Date Received: 12/04/14
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 12/05/14 13:45
Cleanup Method: EPA 3665A
Cleanup Date: 12/08/14
Cleanup Method: EPA 3660B
Cleanup Date: 12/08/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
PCB by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	22.4	--	1	A
Aroclor 1221	ND		ug/kg	22.4	--	1	A
Aroclor 1232	ND		ug/kg	22.4	--	1	A
Aroclor 1242	ND		ug/kg	22.4	--	1	A
Aroclor 1248	ND		ug/kg	15.0	--	1	A
Aroclor 1254	ND		ug/kg	22.4	--	1	A
Aroclor 1260	248		ug/kg	15.0	--	1	B
Aroclor 1262	ND		ug/kg	7.48	--	1	A
Aroclor 1268	ND		ug/kg	7.48	--	1	A
PCBs, Total	248		ug/kg	7.48	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	72		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	89		30-150	B

Project Name: FORMER BIRDSEYE PLANT
Project Number: 10963.002.2014

Lab Number: L1429085
Report Date: 12/11/14

SAMPLE RESULTS

Lab ID: L1429085-07
Client ID: SS106
Sample Location: CARIBOU, ME
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 12/09/14 16:15
Analyst: JT
Percent Solids: 93%

Date Collected: 12/03/14 09:45
Date Received: 12/04/14
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 12/05/14 13:45
Cleanup Method: EPA 3665A
Cleanup Date: 12/08/14
Cleanup Method: EPA 3660B
Cleanup Date: 12/08/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
PCB by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	20.6	--	1	A
Aroclor 1221	ND		ug/kg	20.6	--	1	A
Aroclor 1232	ND		ug/kg	20.6	--	1	A
Aroclor 1242	ND		ug/kg	20.6	--	1	A
Aroclor 1248	ND		ug/kg	13.8	--	1	A
Aroclor 1254	ND		ug/kg	20.6	--	1	A
Aroclor 1260	83.5		ug/kg	13.8	--	1	B
Aroclor 1262	ND		ug/kg	6.88	--	1	A
Aroclor 1268	ND		ug/kg	6.88	--	1	A
PCBs, Total	83.5		ug/kg	6.88	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	68		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	71		30-150	B
Decachlorobiphenyl	84		30-150	B

Project Name: FORMER BIRDSEYE PLANT
Project Number: 10963.002.2014

Lab Number: L1429085
Report Date: 12/11/14

SAMPLE RESULTS

Lab ID: L1429085-08 D
 Client ID: SS107
 Sample Location: CARIBOU, ME
 Matrix: Soil
 Analytical Method: 1,8082A
 Analytical Date: 12/10/14 22:48
 Analyst: JT
 Percent Solids: 83%

Date Collected: 12/03/14 09:48
 Date Received: 12/04/14
 Field Prep: Not Specified
 Extraction Method: EPA 3540C
 Extraction Date: 12/05/14 13:45
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/08/14
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/08/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
PCB by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	45.7	--	2	A
Aroclor 1221	ND		ug/kg	45.7	--	2	A
Aroclor 1232	ND		ug/kg	45.7	--	2	A
Aroclor 1242	ND		ug/kg	45.7	--	2	A
Aroclor 1248	ND		ug/kg	30.5	--	2	A
Aroclor 1254	ND		ug/kg	45.7	--	2	A
Aroclor 1260	1190		ug/kg	30.5	--	2	B
Aroclor 1262	ND		ug/kg	15.2	--	2	A
Aroclor 1268	ND		ug/kg	15.2	--	2	A
PCBs, Total	1190		ug/kg	15.2	--	2	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	70		30-150	A
Decachlorobiphenyl	79		30-150	A
2,4,5,6-Tetrachloro-m-xylene	74		30-150	B
Decachlorobiphenyl	89		30-150	B

Project Name: FORMER BIRDSEYE PLANT
Project Number: 10963.002.2014

Lab Number: L1429085
Report Date: 12/11/14

SAMPLE RESULTS

Lab ID: L1429085-09
Client ID: SS108
Sample Location: CARIBOU, ME
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 12/09/14 16:48
Analyst: JT
Percent Solids: 87%

Date Collected: 12/03/14 09:55
Date Received: 12/04/14
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 12/05/14 13:45
Cleanup Method: EPA 3665A
Cleanup Date: 12/08/14
Cleanup Method: EPA 3660B
Cleanup Date: 12/08/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
PCB by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	22.7	--	1	A
Aroclor 1221	ND		ug/kg	22.7	--	1	A
Aroclor 1232	ND		ug/kg	22.7	--	1	A
Aroclor 1242	ND		ug/kg	22.7	--	1	A
Aroclor 1248	ND		ug/kg	15.2	--	1	A
Aroclor 1254	ND		ug/kg	22.7	--	1	A
Aroclor 1260	92.2		ug/kg	15.2	--	1	B
Aroclor 1262	ND		ug/kg	7.58	--	1	A
Aroclor 1268	ND		ug/kg	7.58	--	1	A
PCBs, Total	92.2		ug/kg	7.58	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		30-150	A
Decachlorobiphenyl	77		30-150	A
2,4,5,6-Tetrachloro-m-xylene	82		30-150	B
Decachlorobiphenyl	94		30-150	B

Project Name: FORMER BIRDSEYE PLANT
Project Number: 10963.002.2014

Lab Number: L1429085
Report Date: 12/11/14

SAMPLE RESULTS

Lab ID: L1429085-10
Client ID: SS109
Sample Location: CARIBOU, ME
Matrix: Soil
Analytical Method: 1,8082A
Analytical Date: 12/09/14 17:04
Analyst: JT
Percent Solids: 90%

Date Collected: 12/03/14 10:01
Date Received: 12/04/14
Field Prep: Not Specified
Extraction Method: EPA 3540C
Extraction Date: 12/05/14 13:45
Cleanup Method: EPA 3665A
Cleanup Date: 12/08/14
Cleanup Method: EPA 3660B
Cleanup Date: 12/08/14

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Column
PCB by GC - Westborough Lab							
Aroclor 1016	ND		ug/kg	21.3	--	1	A
Aroclor 1221	ND		ug/kg	21.3	--	1	A
Aroclor 1232	ND		ug/kg	21.3	--	1	A
Aroclor 1242	ND		ug/kg	21.3	--	1	A
Aroclor 1248	ND		ug/kg	14.2	--	1	A
Aroclor 1254	ND		ug/kg	21.3	--	1	A
Aroclor 1260	103		ug/kg	14.2	--	1	B
Aroclor 1262	ND		ug/kg	7.10	--	1	A
Aroclor 1268	ND		ug/kg	7.10	--	1	A
PCBs, Total	103		ug/kg	7.10	--	1	A

Surrogate	% Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	79		30-150	A
Decachlorobiphenyl	81		30-150	A
2,4,5,6-Tetrachloro-m-xylene	84		30-150	B
Decachlorobiphenyl	98		30-150	B

Project Name: FORMER BIRDSEYE PLANT**Lab Number:** L1429085**Project Number:** 10963.002.2014**Report Date:** 12/11/14

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8082A
 Analytical Date: 12/06/14 21:33
 Analyst: JT

Extraction Method: EPA 3540C
 Extraction Date: 12/05/14 13:10
 Cleanup Method: EPA 3665A
 Cleanup Date: 12/06/14
 Cleanup Method: EPA 3660B
 Cleanup Date: 12/06/14

Parameter	Result	Qualifier	Units	RL	MDL	Column
PCB by GC - Westborough Lab for sample(s): 01-10 Batch: WG746023-1						
Aroclor 1016	ND		ug/kg	19.2	--	A
Aroclor 1221	ND		ug/kg	19.2	--	A
Aroclor 1232	ND		ug/kg	19.2	--	A
Aroclor 1242	ND		ug/kg	19.2	--	A
Aroclor 1248	ND		ug/kg	12.8	--	A
Aroclor 1254	ND		ug/kg	19.2	--	A
Aroclor 1260	ND		ug/kg	12.8	--	A
Aroclor 1262	ND		ug/kg	6.39	--	A
Aroclor 1268	ND		ug/kg	6.39	--	A
PCBs, Total	ND		ug/kg	6.39	--	A

Surrogate	%Recovery	Qualifier	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	63		30-150	A
Decachlorobiphenyl	66		30-150	A
2,4,5,6-Tetrachloro-m-xylene	63		30-150	B
Decachlorobiphenyl	75		30-150	B

Lab Control Sample Analysis

Batch Quality Control

Project Name: FORMER BIRDSEYE PLANT

Project Number: 10963.002.2014

Lab Number: L1429085

Report Date: 12/11/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits	Column
PCB by GC - Westborough Lab Associated sample(s): 01-10 Batch: WG746023-2 WG746023-3									
Aroclor 1016	101		89		40-140	13		50	A
Aroclor 1260	82		79		40-140	4		50	A

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria	Column
2,4,5,6-Tetrachloro-m-xylene	77		67		30-150	A
Decachlorobiphenyl	67		57		30-150	A
2,4,5,6-Tetrachloro-m-xylene	78		69		30-150	B
Decachlorobiphenyl	81		70		30-150	B

INORGANICS & MISCELLANEOUS

Project Name: FORMER BIRDSEYE PLANT**Lab Number:** L1429085**Project Number:** 10963.002.2014**Report Date:** 12/11/14**SAMPLE RESULTS****Lab ID:** L1429085-01**Date Collected:** 12/03/14 09:06**Client ID:** SS100**Date Received:** 12/04/14**Sample Location:** CARIBOU, ME**Field Prep:** Not Specified**Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.7		%	0.100	NA	1	-	12/05/14 02:10	30,2540G	RT



Project Name: FORMER BIRDSEYE PLANT**Project Number:** 10963.002.2014**Lab Number:** L1429085**Report Date:** 12/11/14**SAMPLE RESULTS****Lab ID:** L1429085-02**Client ID:** SS101**Sample Location:** CARIBOU, ME**Matrix:** Soil**Date Collected:** 12/03/14 09:15**Date Received:** 12/04/14**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	84.5		%	0.100	NA	1	-	12/05/14 02:10	30,2540G	RT



Project Name: FORMER BIRDSEYE PLANT**Project Number:** 10963.002.2014**Lab Number:** L1429085**Report Date:** 12/11/14**SAMPLE RESULTS****Lab ID:** L1429085-03**Client ID:** SS102**Sample Location:** CARIBOU, ME**Matrix:** Soil**Date Collected:** 12/03/14 09:22**Date Received:** 12/04/14**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	86.8		%	0.100	NA	1	-	12/05/14 02:10	30,2540G	RT



Project Name: FORMER BIRDSEYE PLANT**Project Number:** 10963.002.2014**Lab Number:** L1429085**Report Date:** 12/11/14**SAMPLE RESULTS****Lab ID:** L1429085-04**Client ID:** SS103**Sample Location:** CARIBOU, ME**Matrix:** Soil**Date Collected:** 12/03/14 09:26**Date Received:** 12/04/14**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.6		%	0.100	NA	1	-	12/05/14 02:10	30,2540G	RT



Project Name: FORMER BIRDSEYE PLANT**Project Number:** 10963.002.2014**Lab Number:** L1429085**Report Date:** 12/11/14**SAMPLE RESULTS****Lab ID:** L1429085-05**Client ID:** SS104**Sample Location:** CARIBOU, ME**Matrix:** Soil**Date Collected:** 12/03/14 09:30**Date Received:** 12/04/14**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	88.2		%	0.100	NA	1	-	12/05/14 02:10	30,2540G	RT



Project Name: FORMER BIRDSEYE PLANT**Lab Number:** L1429085**Project Number:** 10963.002.2014**Report Date:** 12/11/14**SAMPLE RESULTS****Lab ID:** L1429085-06**Date Collected:** 12/03/14 09:37**Client ID:** SS105**Date Received:** 12/04/14**Sample Location:** CARIBOU, ME**Field Prep:** Not Specified**Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.4		%	0.100	NA	1	-	12/05/14 02:10	30,2540G	RT



Project Name: FORMER BIRDSEYE PLANT**Project Number:** 10963.002.2014**Lab Number:** L1429085**Report Date:** 12/11/14**SAMPLE RESULTS****Lab ID:** L1429085-07**Client ID:** SS106**Sample Location:** CARIBOU, ME**Matrix:** Soil**Date Collected:** 12/03/14 09:45**Date Received:** 12/04/14**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	93.0		%	0.100	NA	1	-	12/05/14 02:10	30,2540G	RT



Project Name: FORMER BIRDSEYE PLANT**Project Number:** 10963.002.2014**Lab Number:** L1429085**Report Date:** 12/11/14**SAMPLE RESULTS****Lab ID:** L1429085-08**Client ID:** SS107**Sample Location:** CARIBOU, ME**Matrix:** Soil**Date Collected:** 12/03/14 09:48**Date Received:** 12/04/14**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	83.4		%	0.100	NA	1	-	12/05/14 02:10	30,2540G	RT



Project Name: FORMER BIRDSEYE PLANT**Lab Number:** L1429085**Project Number:** 10963.002.2014**Report Date:** 12/11/14**SAMPLE RESULTS****Lab ID:** L1429085-09**Date Collected:** 12/03/14 09:55**Client ID:** SS108**Date Received:** 12/04/14**Sample Location:** CARIBOU, ME**Field Prep:** Not Specified**Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.4		%	0.100	NA	1	-	12/05/14 02:10	30,2540G	RT



Project Name: FORMER BIRDSEYE PLANT**Project Number:** 10963.002.2014**Lab Number:** L1429085**Report Date:** 12/11/14**SAMPLE RESULTS****Lab ID:** L1429085-10**Client ID:** SS109**Sample Location:** CARIBOU, ME**Matrix:** Soil**Date Collected:** 12/03/14 10:01**Date Received:** 12/04/14**Field Prep:** Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.9		%	0.100	NA	1	-	12/05/14 02:10	30,2540G	RT



Lab Duplicate Analysis
Batch Quality Control**Project Name:** FORMER BIRDSEYE PLANT**Project Number:** 10963.002.2014**Lab Number:** L1429085**Report Date:** 12/11/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-10 QC Batch ID: WG745883-1 QC Sample: L1429085-01 Client ID: SS100						
Solids, Total	87.7	87.9	%	0		20

Project Name: FORMER BIRDSEYE PLANT**Project Number:** 10963.002.2014**Lab Number:** L1429085**Report Date:** 12/11/14**Sample Receipt and Container Information**

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA**Cooler Information Custody Seal****Cooler**

A Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1429085-01A	Glass 120ml/4oz unpreserved	A	N/A	5.5	Y	Absent	TS(7),PCB-8082LL-3540C(14)
L1429085-02A	Glass 120ml/4oz unpreserved	A	N/A	5.5	Y	Absent	TS(7),PCB-8082LL-3540C(14)
L1429085-03A	Glass 120ml/4oz unpreserved	A	N/A	5.5	Y	Absent	TS(7),PCB-8082LL-3540C(14)
L1429085-04A	Glass 120ml/4oz unpreserved	A	N/A	5.5	Y	Absent	TS(7),PCB-8082LL-3540C(14)
L1429085-05A	Glass 120ml/4oz unpreserved	A	N/A	5.5	Y	Absent	TS(7),PCB-8082LL-3540C(14)
L1429085-06A	Glass 120ml/4oz unpreserved	A	N/A	5.5	Y	Absent	TS(7),PCB-8082LL-3540C(14)
L1429085-07A	Glass 250ml/8oz unpreserved	A	N/A	5.5	Y	Absent	TS(7),PCB-8082LL-3540C(14)
L1429085-08A	Glass 250ml/8oz unpreserved	A	N/A	5.5	Y	Absent	TS(7),PCB-8082LL-3540C(14)
L1429085-09A	Glass 250ml/8oz unpreserved	A	N/A	5.5	Y	Absent	TS(7),PCB-8082LL-3540C(14)
L1429085-10A	Glass 250ml/8oz unpreserved	A	N/A	5.5	Y	Absent	TS(7),PCB-8082LL-3540C(14)

*Values in parentheses indicate holding time in days

Project Name: FORMER BIRDSEYE PLANT
Project Number: 10963.002.2014

Lab Number: L1429085
Report Date: 12/11/14

GLOSSARY

Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

Report Format: Data Usability Report



Project Name: FORMER BIRDSEYE PLANT
Project Number: 10963.002.2014

Lab Number: L1429085
Report Date: 12/11/14

Data Qualifiers

- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- S** - Analytical results are from modified screening analysis.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

Project Name: FORMER BIRDSEYE PLANT
Project Number: 10963.002.2014

Lab Number: L1429085
Report Date: 12/11/14

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.
- 30 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WPCF. 18th Edition. 1992.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Certification Information

Last revised April 15, 2014

The following analytes are not included in our NELAP Scope of Accreditation:

Westborough Facility

EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.

EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.

EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.

EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene, 1,4-Diphenylhydrazine.

EPA 625: 4-Chloroaniline, 4-Methylphenol.

SM4500: Soil: Total Phosphorus, TKN, NO₂, NO₃.

EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility

EPA 8270D: Biphenyl.

EPA 2540D: TSS

EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

The following analytes are included in our Massachusetts DEP Scope of Accreditation, Westborough Facility:

Drinking Water

EPA 200.8: Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, Tl; **EPA 200.7:** Ba, Be, Ca, Cd, Cr, Cu, Na; **EPA 245.1:** Mercury;

EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO₃-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B**

EPA 332: Perchlorate.

Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.

Non-Potable Water

EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, Tl, Zn;

EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, Ti, Tl, V, Zn;

EPA 245.1, SM4500H-B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC,

SM426C, SM4500NH₃-BH, EPA 350.1: Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **SM4500NO₃-F,**

EPA 353.2: Nitrate-N, **SM4500NH₃-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4,**

SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.

EPA 624: Volatile Halocarbons & Aromatics,

EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625: SVOC (Acid/Base/Neutral Extractables); **EPA 600/4-81-045:** PCB-Oil.

Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF.

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

PAGE 1 OF 1

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection		Sample Matrix	Sampler's Initials
		Date	Time		
29085 01	SS100	12/3/14 11/20/14	906	SOIL	CJSM
02	SS101		915		
03	SS102		922		
04	SS103		926		
05	SS104		930		
06	SS105		937		
07	SS106		945		
08	SS107		948		
09	SS108		955		
10	SS109		1001		

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. All samples submitted are subject to Alpha's Payment Terms.

FORM NO: 01-01(I-
S. 1)

TOTAL # BOTTLES

Sample Specific Comments

5

5

5

5

5



ATTACHMENT C

LSI REPORT

September 4, 2020

Mr. Dennis Marker
City Manager
City of Caribou
25 High Street
Caribou, Maine 04736

**Re: Limited Soil Investigation Report | Former Birdseye Plant | 27 Birdseye Avenue,
Caribou, Maine**

Dear Mr. Marker:

CES, Inc. (CES) is pleased to provide the City of Caribou (City) with this report for the Limited Soil Investigation (LSI) completed at the former Birdseye Plant in Caribou, Maine. The purpose of the LSI was to characterize the nature and extent of the debris piles identified in Areas of Concern (AOCs) 7 and 8, which had been identified in previous investigations, but not evaluated. The additional information provided in this LSI may be used to update the Conceptual Site Model (CSM) and may help the City decide whether to apply for liability protection under the Maine Department of Environmental Protection (MDEP) Voluntary Response Action Program (VRAP) and/or continue pursuing Brownfields funding through the U.S. Environmental Protection Agency (USEPA). The Scope of Work for this LSI was discussed with you prior to mobilization.

BACKGROUND

Site History

The Site consists of approximately 21.6 acres and is located at the southwest corner of the Route 1 and Fort Street intersection in Caribou, Maine. Refer to the attached Site Location Map. Recently demolished structures included an 83,600-square foot concrete block industrial building (the Main Production Building), a Bioethane Building, oil silos, boiler house, Frozen Foods Building, Scale House, and a Sand Shed. The Site is identified by the City of Caribou Tax Assessor's Office as Lots 74, 74A, 74B, 74C, and 74E on Tax Map 27, Lot 57 on Map 28, and Lots 2B and 146 on Map 25. The property is located within the Industrial 2 Zone and is currently vacant. Previously reviewed records indicate that public water lines, sanitary sewer lines, and stormwater lines, as well as process waste piping, are located at the Site. Other various subsurface structures (tunnels, access ways, etc.) associated with past facility operations may still exist at the Site.

Review of available information indicates that the Site was operated as a vegetable freezing and potato product plant between 1943 and 1991. Prior to development in 1943, the site was reportedly undeveloped farmland.

Previous Investigations Related to AOC 7 and AOC 8 Soils

A Phase I Environmental Site Assessment, performed by County Environmental Engineering (CEE) in July of 2013, identified Recognized Environmental Conditions (RECs) and CEE concluded that additional assessment and investigation was warranted and recommended performing a Phase II subsurface investigation. Based on the data collected during this Phase II ESA, CEE recommended the following:

1. Develop a Soil Management Plan for the Site that addresses the identified contamination in accessible soils and potential contamination at depth in the Boneyard and UST areas.
2. Properly secure the on-site water supply wells by capping and locking.
3. On-site debris, partially buried debris, and any remaining universal waste should be managed for disposal or recycling in accordance with Maine Solid and Universal Waste Regulations.
4. Conduct a complete asbestos survey of the entire site prior to reuse, renovation, or demolition.
5. Submit a Voluntary Response Action Program (VRAP) application to the MDEP to obtain liability protections.

Phase II investigations, findings and recommendations summarized above were reported in the Phase II Environmental Site Assessment – Former Frozen Foods Property, 27 Birdseye Avenue Caribou, Maine dated February 25, 2014.

LIMITED SOIL INVESTIGATION

As discussed with the City, to minimize the size of AOCs 7 and 8, and to reduce the scope of any remedial actions or future management of the AOCs, a LSI was completed on the debris piles in each AOC to characterize the nature and extent of the debris.

On August 4, 2020, the debris pile in AOC 7 was mostly disassembled to identify the type and extent of the debris. An excavator operator from McGillan, Inc. (McGillan) and Mr. David Hopkins, Jr. PE, (CES) were on site for the duration of the day, with periodic visits from City staff. CES observed and recorded the type of debris encountered in the debris pile which appeared to be miscellaneous waste from the former plant operations. Debris encountered primarily consisted of various plastic packaging material (bags, strapping, etc.), plastic water pipe, empty plastic and metal drums, miscellaneous metal debris, fencing, and several forklift tires and miscellaneous other tires. (See Photo 1 of the Photo Log). Materials were separated into piles consisting of tires, metals, and various other debris for later disposal. Test pits 7A, B, C, and D were also excavated on August 4, 2020, to a depth of approximately 6 feet below ground surface (bgs).

See the attached Site Sketch for approximate test pit locations. The test pits consisted primarily of brown silty loam and small cobbles and could be waste material from the processing of potatoes. Small pockets of black organic-type material was encountered near the bottoms of test pits 7A and 7C. A sample of the material was collected from test pit 7A and submitted for laboratory analysis for the presence of semi volatile organic compounds (SVOCs) (See the Photo Log, Photo 2 for test pit 7A). East of test pit 7B was what appeared to be a small pile of building demolition debris, containing masonry and concrete (See Photo Log, Photo 10). Pieces of pipe wrap/insulation, consisting of two layers of aluminum wrap with an interstitial space containing suspect asbestos-containing material (ACM) was observed within the debris pile. A sample of the suspect ACM was collected for laboratory analysis.

On August 5, 2020, McGillan proceeded to test pit in the areas of AOC 8, reported as “partially buried debris” in the Phase II ESA report. Test pits 8A through 8S were completed in the approximate areas shown on the attached Site sketch. Test pit logs are included in **Attachment 4** and some test pit photos are found within the photolog. The test pits primarily consisted of brown silty loam and small cobbles, a waste typical of a potato processing facility. Several miscellaneous forklift tires and a small quantity of metal debris was encountered on the surface. A limited (less than (<) 1 cubic yard (CY)) of asphalt and concrete were found on the surface near test pit 8N. Test pits 8N and 8S were excavated approximately 6 feet bgs to what appeared to be a confining layer of gray soil. Samples of this gray soil were collected from each test pit. The sample collected from test pit 8N was analyzed for SVOCs while the sample collected in test pit 8S was analyzed for both volatile organic compounds (VOCs) and SVOCs. Some surficial debris was noted on the east side of the former trail, east of test pit 8R. A test pit (6 feet bgs) was excavated in this area revealing apparent building debris and one piece of transite pipe, approximately 8 inches in diameter and 6 feet long, at which point work was stopped and the material reburied.

On August 6, 7, and 10, City crews, with the assistance of McGillan, removed the AOC 7 debris pile and miscellaneous minor debris from AOC 8, and disposed of this non-hazardous debris at the Tri-Community landfill in Fort Fairfield, Maine.

On August 13, CES returned to the site to collect surficial samples from under where the former AOC 7 debris pile was located. Two composite samples, one from the north half (sample “7N”) and one from the south half (sample “7S”) of the former debris pile footprint, were collected and submitted for SVOC analysis.

FINDINGS

Visible staining and olfactory evidence (detectable odors) of petroleum impacts or other hazardous substances was not detected from the debris piles/test pits in either AOC 7 or AOC 8.

AOC 7. The debris piles in AOC 7 appeared to consist of either former plant operations debris or process debris. The black pocket of organic-type material found in test pit 7A, was non-detect

for all SVOCs. The suspect ACM pipe insulation found in the building rubble material, east of test pit 7B, tested positive for ACM. The two surface soils samples (7N and 7S) collected below the former debris pile contained levels of SVOCs below the MDEP Remedial Action Guidelines (RAGs), as shown on the attached table, with the exception of benzo(a)pyrene for both samples. The benzo(a)pyrene concentrations found (2.60 and 2.90 mg/kg) exceed only the “Residential” RAG of 1.6 mg/kg. Laboratory results for test pit 7A, the ACM, and for the two surface soil samples below the former debris pile can be found in **Attachment 4**.

AOC 8. The debris piles in AOC 8 appeared to consist of former plant operations processing debris (brown silty loam and small rocks) with minor (less than 1%) scattered operations debris (forklift tires, misc. metal, concrete, asphalt). Gray-colored soils were observed at the bottoms of test pits 8N and 8S, and samples were collected for SVOCs at each, and also for VOCs in test pit 8 S. The results for the sample at test pit 8N were non-detect for all SVOCs. The results for the sample taken at test pit 8S showed low levels of SVOCs, all below Maine RAGs, as shown on the attached table. VOC results for test pit 8S were all non-detect.

Some surficial debris was noted on the east side of a former trail, east of test pit 8 R. A test pit (6 feet bgs) was excavated revealing apparent building demolition debris and one piece of transite pipe, approximately 8 inches in diameter and 6 feet long. Work was stopped and the material reburied.

CONCLUSION

Observations and laboratory analysis of the contents of the debris piles in AOCs 7 and 8 indicate that these debris piles do not represent a significant threat or continuing source of contamination to the Site. Based upon the findings of this LSI, together with the findings of previous investigations, it is apparent that the only future land use that may be restricted in AOC 7 or AOC 8 is residential use (unless additional soil removal is completed under the former debris pile in AOC 7) and groundwater extraction for potable water (based on Phase II information).

LIMITATIONS

CES only investigated the AOC 7 and AOC 8 debris pile areas of the Site. Residual petroleum or hazardous substance impacts, or concentrations greater than those detected by the laboratory analysis may exist in other areas of the Site.

RECOMMENDATIONS

1. Dismantle the building rubble material pile, east of test pit 7 B, and separate the friable ACM insulation for proper containerization and disposal. This activity should be supervised by a certified Asbestos Professional/Supervisor and all workers should be properly trained. The transite pipe found in the test pit east of test pit 8R should also be removed and properly disposed of.

2. If the City prefers to consider residential use in the area of the debris pile associated with AOC7, additional soil removal or capping the area with a soil cover, would be required.
3. Properly secure or close the on-site water supply wells, if not contemplated for non-potable reuse.
4. Submit a Voluntary Response Action Program (VRAP) application to the MDEP to obtain liability protections.

Please do not hesitate to contact us at (207) 227-3446 if you have any questions related to this project or if additional services are required.

Sincerely,
CES, Inc.

A handwritten signature in blue ink, reading "David Hopkins Jr.".

David Hopkins Jr. P.E.
Senior Project Engineer

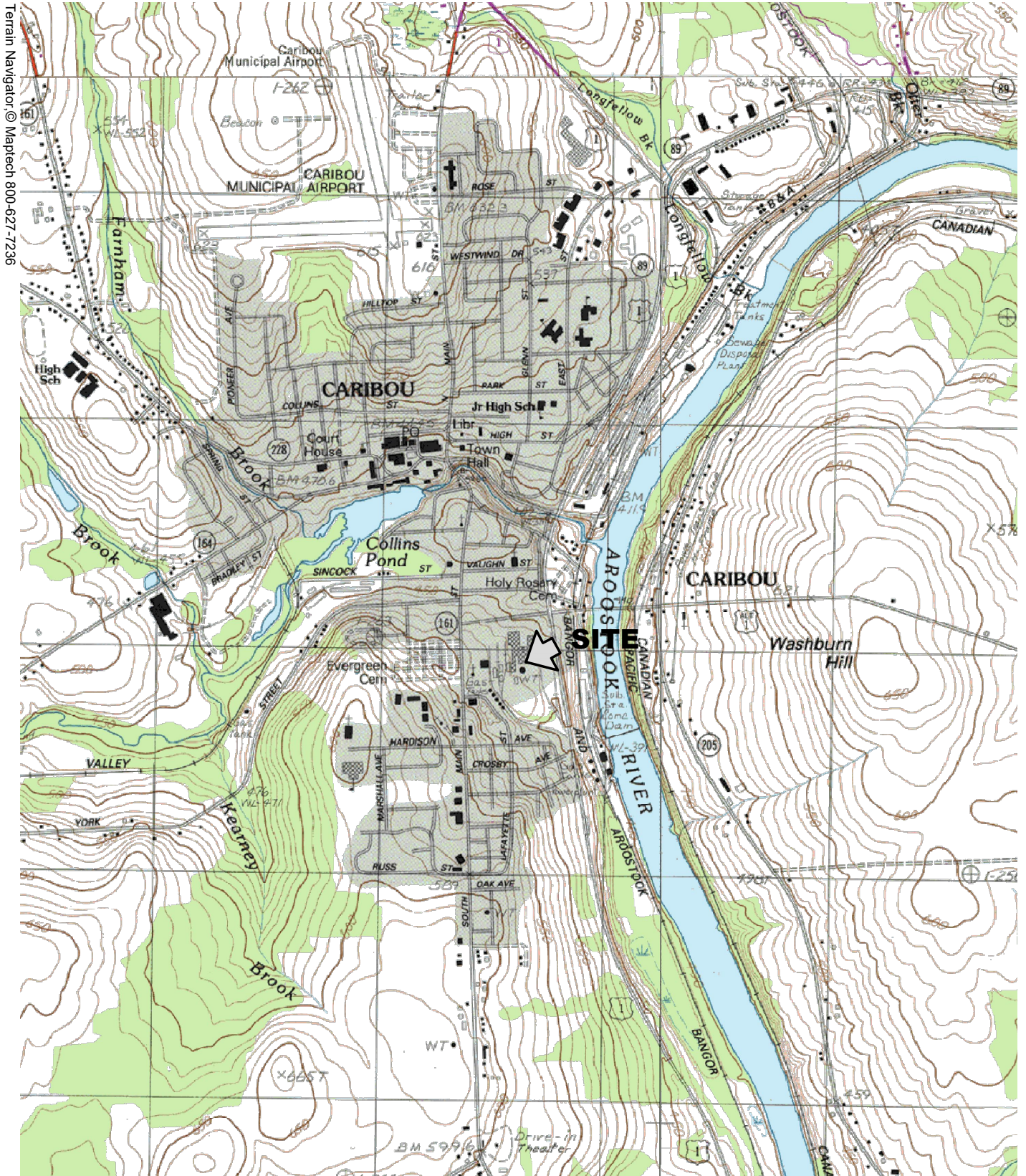
DSH/ahh/dbk

Attachments

1. Site Location Map
2. Limited Soil Investigation figure
3. Photo Log
4. Laboratory results summary table
5. Laboratory results

ATTACHMENT 1

SITE LOCATION MAP



SOURCE:
U.S.G.S. TOPOGRAPHIC QUADRANGLE
CARIBOU
@ 1:24,000



FIGURE 1 32 BIRDSEYE AVENUE LOCATION MAP

OCTOBER 2017
10963.004

ATTACHMENT 2

LIMITED SOIL INVESTIGATION



BUILDINGS DEMOLISHED SINCE JANUARY 2015 ABCA



TEST PIT LOCATION



ACCESSIBLE SOIL



**FORMER BIRDSEYE FACILITY
CARIBOU, MAINE**

**LIMITED SOIL
INVESTIGATION**

DWG:

C101

BY:

BLQ

DATE:

2020.09.01

JN:

10963.005

SCALE:

1"=150'

REV:

REV DATE:

CES 
Engineers • Environmental Scientists • Surveyors

ATTACHMENT 3

PHOTO LOG

FORMER BIRDSEYE FACILITY CARIBOU, MAINE



Photo No. 1

Photo Date:
2020.08.04

Site Location:
Former Birdseye
Facility, Caribou,
Maine

Description:
AOC 7 Debris Pile.
Packing plastics,
misc. metals, forklift
tires, plastic pipe, etc.

Photo By:
DSH



Photo No. 2

Photo Date:
2020.08.04

Site Location:
Former Birdseye
Facility, Caribou,
Maine

Description:
Test Pit 7A. Primarily
small rocks possibly
from potato
processing. Black
pocket of organic
material found at
approx. 6 feet bgs.
Sample taken.

Photo By:
DSH



**FORMER BIRDSEYE FACILITY
CARIBOU, MAINE**



Photo No. 3

Photo Date:
2020.08.05

Site Location:
Former Birdseye
Facility, Caribou,
Maine

Description:
Test Pit 8B. Fine silty
loam, likely from
potato processing.

Photo By:
DSH



Photo No. 4

Photo Date:
2020.08.05

Site Location:
Former Birdseye
Facility, Caribou,
Maine

Description:
Test Pit 8A Area.
Fine silty loam as well
as small rocks, likely
from potato
processing.

Photo By:
DSH



**FORMER BIRDSEYE FACILITY
CARIBOU, MAINE**



Photo No. 5

Photo Date:
2020.08.05

Site Location:
Former Birdseye
Facility, Caribou,
Maine

Description:
Test Pit 8G.
Fine silty loam

Photo By:
DSH



Photo No. 6

Photo Date:
2020.08.05

Site Location:
Former Birdseye
Facility, Caribou,
Maine

Description:
Test Pit 8J.
Fine silty loam

Photo By:
DSH



**FORMER BIRDSEYE FACILITY
CARIBOU, MAINE**



Photo No. 7

Photo Date:
2020.08.05

Site Location:
Former Birdseye
Facility, Caribou,
Maine

Description:
Test Pit 8L.
Fine silty loam.

Photo By:
DSH



Photo No. 8

Photo Date:
2020.08.05

Site Location:
Former Birdseye
Facility, Caribou,
Maine

Description:
Test Pit 8N.
Fine silty loam with
gray soils at approx. 6
feet bgs. Sample
taken.

Photo By:
DSH



**FORMER BIRDSEYE FACILITY
CARIBOU, MAINE**



Photo No. 9

Photo Date:
2020.08.05

Site Location:
Former Birdseye
Facility, Caribou,
Maine

Description:
Test Pit 8R.
Excavated to 12 feet
bgs to ensure no
waste disposal in this
easterly direction.
Gray soils at likely
confining layer.

Photo By:
DSH



Photo No. 10

Photo Date:
2020.08.05

Site Location:
Former Birdseye
Facility, Caribou,
Maine

Description:
Building demolition
rubble pile, east of
test pit 7B.

Photo By:
DSH



ATTACHMENT 4

LABORATORY RESULTS SUMMARY TABLE

LABORATORY ANALYTICAL RESULTS SOIL SAMPLES

	TP-7A	TP-7N	TP-7S	TP-8N	TP-8S	COMMERCIAL WORKER*	PARK USER*	LEACHING TO GROUNDWATER*	RESIDENTIAL*
SVOC	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
Acenaphthene	ND	0.31	0.30	ND	0.09	62,000	14,000	300	4,900
Fluoranthene	0.01	6.40	6.70	ND	3.40	41,000	9,300	4,900	3,300
Benzo(a)anthracene	0.01	2.60	2.90	ND	1.40	280	45	5.8	16
Benzo(a)pyrene	0.01	2.60	2.90	ND	1.50	29	4.5	16	1.6
Benzo(b)fluoranthene	0.01	3.00	3.40	ND	1.70	290	45	170	16
Benzo(k)fluoranthene	ND	1.00	1.10	ND	0.57	2,900	450	1,600	160
Chrysene	ND	2.40	2.60	ND	1.30	29,000	4,500	5,000	1,600
Acenaphthylene	ND	0.32	0.27	ND	0.09	45,000	14,000	290	4,900
Anthracene	ND	1.10	1.10	ND	0.35	100,000	70,000	3,200	25,000
Benzo(ghi)perylene	ND	1.50	1.70	ND	0.82	23,000	7,000	130,000	2,500
Fluorene	ND	0.45	0.45	ND	0.01	41,000	9,300	300	3,300
Phenanthrene	ND	3.70	4.00	ND	1.40	23,000	7,000	320	2,500
Dibenzo(a,h)anthracene	ND	0.30	0.35	ND	0.17	29	4.5	53	1.6
Indeno(1,2,3-cd)Pyrene	ND	1.50	1.80	ND	0.86	290	45	540	16
Pyrene	0.01	5.50	5.80	ND	3.00	31,000	7,000	720	2,500
Bis(2-Ethylhexyl)phthalate	ND	ND	0.29	ND	ND	2,200	1,500	730	530
All other SVOC Compounds	ND	ND	ND	ND	ND	-	-	-	-
VOC	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
All VOC Compounds	NA	NA	NA	NA	ND	-	-	-	-

Notes:

ND = Not detected above the laboratory method detection limit

NA = Not analyzed

mg/kg = milligrams per kilogram

* = *Maine Remedial Action Guidelines (RAGs) for Sites Contaminated with Hazardous Substance* (RAG - MDEP, 2018)

ATTACHMENT 5

LABORATORY RESULTS



ANALYTICAL REPORT

Lab Number:	L2032832
Client:	CES, Inc. 549 Main Street PO Box 827 Presque Isle, ME 04769
ATTN:	David Hopkins
Phone:	(207) 764-8412
Project Name:	BIRSDEYE
Project Number:	10963
Report Date:	08/20/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: BIRSDEYE
Project Number: 10963

Lab Number: L2032832
Report Date: 08/20/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2032832-01	BIRDSEYE 7N	SOIL	CARIBOU, ME	08/13/20 09:10	08/13/20
L2032832-02	BIRDSEYE 7S	SOIL	CARIBOU, ME	08/13/20 09:15	08/13/20

Project Name: BIRSDEYE
Project Number: 10963

Lab Number: L2032832
Report Date: 08/20/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

Project Name: BIRSDEYE
Project Number: 10963

Lab Number: L2032832
Report Date: 08/20/20

Case Narrative (continued)

Semivolatile Organics

L2032832-01: The sample has elevated detection limits due to the dilution required by the sample matrix.

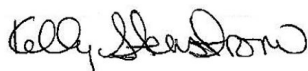
Semivolatile Organics by SIM

L2032832-01 and -02: The sample has elevated detection limits due to the dilution required by the sample matrix.

L2032832-01 and -02: The surrogate recoveries are below the acceptance criteria for 2-fluorophenol (0%), phenol-d6 (0%), nitrobenzene-d5 (0%), 2-fluorobiphenyl (0%), 2,4,6-tribromophenol (0%), and 4-terphenyl-d14 (0%) due to the dilution required to quantitate the sample. Re-extraction was not required; therefore, the results of the original analysis are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

 Kelly Stenstrom

Title: Technical Director/Representative

Date: 08/20/20

QC OUTLIER SUMMARY REPORT

Project Name: BIRSDEYE

Project Number: 10963

Lab Number: L2032832

Report Date: 08/20/20

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
Semivolatile Organics by GC/MS - Westborough Lab								
8270D	Batch QC	WG1399087-2	Hexachlorocyclopentadiene	LCS	34	40-140	01-02	potential low bias
8270D	Batch QC	WG1399087-3	Hexachlorocyclopentadiene	LCSD	37	40-140	01-02	potential low bias
Semivolatile Organics by GC/MS-SIM - Westborough Lab								
8270D-SIM	BIRDSEYE 7N	L2032832-01 D	2-Fluorophenol	Surrogate	0	25-120	-	- - not applicable - -
8270D-SIM	BIRDSEYE 7N	L2032832-01 D	Phenol-d6	Surrogate	0	10-120	-	- - not applicable - -
8270D-SIM	BIRDSEYE 7N	L2032832-01 D	Nitrobenzene-d5	Surrogate	0	23-120	-	- - not applicable - -
8270D-SIM	BIRDSEYE 7N	L2032832-01 D	2-Fluorobiphenyl	Surrogate	0	30-120	-	- - not applicable - -
8270D-SIM	BIRDSEYE 7N	L2032832-01 D	2,4,6-Tribromophenol	Surrogate	0	10-136	-	- - not applicable - -
8270D-SIM	BIRDSEYE 7N	L2032832-01 D	4-Terphenyl-d14	Surrogate	0	18-120	-	- - not applicable - -
8270D-SIM	BIRDSEYE 7S	L2032832-02 D	2-Fluorophenol	Surrogate	0	25-120	-	- - not applicable - -
8270D-SIM	BIRDSEYE 7S	L2032832-02 D	Phenol-d6	Surrogate	0	10-120	-	- - not applicable - -
8270D-SIM	BIRDSEYE 7S	L2032832-02 D	Nitrobenzene-d5	Surrogate	0	23-120	-	- - not applicable - -
8270D-SIM	BIRDSEYE 7S	L2032832-02 D	2-Fluorobiphenyl	Surrogate	0	30-120	-	- - not applicable - -
8270D-SIM	BIRDSEYE 7S	L2032832-02 D	2,4,6-Tribromophenol	Surrogate	0	10-136	-	- - not applicable - -
8270D-SIM	BIRDSEYE 7S	L2032832-02 D	4-Terphenyl-d14	Surrogate	0	18-120	-	- - not applicable - -

ORGANICS

SEMIVOLATILES

Project Name: BIRSDEYE**Lab Number:** L2032832**Project Number:** 10963**Report Date:** 08/20/20**SAMPLE RESULTS**

Lab ID: L2032832-01 D

Date Collected: 08/13/20 09:10

Client ID: BIRDSEYE 7N

Date Received: 08/13/20

Sample Location: CARIBOU, ME

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D

Extraction Date: 08/14/20 20:28

Analytical Date: 08/16/20 05:18

Analyst: JG

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/kg	6200	--	10
1,2,4-Trichlorobenzene	ND		ug/kg	1900	--	10
Bis(2-chloroethyl)ether	ND		ug/kg	1700	--	10
1,2-Dichlorobenzene	ND		ug/kg	1900	--	10
1,3-Dichlorobenzene	ND		ug/kg	1900	--	10
1,4-Dichlorobenzene	ND		ug/kg	1900	--	10
3,3'-Dichlorobenzidine	ND		ug/kg	1900	--	10
2,4-Dinitrotoluene	ND		ug/kg	1900	--	10
2,6-Dinitrotoluene	ND		ug/kg	1900	--	10
Azobenzene	ND		ug/kg	1900	--	10
4-Chlorophenyl phenyl ether	ND		ug/kg	1900	--	10
4-Bromophenyl phenyl ether	ND		ug/kg	1900	--	10
Bis(2-chloroisopropyl)ether	ND		ug/kg	2200	--	10
Bis(2-chloroethoxy)methane	ND		ug/kg	2000	--	10
Hexachlorocyclopentadiene	ND		ug/kg	5300	--	10
Isophorone	ND		ug/kg	1700	--	10
Nitrobenzene	ND		ug/kg	1700	--	10
NDPA/DPA	ND		ug/kg	1500	--	10
n-Nitrosodi-n-propylamine	ND		ug/kg	1900	--	10
Bis(2-ethylhexyl)phthalate	ND		ug/kg	1900	--	10
Butyl benzyl phthalate	ND		ug/kg	1900	--	10
Di-n-butylphthalate	ND		ug/kg	1900	--	10
Di-n-octylphthalate	ND		ug/kg	1900	--	10
Diethyl phthalate	ND		ug/kg	1900	--	10
Dimethyl phthalate	ND		ug/kg	1900	--	10
Biphenyl	ND		ug/kg	4200	--	10
Aniline	ND		ug/kg	2200	--	10
4-Chloroaniline	ND		ug/kg	1900	--	10

Project Name: BIRSDEYE**Lab Number:** L2032832**Project Number:** 10963**Report Date:** 08/20/20**SAMPLE RESULTS**

Lab ID: L2032832-01 D

Date Collected: 08/13/20 09:10

Client ID: BIRDSEYE 7N

Date Received: 08/13/20

Sample Location: CARIBOU, ME

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2-Nitroaniline	ND		ug/kg	1900	--	10
3-Nitroaniline	ND		ug/kg	1900	--	10
4-Nitroaniline	ND		ug/kg	1900	--	10
Dibenzofuran	ND		ug/kg	1900	--	10
n-Nitrosodimethylamine	ND		ug/kg	3700	--	10
2,4,6-Trichlorophenol	ND		ug/kg	1100	--	10
p-Chloro-m-cresol	ND		ug/kg	1900	--	10
2-Chlorophenol	ND		ug/kg	1900	--	10
2,4-Dichlorophenol	ND		ug/kg	1700	--	10
2,4-Dimethylphenol	ND		ug/kg	1900	--	10
2-Nitrophenol	ND		ug/kg	4000	--	10
4-Nitrophenol	ND		ug/kg	2600	--	10
2,4-Dinitrophenol	ND		ug/kg	8900	--	10
4,6-Dinitro-o-cresol	ND		ug/kg	4800	--	10
Phenol	ND		ug/kg	1900	--	10
2-Methylphenol	ND		ug/kg	1900	--	10
3-Methylphenol/4-Methylphenol	ND		ug/kg	2700	--	10
2,4,5-Trichlorophenol	ND		ug/kg	1900	--	10
Benzoic Acid	ND		ug/kg	6000	--	10
Benzyl Alcohol	ND		ug/kg	1900	--	10
Carbazole	ND		ug/kg	1900	--	10
Pyridine	ND		ug/kg	2000	--	10

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	69		25-120
Phenol-d6	74		10-120
Nitrobenzene-d5	76		23-120
2-Fluorobiphenyl	70		30-120
2,4,6-Tribromophenol	79		10-136
4-Terphenyl-d14	79		18-120

Project Name: BIRSDEYE**Lab Number:** L2032832**Project Number:** 10963**Report Date:** 08/20/20**SAMPLE RESULTS**

Lab ID: L2032832-01 D

Date Collected: 08/13/20 09:10

Client ID: BIRDSEYE 7N

Date Received: 08/13/20

Sample Location: CARIBOU, ME

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D-SIM

Extraction Date: 08/14/20 21:45

Analytical Date: 08/20/20 13:57

Analyst: RP

Percent Solids: 89%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	310		ug/kg	180	--	25
2-Chloronaphthalene	ND		ug/kg	180	--	25
Fluoranthene	6400		ug/kg	180	--	25
Hexachlorobutadiene	ND		ug/kg	180	--	25
Naphthalene	ND		ug/kg	180	--	25
Benzo(a)anthracene	2600		ug/kg	180	--	25
Benzo(a)pyrene	2600		ug/kg	180	--	25
Benzo(b)fluoranthene	3000		ug/kg	180	--	25
Benzo(k)fluoranthene	1000		ug/kg	180	--	25
Chrysene	2400		ug/kg	180	--	25
Acenaphthylene	320		ug/kg	180	--	25
Anthracene	1100		ug/kg	180	--	25
Benzo(ghi)perylene	1500		ug/kg	180	--	25
Fluorene	450		ug/kg	180	--	25
Phenanthrene	3700		ug/kg	180	--	25
Dibenzo(a,h)anthracene	300		ug/kg	180	--	25
Indeno(1,2,3-cd)Pyrene	1500		ug/kg	180	--	25
Pyrene	5500		ug/kg	180	--	25
1-Methylnaphthalene	ND		ug/kg	180	--	25
2-Methylnaphthalene	ND		ug/kg	180	--	25
Pentachlorophenol	ND		ug/kg	740	--	25
Hexachlorobenzene	ND		ug/kg	180	--	25
Hexachloroethane	ND		ug/kg	180	--	25

Project Name: BIRSDEYE**Lab Number:** L2032832**Project Number:** 10963**Report Date:** 08/20/20**SAMPLE RESULTS**

Lab ID: L2032832-01 D

Date Collected: 08/13/20 09:10

Client ID: BIRDSEYE 7N

Date Received: 08/13/20

Sample Location: CARIBOU, ME

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	0	Q	25-120
Phenol-d6	0	Q	10-120
Nitrobenzene-d5	0	Q	23-120
2-Fluorobiphenyl	0	Q	30-120
2,4,6-Tribromophenol	0	Q	10-136
4-Terphenyl-d14	0	Q	18-120

Project Name: BIRSDEYE**Lab Number:** L2032832**Project Number:** 10963**Report Date:** 08/20/20**SAMPLE RESULTS**

Lab ID: L2032832-02
 Client ID: BIRDSEYE 7S
 Sample Location: CARIBOU, ME

Date Collected: 08/13/20 09:15
 Date Received: 08/13/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8270D
 Analytical Date: 08/16/20 05:40
 Analyst: JG
 Percent Solids: 97%

Extraction Method: EPA 3546
 Extraction Date: 08/14/20 20:28

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
Benzidine	ND		ug/kg	570	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	170	--	1
Bis(2-chloroethyl)ether	ND		ug/kg	150	--	1
1,2-Dichlorobenzene	ND		ug/kg	170	--	1
1,3-Dichlorobenzene	ND		ug/kg	170	--	1
1,4-Dichlorobenzene	ND		ug/kg	170	--	1
3,3'-Dichlorobenzidine	ND		ug/kg	170	--	1
2,4-Dinitrotoluene	ND		ug/kg	170	--	1
2,6-Dinitrotoluene	ND		ug/kg	170	--	1
Azobenzene	ND		ug/kg	170	--	1
4-Chlorophenyl phenyl ether	ND		ug/kg	170	--	1
4-Bromophenyl phenyl ether	ND		ug/kg	170	--	1
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	--	1
Bis(2-chloroethoxy)methane	ND		ug/kg	180	--	1
Hexachlorocyclopentadiene	ND		ug/kg	490	--	1
Isophorone	ND		ug/kg	150	--	1
Nitrobenzene	ND		ug/kg	150	--	1
NDPA/DPA	ND		ug/kg	140	--	1
n-Nitrosodi-n-propylamine	ND		ug/kg	170	--	1
Bis(2-ethylhexyl)phthalate	290		ug/kg	170	--	1
Butyl benzyl phthalate	ND		ug/kg	170	--	1
Di-n-butylphthalate	ND		ug/kg	170	--	1
Di-n-octylphthalate	ND		ug/kg	170	--	1
Diethyl phthalate	ND		ug/kg	170	--	1
Dimethyl phthalate	ND		ug/kg	170	--	1
Biphenyl	ND		ug/kg	390	--	1
Aniline	ND		ug/kg	200	--	1
4-Chloroaniline	ND		ug/kg	170	--	1

Project Name: BIRSDEYE

Lab Number: L2032832

Project Number: 10963

Report Date: 08/20/20

SAMPLE RESULTS

Lab ID: L2032832-02
 Client ID: BIRDSEYE 7S
 Sample Location: CARIBOU, ME

Date Collected: 08/13/20 09:15
 Date Received: 08/13/20
 Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS - Westborough Lab						
2-Nitroaniline	ND		ug/kg	170	--	1
3-Nitroaniline	ND		ug/kg	170	--	1
4-Nitroaniline	ND		ug/kg	170	--	1
Dibenzofuran	ND		ug/kg	170	--	1
n-Nitrosodimethylamine	ND		ug/kg	340	--	1
2,4,6-Trichlorophenol	ND		ug/kg	100	--	1
p-Chloro-m-cresol	ND		ug/kg	170	--	1
2-Chlorophenol	ND		ug/kg	170	--	1
2,4-Dichlorophenol	ND		ug/kg	150	--	1
2,4-Dimethylphenol	ND		ug/kg	170	--	1
2-Nitrophenol	ND		ug/kg	370	--	1
4-Nitrophenol	ND		ug/kg	240	--	1
2,4-Dinitrophenol	ND		ug/kg	820	--	1
4,6-Dinitro-o-cresol	ND		ug/kg	450	--	1
Phenol	ND		ug/kg	170	--	1
2-Methylphenol	ND		ug/kg	170	--	1
3-Methylphenol/4-Methylphenol	ND		ug/kg	250	--	1
2,4,5-Trichlorophenol	ND		ug/kg	170	--	1
Benzoic Acid	ND		ug/kg	560	--	1
Benzyl Alcohol	ND		ug/kg	170	--	1
Carbazole	ND		ug/kg	170	--	1
Pyridine	ND		ug/kg	180	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	67		25-120
Phenol-d6	71		10-120
Nitrobenzene-d5	74		23-120
2-Fluorobiphenyl	67		30-120
2,4,6-Tribromophenol	73		10-136
4-Terphenyl-d14	64		18-120

Project Name: BIRSDEYE**Lab Number:** L2032832**Project Number:** 10963**Report Date:** 08/20/20**SAMPLE RESULTS**

Lab ID: L2032832-02 D

Date Collected: 08/13/20 09:15

Client ID: BIRDSEYE 7S

Date Received: 08/13/20

Sample Location: CARIBOU, ME

Field Prep: Not Specified

Sample Depth:

Matrix: Soil

Extraction Method: EPA 3546

Analytical Method: 1,8270D-SIM

Extraction Date: 08/14/20 21:45

Analytical Date: 08/20/20 14:14

Analyst: RP

Percent Solids: 97%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						
Acenaphthene	300		ug/kg	170	--	25
2-Chloronaphthalene	ND		ug/kg	170	--	25
Fluoranthene	6700		ug/kg	170	--	25
Hexachlorobutadiene	ND		ug/kg	170	--	25
Naphthalene	ND		ug/kg	170	--	25
Benzo(a)anthracene	2900		ug/kg	170	--	25
Benzo(a)pyrene	2900		ug/kg	170	--	25
Benzo(b)fluoranthene	3400		ug/kg	170	--	25
Benzo(k)fluoranthene	1100		ug/kg	170	--	25
Chrysene	2600		ug/kg	170	--	25
Acenaphthylene	270		ug/kg	170	--	25
Anthracene	1100		ug/kg	170	--	25
Benzo(ghi)perylene	1700		ug/kg	170	--	25
Fluorene	450		ug/kg	170	--	25
Phenanthrene	4000		ug/kg	170	--	25
Dibenzo(a,h)anthracene	350		ug/kg	170	--	25
Indeno(1,2,3-cd)Pyrene	1800		ug/kg	170	--	25
Pyrene	5800		ug/kg	170	--	25
1-Methylnaphthalene	ND		ug/kg	170	--	25
2-Methylnaphthalene	ND		ug/kg	170	--	25
Pentachlorophenol	ND		ug/kg	680	--	25
Hexachlorobenzene	ND		ug/kg	170	--	25
Hexachloroethane	ND		ug/kg	170	--	25

Project Name: BIRSDEYE**Lab Number:** L2032832**Project Number:** 10963**Report Date:** 08/20/20**SAMPLE RESULTS**

Lab ID: L2032832-02 D

Date Collected: 08/13/20 09:15

Client ID: BIRDSEYE 7S

Date Received: 08/13/20

Sample Location: CARIBOU, ME

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Semivolatile Organics by GC/MS-SIM - Westborough Lab						

Surrogate	% Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	0	Q	25-120
Phenol-d6	0	Q	10-120
Nitrobenzene-d5	0	Q	23-120
2-Fluorobiphenyl	0	Q	30-120
2,4,6-Tribromophenol	0	Q	10-136
4-Terphenyl-d14	0	Q	18-120

Project Name: BIRSDEYE

Project Number: 10963

Lab Number: L2032832

Report Date: 08/20/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D-SIM
 Analytical Date: 08/15/20 11:55
 Analyst: JJW

Extraction Method: EPA 3546
 Extraction Date: 08/14/20 14:29

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1398985-1					
Acenaphthene	ND		ug/kg	6.5	--
2-Chloronaphthalene	ND		ug/kg	6.5	--
Fluoranthene	ND		ug/kg	6.5	--
Hexachlorobutadiene	ND		ug/kg	6.5	--
Naphthalene	ND		ug/kg	6.5	--
Benzo(a)anthracene	ND		ug/kg	6.5	--
Benzo(a)pyrene	ND		ug/kg	6.5	--
Benzo(b)fluoranthene	ND		ug/kg	6.5	--
Benzo(k)fluoranthene	ND		ug/kg	6.5	--
Chrysene	ND		ug/kg	6.5	--
Acenaphthylene	ND		ug/kg	6.5	--
Anthracene	ND		ug/kg	6.5	--
Benzo(ghi)perylene	ND		ug/kg	6.5	--
Fluorene	ND		ug/kg	6.5	--
Phenanthrene	ND		ug/kg	6.5	--
Dibenzo(a,h)anthracene	ND		ug/kg	6.5	--
Indeno(1,2,3-cd)Pyrene	ND		ug/kg	6.5	--
Pyrene	ND		ug/kg	6.5	--
1-Methylnaphthalene	ND		ug/kg	6.5	--
2-Methylnaphthalene	ND		ug/kg	6.5	--
Pentachlorophenol	ND		ug/kg	26	--
Hexachlorobenzene	ND		ug/kg	6.5	--
Hexachloroethane	ND		ug/kg	6.5	--

Project Name: BIRSDEYE**Project Number:** 10963**Lab Number:** L2032832**Report Date:** 08/20/20**Method Blank Analysis**
Batch Quality ControlAnalytical Method: 1,8270D-SIM
Analytical Date: 08/15/20 11:55
Analyst: JJWExtraction Method: EPA 3546
Extraction Date: 08/14/20 14:29

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS-SIM - Westborough Lab for sample(s): 01-02 Batch: WG1398985-1					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	57		25-120
Phenol-d6	61		10-120
Nitrobenzene-d5	61		23-120
2-Fluorobiphenyl	55		30-120
2,4,6-Tribromophenol	58		10-136
4-Terphenyl-d14	49		18-120

Project Name: BIRSDEYE

Project Number: 10963

Lab Number: L2032832

Report Date: 08/20/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 08/16/20 04:11
 Analyst: JG

Extraction Method: EPA 3546
 Extraction Date: 08/14/20 20:28

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1399087-1					
Acenaphthene	ND		ug/kg	130	--
Benzidine	ND		ug/kg	540	--
1,2,4-Trichlorobenzene	ND		ug/kg	160	--
Hexachlorobenzene	ND		ug/kg	99	--
Bis(2-chloroethyl)ether	ND		ug/kg	150	--
2-Chloronaphthalene	ND		ug/kg	160	--
1,2-Dichlorobenzene	ND		ug/kg	160	--
1,3-Dichlorobenzene	ND		ug/kg	160	--
1,4-Dichlorobenzene	ND		ug/kg	160	--
3,3'-Dichlorobenzidine	ND		ug/kg	160	--
2,4-Dinitrotoluene	ND		ug/kg	160	--
2,6-Dinitrotoluene	ND		ug/kg	160	--
Azobenzene	ND		ug/kg	160	--
Fluoranthene	ND		ug/kg	99	--
4-Chlorophenyl phenyl ether	ND		ug/kg	160	--
4-Bromophenyl phenyl ether	ND		ug/kg	160	--
Bis(2-chloroisopropyl)ether	ND		ug/kg	200	--
Bis(2-chloroethoxy)methane	ND		ug/kg	180	--
Hexachlorobutadiene	ND		ug/kg	160	--
Hexachlorocyclopentadiene	ND		ug/kg	470	--
Hexachloroethane	ND		ug/kg	130	--
Isophorone	ND		ug/kg	150	--
Naphthalene	ND		ug/kg	160	--
Nitrobenzene	ND		ug/kg	150	--
NDPA/DPA	ND		ug/kg	130	--
n-Nitrosodi-n-propylamine	ND		ug/kg	160	--
Bis(2-ethylhexyl)phthalate	ND		ug/kg	160	--
Butyl benzyl phthalate	ND		ug/kg	160	--
Di-n-butylphthalate	ND		ug/kg	160	--

Project Name: BIRSDEYE

Project Number: 10963

Lab Number: L2032832

Report Date: 08/20/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 08/16/20 04:11
 Analyst: JG

Extraction Method: EPA 3546
 Extraction Date: 08/14/20 20:28

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1399087-1					
Di-n-octylphthalate	ND		ug/kg	160	--
Diethyl phthalate	ND		ug/kg	160	--
Dimethyl phthalate	ND		ug/kg	160	--
Benzo(a)anthracene	ND		ug/kg	99	--
Benzo(a)pyrene	ND		ug/kg	130	--
Benzo(b)fluoranthene	ND		ug/kg	99	--
Benzo(k)fluoranthene	ND		ug/kg	99	--
Chrysene	ND		ug/kg	99	--
Acenaphthylene	ND		ug/kg	130	--
Anthracene	ND		ug/kg	99	--
Benzo(ghi)perylene	ND		ug/kg	130	--
Fluorene	ND		ug/kg	160	--
Phenanthrene	ND		ug/kg	99	--
Dibenzo(a,h)anthracene	ND		ug/kg	99	--
Indeno(1,2,3-cd)pyrene	ND		ug/kg	130	--
Pyrene	ND		ug/kg	99	--
Biphenyl	ND		ug/kg	380	--
Aniline	ND		ug/kg	200	--
4-Chloroaniline	ND		ug/kg	160	--
1-Methylnaphthalene	ND		ug/kg	160	--
2-Nitroaniline	ND		ug/kg	160	--
3-Nitroaniline	ND		ug/kg	160	--
4-Nitroaniline	ND		ug/kg	160	--
Dibenzofuran	ND		ug/kg	160	--
2-Methylnaphthalene	ND		ug/kg	200	--
n-Nitrosodimethylamine	ND		ug/kg	330	--
2,4,6-Trichlorophenol	ND		ug/kg	99	--
p-Chloro-m-cresol	ND		ug/kg	160	--
2-Chlorophenol	ND		ug/kg	160	--

Project Name: BIRSDEYE

Project Number: 10963

Lab Number: L2032832

Report Date: 08/20/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8270D
 Analytical Date: 08/16/20 04:11
 Analyst: JG

Extraction Method: EPA 3546
 Extraction Date: 08/14/20 20:28

Parameter	Result	Qualifier	Units	RL	MDL
Semivolatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG1399087-1					
2,4-Dichlorophenol	ND		ug/kg	150	--
2,4-Dimethylphenol	ND		ug/kg	160	--
2-Nitrophenol	ND		ug/kg	360	--
4-Nitrophenol	ND		ug/kg	230	--
2,4-Dinitrophenol	ND		ug/kg	790	--
4,6-Dinitro-o-cresol	ND		ug/kg	430	--
Pentachlorophenol	ND		ug/kg	130	--
Phenol	ND		ug/kg	160	--
2-Methylphenol	ND		ug/kg	160	--
3-Methylphenol/4-Methylphenol	ND		ug/kg	240	--
2,4,5-Trichlorophenol	ND		ug/kg	160	--
Benzoic Acid	ND		ug/kg	540	--
Benzyl Alcohol	ND		ug/kg	160	--
Carbazole	ND		ug/kg	160	--
Pyridine	ND		ug/kg	180	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
2-Fluorophenol	70		25-120
Phenol-d6	73		10-120
Nitrobenzene-d5	69		23-120
2-Fluorobiphenyl	63		30-120
2,4,6-Tribromophenol	73		10-136
4-Terphenyl-d14	67		18-120

Lab Control Sample Analysis **Batch Quality Control**

Project Name: BIRSDEYE

Project Number: 10963

Lab Number: L2032832

Report Date: 08/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG1398985-2 WG1398985-3								
Acenaphthene	53		60		40-140	12		50
2-Chloronaphthalene	53		61		40-140	14		50
Fluoranthene	50		57		40-140	13		50
Hexachlorobutadiene	54		62		34-107	14		50
Naphthalene	51		59		40-140	15		50
Benzo(a)anthracene	50		57		40-140	13		50
Benzo(a)pyrene	54		62		40-140	14		50
Benzo(b)fluoranthene	52		58		40-140	11		50
Benzo(k)fluoranthene	58		69		40-140	17		50
Chrysene	54		62		40-140	14		50
Acenaphthylene	54		62		40-140	14		50
Anthracene	53		60		40-140	12		50
Benzo(ghi)perylene	51		58		40-140	13		50
Fluorene	53		61		40-140	14		50
Phenanthrene	49		57		40-140	15		50
Dibenzo(a,h)anthracene	52		60		40-140	14		50
Indeno(1,2,3-cd)Pyrene	52		60		40-140	14		50
Pyrene	50		57		35-142	13		50
1-Methylnaphthalene	55		64		40-140	15		50
2-Methylnaphthalene	52		60		40-140	14		50
Pentachlorophenol	58		62		17-109	7		50
Hexachlorobenzene	60		68		40-140	13		50
Hexachloroethane	57		65		29-106	13		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: BIRSDEYE

Project Number: 10963

Lab Number: L2032832

Report Date: 08/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS-SIM - Westborough Lab Associated sample(s): 01-02 Batch: WG1398985-2 WG1398985-3								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	54		61		25-120
Phenol-d6	58		66		10-120
Nitrobenzene-d5	60		68		23-120
2-Fluorobiphenyl	53		60		30-120
2,4,6-Tribromophenol	56		63		10-136
4-Terphenyl-d14	45		51		18-120

Lab Control Sample Analysis Batch Quality Control

Project Name: BIRSDEYE

Project Number: 10963

Lab Number: L2032832

Report Date: 08/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1399087-2 WG1399087-3								
Acenaphthene	72		77		31-137	7		50
Benzidine	20		12		10-66	50		50
1,2,4-Trichlorobenzene	59		64		38-107	8		50
Hexachlorobenzene	73		73		40-140	0		50
Bis(2-chloroethyl)ether	67		70		40-140	4		50
2-Chloronaphthalene	66		67		40-140	2		50
1,2-Dichlorobenzene	61		66		40-140	8		50
1,3-Dichlorobenzene	61		65		40-140	6		50
1,4-Dichlorobenzene	61		64		28-104	5		50
3,3'-Dichlorobenzidine	75		70		40-140	7		50
2,4-Dinitrotoluene	74		73		40-132	1		50
2,6-Dinitrotoluene	71		71		40-140	0		50
Azobenzene	82		83		40-140	1		50
Fluoranthene	73		75		40-140	3		50
4-Chlorophenyl phenyl ether	69		70		40-140	1		50
4-Bromophenyl phenyl ether	69		70		40-140	1		50
Bis(2-chloroisopropyl)ether	86		91		40-140	6		50
Bis(2-chloroethoxy)methane	69		70		40-117	1		50
Hexachlorobutadiene	62		67		40-140	8		50
Hexachlorocyclopentadiene	34	Q	37	Q	40-140	8		50
Hexachloroethane	63		66		40-140	5		50
Isophorone	76		77		40-140	1		50
Naphthalene	65		69		40-140	6		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: BIRSDEYE

Project Number: 10963

Lab Number: L2032832

Report Date: 08/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1399087-2 WG1399087-3								
Nitrobenzene	70		75		40-140	7		50
NDPA/DPA	72		73		36-157	1		50
n-Nitrosodi-n-propylamine	77		78		32-121	1		50
Bis(2-ethylhexyl)phthalate	76		77		40-140	1		50
Butyl benzyl phthalate	79		80		40-140	1		50
Di-n-butylphthalate	78		79		40-140	1		50
Di-n-octylphthalate	75		77		40-140	3		50
Diethyl phthalate	73		74		40-140	1		50
Dimethyl phthalate	68		70		40-140	3		50
Benzo(a)anthracene	70		72		40-140	3		50
Benzo(a)pyrene	71		74		40-140	4		50
Benzo(b)fluoranthene	75		79		40-140	5		50
Benzo(k)fluoranthene	67		69		40-140	3		50
Chrysene	71		75		40-140	5		50
Acenaphthylene	75		77		40-140	3		50
Anthracene	76		78		40-140	3		50
Benzo(ghi)perylene	78		82		40-140	5		50
Fluorene	72		74		40-140	3		50
Phenanthrene	73		76		40-140	4		50
Dibenzo(a,h)anthracene	76		80		40-140	5		50
Indeno(1,2,3-cd)pyrene	72		78		40-140	8		50
Pyrene	77		78		35-142	1		50
Biphenyl	72		76		37-127	5		50

Lab Control Sample Analysis

Batch Quality Control

Project Name: BIRSDEYE

Project Number: 10963

Lab Number: L2032832

Report Date: 08/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1399087-2 WG1399087-3								
Aniline	64		60		40-140	6		50
4-Chloroaniline	68		67		40-140	1		50
1-Methylnaphthalene	66		68		26-130	3		50
2-Nitroaniline	70		75		47-134	7		50
3-Nitroaniline	72		71		26-129	1		50
4-Nitroaniline	70		72		41-125	3		50
Dibenzofuran	72		74		40-140	3		50
2-Methylnaphthalene	66		69		40-140	4		50
n-Nitrosodimethylamine	68		69		22-100	1		50
2,4,6-Trichlorophenol	71		70		30-130	1		50
p-Chloro-m-cresol	77		78		26-103	1		50
2-Chlorophenol	68		73		25-102	7		50
2,4-Dichlorophenol	69		72		30-130	4		50
2,4-Dimethylphenol	78		82		30-130	5		50
2-Nitrophenol	66		69		30-130	4		50
4-Nitrophenol	84		89		11-114	6		50
2,4-Dinitrophenol	60		67		4-130	11		50
4,6-Dinitro-o-cresol	68		69		10-130	1		50
Pentachlorophenol	58		61		17-109	5		50
Phenol	70		72		26-90	3		50
2-Methylphenol	76		78		30-130.	3		50
3-Methylphenol/4-Methylphenol	81		82		30-130	1		50
2,4,5-Trichlorophenol	70		71		30-130	1		50

Lab Control Sample Analysis Batch Quality Control

Project Name: BIRSDEYE

Project Number: 10963

Lab Number: L2032832

Report Date: 08/20/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Semivolatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG1399087-2 WG1399087-3								
Benzoic Acid	56		69		10-110	21		50
Benzyl Alcohol	76		79		40-140	4		50
Carbazole	76		79		54-128	4		50
Pyridine	44		47		10-93	7		50

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
2-Fluorophenol	74		75		25-120
Phenol-d6	76		79		10-120
Nitrobenzene-d5	73		76		23-120
2-Fluorobiphenyl	66		68		30-120
2,4,6-Tribromophenol	79		80		10-136
4-Terphenyl-d14	72		72		18-120

INORGANICS & MISCELLANEOUS

Project Name: BIRSDEYE**Project Number:** 10963**Lab Number:** L2032832**Report Date:** 08/20/20**SAMPLE RESULTS****Lab ID:** L2032832-01**Client ID:** BIRDSEYE 7N**Sample Location:** CARIBOU, ME**Date Collected:** 08/13/20 09:10**Date Received:** 08/13/20**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	89.0		%	0.100	NA	1	-	08/14/20 09:25	121,2540G	RI



Project Name: BIRSDEYE**Project Number:** 10963**Lab Number:** L2032832**Report Date:** 08/20/20**SAMPLE RESULTS****Lab ID:** L2032832-02**Client ID:** BIRDSEYE 7S**Sample Location:** CARIBOU, ME**Date Collected:** 08/13/20 09:15**Date Received:** 08/13/20**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	96.7		%	0.100	NA	1	-	08/14/20 09:25	121,2540G	RI



Lab Duplicate Analysis
*Batch Quality Control***Project Name:** BIRSDEYE**Project Number:** 10963**Lab Number:** L2032832**Report Date:** 08/20/20

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG1398808-1 QC Sample: L2032832-01 Client ID: BIRDSEYE 7N						
Solids, Total	89.0	88.9	%	0		20

Project Name: BIRSDEYE

Project Number: 10963

Serial_No:08202018:17

Lab Number: L2032832

Report Date: 08/20/20

Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Cooler Information

Cooler **Custody Seal**

B Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2032832-01A	Glass 120ml/4oz unpreserved	B	NA		4.0	Y	Absent		8270TCL(14),8270TCL-SIM(14),ME-TS-2540(7)
L2032832-02A	Glass 120ml/4oz unpreserved	B	NA		4.0	Y	Absent		8270TCL(14),8270TCL-SIM(14),ME-TS-2540(7)

Project Name: BIRSDEYE**Lab Number:** L2032832**Project Number:** 10963**Report Date:** 08/20/20

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: Data Usability Report

Project Name: BIRSDEYE**Lab Number:** L2032832**Project Number:** 10963**Report Date:** 08/20/20

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenzo(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration

Report Format: Data Usability Report



Project Name: BIRSDEYE**Lab Number:** L2032832**Project Number:** 10963**Report Date:** 08/20/20**Data Qualifiers**

Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Project Name: BIRSDEYE**Lab Number:** L2032832**Project Number:** 10963**Report Date:** 08/20/20

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.Facility: **Company-wide**Department: **Quality Assurance**Title: **Certificate/Approval Program Summary**ID No.: **17873**

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Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene,

3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

EPA TO-12 Non-methane organics**EPA 3C** Fixed gases**Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology: SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:**Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E,****SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II,

Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs

EPA 625.1: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.**EPA 522.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1** Hg.**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

PAGE _____ OF _____

ALPHA Job #: L2032832

320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300

Project Information

ALPHA Quote #:

Email: d.haskins@resincasa.com

Turn-Around Time

☐ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due:

Additional Project Information:

Report Information - Data Deliverables

☒ ADEx ☐ EMAIL

Billing Information

<input checked="" type="checkbox"/> Same as Client info	PO #:
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Regulatory Requirements & Project Information Requirements

☐ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods
☐ Yes ☐ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☐ No NPDES RGP
☐ Other State /Fed Program _____ Criteria _____

ANALYSIS

VOC: ☐ 8260 ☐ 624 ☐ 524.2

SVOC: ☒ ABN ☐ PAH

METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15

EPH: ☐ RCRA5 ☐ RCRA8 ☐ PP13

VPH: ☐ Ranges & Targets ☐ Ranges Only

☐ PCB ☐ PEST

TPH: ☐ Quant Only ☐ Fingerprints

SAMPLE INFO

Filtration
☐ Field
☐ Lab to do

Preservation
☐ Lab to do

TOTAL # BOTTLES

[illegible]

Container Type

P = Plastic
A = Amber glass
V = Vial
G = Glass
B = Bacteria cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Preservative

A = None
B = HCl
C = HNO₃
D = H₂SO₄
E = NaOH
F = MeOH
G = NaHSO₄
H = Na₂S₂O₃
I = Ascorbic Acid
J = NH₄Cl
K = Zn Acetate
O = Other

Container Type

Preservative

Relinquished By:

Date/Time

Received By:

Date/Time

All samples submitted are subject to Alpha's Terms and Conditions.
See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)



ANALYTICAL REPORT

Lab Number:	L2033981
Client:	CES, Inc. 549 Main Street PO Box 827 Presque Isle, ME 04769
ATTN:	David Hopkins
Phone:	(207) 764-8412
Project Name:	BIRDSEYE
Project Number:	10963.005
Report Date:	08/24/20

The original project report/data package is held by Alpha Analytical. This report/data package is paginated and should be reproduced only in its entirety. Alpha Analytical holds no responsibility for results and/or data that are not consistent with the original.

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0574), IL (200077), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #P330-17-00196).

Eight Walkup Drive, Westborough, MA 01581-1019
508-898-9220 (Fax) 508-898-9193 800-624-9220 - www.alphalab.com



Project Name: BIRDSEYE
Project Number: 10963.005

Lab Number: L2033981
Report Date: 08/24/20

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2033981-01	8S	SOIL	CARIBOU, ME	08/19/20 10:53	08/19/20

Project Name: BIRDSEYE
Project Number: 10963.005

Lab Number: L2033981
Report Date: 08/24/20

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively.

When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances, the specific failure is not narrated but noted in the associated QC Outlier Summary Report, located directly after the Case Narrative. QC information is also incorporated in the Data Usability Assessment table (Format 11) of our Data Merger tool, where it can be reviewed in conjunction with the sample result, associated regulatory criteria and any associated data usability implications.

Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

HOLD POLICY - For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Alpha Project Manager and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Project Management at 800-624-9220 with any questions.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:

Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative

Date: 08/24/20

QC OUTLIER SUMMARY REPORT

Project Name: BIRDSEYE**Lab Number:** L2033981**Project Number:** 10963.005**Report Date:** 08/24/20

Method	Client ID (Native ID)	Lab ID	Parameter	QC Type	Recovery/RPD (%)	QC Limits (%)	Associated Samples	Data Quality Assessment
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There are no QC Outliers associated with this report.

ORGANICS

VOLATILES

Project Name: BIRDSEYE**Lab Number:** L2033981**Project Number:** 10963.005**Report Date:** 08/24/20**SAMPLE RESULTS**

Lab ID: L2033981-01
 Client ID: 8S
 Sample Location: CARIBOU, ME

Date Collected: 08/19/20 10:53
 Date Received: 08/19/20
 Field Prep: Not Specified

Sample Depth:

Matrix: Soil
 Analytical Method: 1,8260C
 Analytical Date: 08/22/20 15:57
 Analyst: AD
 Percent Solids: 87%

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Methylene chloride	ND		ug/kg	8.2	--	1
1,1-Dichloroethane	ND		ug/kg	1.6	--	1
Chloroform	ND		ug/kg	2.5	--	1
Carbon tetrachloride	ND		ug/kg	1.6	--	1
1,2-Dichloropropane	ND		ug/kg	1.6	--	1
Dibromochloromethane	ND		ug/kg	1.6	--	1
1,1,2-Trichloroethane	ND		ug/kg	1.6	--	1
Tetrachloroethene	ND		ug/kg	0.82	--	1
Chlorobenzene	ND		ug/kg	0.82	--	1
Trichlorofluoromethane	ND		ug/kg	6.6	--	1
1,2-Dichloroethane	ND		ug/kg	1.6	--	1
1,1,1-Trichloroethane	ND		ug/kg	0.82	--	1
Bromodichloromethane	ND		ug/kg	0.82	--	1
trans-1,3-Dichloropropene	ND		ug/kg	1.6	--	1
cis-1,3-Dichloropropene	ND		ug/kg	0.82	--	1
1,3-Dichloropropene, Total	ND		ug/kg	0.82	--	1
1,1-Dichloropropene	ND		ug/kg	0.82	--	1
Bromoform	ND		ug/kg	6.6	--	1
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.82	--	1
Benzene	ND		ug/kg	0.82	--	1
Toluene	ND		ug/kg	1.6	--	1
Ethylbenzene	ND		ug/kg	1.6	--	1
Chloromethane	ND		ug/kg	6.6	--	1
Bromomethane	ND		ug/kg	3.3	--	1
Vinyl chloride	ND		ug/kg	1.6	--	1
Chloroethane	ND		ug/kg	3.3	--	1
1,1-Dichloroethene	ND		ug/kg	1.6	--	1
trans-1,2-Dichloroethene	ND		ug/kg	2.5	--	1

Project Name: BIRDSEYE

Lab Number: L2033981

Project Number: 10963.005

Report Date: 08/24/20

SAMPLE RESULTS

Lab ID: L2033981-01

Date Collected: 08/19/20 10:53

Client ID: 8S

Date Received: 08/19/20

Sample Location: CARIBOU, ME

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Trichloroethene	ND		ug/kg	0.82	--	1
1,2-Dichlorobenzene	ND		ug/kg	3.3	--	1
1,3-Dichlorobenzene	ND		ug/kg	3.3	--	1
1,4-Dichlorobenzene	ND		ug/kg	3.3	--	1
Methyl tert butyl ether	ND		ug/kg	3.3	--	1
p/m-Xylene	ND		ug/kg	3.3	--	1
o-Xylene	ND		ug/kg	1.6	--	1
Xylenes, Total	ND		ug/kg	1.6	--	1
cis-1,2-Dichloroethene	ND		ug/kg	1.6	--	1
1,2-Dichloroethene, Total	ND		ug/kg	1.6	--	1
Dibromomethane	ND		ug/kg	3.3	--	1
1,4-Dichlorobutane	ND		ug/kg	16	--	1
1,2,3-Trichloropropane	ND		ug/kg	3.3	--	1
Styrene	ND		ug/kg	1.6	--	1
Dichlorodifluoromethane	ND		ug/kg	16	--	1
Acetone	ND		ug/kg	41	--	1
Carbon disulfide	ND		ug/kg	16	--	1
2-Butanone	ND		ug/kg	16	--	1
Vinyl acetate	ND		ug/kg	16	--	1
4-Methyl-2-pentanone	ND		ug/kg	16	--	1
2-Hexanone	ND		ug/kg	16	--	1
Ethyl methacrylate	ND		ug/kg	16	--	1
Acrylonitrile	ND		ug/kg	6.6	--	1
Bromochloromethane	ND		ug/kg	3.3	--	1
Tetrahydrofuran	ND		ug/kg	6.6	--	1
2,2-Dichloropropane	ND		ug/kg	3.3	--	1
1,2-Dibromoethane	ND		ug/kg	1.6	--	1
1,3-Dichloropropane	ND		ug/kg	3.3	--	1
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.82	--	1
Bromobenzene	ND		ug/kg	3.3	--	1
n-Butylbenzene	ND		ug/kg	1.6	--	1
sec-Butylbenzene	ND		ug/kg	1.6	--	1
tert-Butylbenzene	ND		ug/kg	3.3	--	1
o-Chlorotoluene	ND		ug/kg	3.3	--	1
p-Chlorotoluene	ND		ug/kg	3.3	--	1
1,2-Dibromo-3-chloropropane	ND		ug/kg	4.9	--	1
Hexachlorobutadiene	ND		ug/kg	6.6	--	1

Project Name: BIRDSEYE

Lab Number: L2033981

Project Number: 10963.005

Report Date: 08/24/20

SAMPLE RESULTS

Lab ID: L2033981-01

Date Collected: 08/19/20 10:53

Client ID: 8S

Date Received: 08/19/20

Sample Location: CARIBOU, ME

Field Prep: Not Specified

Sample Depth:

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by EPA 5035 Low - Westborough Lab						
Isopropylbenzene	ND		ug/kg	1.6	--	1
p-Isopropyltoluene	ND		ug/kg	1.6	--	1
Naphthalene	ND		ug/kg	6.6	--	1
n-Propylbenzene	ND		ug/kg	1.6	--	1
1,2,3-Trichlorobenzene	ND		ug/kg	3.3	--	1
1,2,4-Trichlorobenzene	ND		ug/kg	3.3	--	1
1,3,5-Trimethylbenzene	ND		ug/kg	3.3	--	1
1,2,4-Trimethylbenzene	ND		ug/kg	3.3	--	1
trans-1,4-Dichloro-2-butene	ND		ug/kg	8.2	--	1
Ethyl ether	ND		ug/kg	3.3	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	101		70-130
Toluene-d8	99		70-130
4-Bromofluorobenzene	97		70-130
Dibromofluoromethane	98		70-130

Project Name: BIRDSEYE

Lab Number: L2033981

Project Number: 10963.005

Report Date: 08/24/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 08/22/20 09:29
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1401989-5					
Methylene chloride	ND		ug/kg	5.0	--
1,1-Dichloroethane	ND		ug/kg	1.0	--
Chloroform	ND		ug/kg	1.5	--
Carbon tetrachloride	ND		ug/kg	1.0	--
1,2-Dichloropropane	ND		ug/kg	1.0	--
Dibromochloromethane	ND		ug/kg	1.0	--
1,1,2-Trichloroethane	ND		ug/kg	1.0	--
2-Chloroethylvinyl ether	ND		ug/kg	20	--
Tetrachloroethene	ND		ug/kg	0.50	--
Chlorobenzene	ND		ug/kg	0.50	--
Trichlorofluoromethane	ND		ug/kg	4.0	--
1,2-Dichloroethane	ND		ug/kg	1.0	--
1,1,1-Trichloroethane	ND		ug/kg	0.50	--
Bromodichloromethane	ND		ug/kg	0.50	--
trans-1,3-Dichloropropene	ND		ug/kg	1.0	--
cis-1,3-Dichloropropene	ND		ug/kg	0.50	--
1,3-Dichloropropene, Total	ND		ug/kg	0.50	--
1,1-Dichloropropene	ND		ug/kg	0.50	--
Bromoform	ND		ug/kg	4.0	--
1,1,2,2-Tetrachloroethane	ND		ug/kg	0.50	--
Benzene	ND		ug/kg	0.50	--
Toluene	ND		ug/kg	1.0	--
Ethylbenzene	ND		ug/kg	1.0	--
Chloromethane	ND		ug/kg	4.0	--
Bromomethane	ND		ug/kg	2.0	--
Vinyl chloride	ND		ug/kg	1.0	--
Chloroethane	ND		ug/kg	2.0	--
1,1-Dichloroethene	ND		ug/kg	1.0	--
trans-1,2-Dichloroethene	ND		ug/kg	1.5	--

Project Name: BIRDSEYE

Lab Number: L2033981

Project Number: 10963.005

Report Date: 08/24/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 08/22/20 09:29
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1401989-5					
Trichloroethene	ND		ug/kg	0.50	--
1,2-Dichlorobenzene	ND		ug/kg	2.0	--
1,3-Dichlorobenzene	ND		ug/kg	2.0	--
1,4-Dichlorobenzene	ND		ug/kg	2.0	--
Methyl tert butyl ether	ND		ug/kg	2.0	--
p/m-Xylene	ND		ug/kg	2.0	--
o-Xylene	ND		ug/kg	1.0	--
Xylenes, Total	ND		ug/kg	1.0	--
cis-1,2-Dichloroethene	ND		ug/kg	1.0	--
1,2-Dichloroethene, Total	ND		ug/kg	1.0	--
Dibromomethane	ND		ug/kg	2.0	--
1,4-Dichlorobutane	ND		ug/kg	10	--
1,2,3-Trichloropropane	ND		ug/kg	2.0	--
Styrene	ND		ug/kg	1.0	--
Dichlorodifluoromethane	ND		ug/kg	10	--
Acetone	ND		ug/kg	25	--
Carbon disulfide	ND		ug/kg	10	--
2-Butanone	ND		ug/kg	10	--
Vinyl acetate	ND		ug/kg	10	--
4-Methyl-2-pentanone	ND		ug/kg	10	--
2-Hexanone	ND		ug/kg	10	--
Ethyl methacrylate	ND		ug/kg	10	--
Acrolein	ND		ug/kg	25	--
Acrylonitrile	ND		ug/kg	4.0	--
Bromochloromethane	ND		ug/kg	2.0	--
Tetrahydrofuran	ND		ug/kg	4.0	--
2,2-Dichloropropane	ND		ug/kg	2.0	--
1,2-Dibromoethane	ND		ug/kg	1.0	--
1,3-Dichloropropane	ND		ug/kg	2.0	--

Project Name: BIRDSEYE

Lab Number: L2033981

Project Number: 10963.005

Report Date: 08/24/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 08/22/20 09:29
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1401989-5					
1,1,1,2-Tetrachloroethane	ND		ug/kg	0.50	--
Bromobenzene	ND		ug/kg	2.0	--
n-Butylbenzene	ND		ug/kg	1.0	--
sec-Butylbenzene	ND		ug/kg	1.0	--
tert-Butylbenzene	ND		ug/kg	2.0	--
1,3,5-Trichlorobenzene	ND		ug/kg	2.0	--
o-Chlorotoluene	ND		ug/kg	2.0	--
p-Chlorotoluene	ND		ug/kg	2.0	--
1,2-Dibromo-3-chloropropane	ND		ug/kg	3.0	--
Hexachlorobutadiene	ND		ug/kg	4.0	--
Isopropylbenzene	ND		ug/kg	1.0	--
p-Isopropyltoluene	ND		ug/kg	1.0	--
Naphthalene	ND		ug/kg	4.0	--
n-Propylbenzene	ND		ug/kg	1.0	--
1,2,3-Trichlorobenzene	ND		ug/kg	2.0	--
1,2,4-Trichlorobenzene	ND		ug/kg	2.0	--
1,3,5-Trimethylbenzene	ND		ug/kg	2.0	--
1,2,4-Trimethylbenzene	ND		ug/kg	2.0	--
trans-1,4-Dichloro-2-butene	ND		ug/kg	5.0	--
Ethyl ether	ND		ug/kg	2.0	--
Methyl Acetate	ND		ug/kg	4.0	--
Ethyl Acetate	ND		ug/kg	10	--
Isopropyl Ether	ND		ug/kg	2.0	--
Cyclohexane	ND		ug/kg	10	--
Tert-Butyl Alcohol	ND		ug/kg	20	--
Ethyl-Tert-Butyl-Ether	ND		ug/kg	2.0	--
Tertiary-Amyl Methyl Ether	ND		ug/kg	2.0	--
1,4-Dioxane	ND		ug/kg	80	--
Methyl cyclohexane	ND		ug/kg	4.0	--

Project Name: BIRDSEYE**Project Number:** 10963.005**Lab Number:** L2033981**Report Date:** 08/24/20

Method Blank Analysis Batch Quality Control

Analytical Method: 1,8260C
 Analytical Date: 08/22/20 09:29
 Analyst: MKS

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by EPA 5035 Low - Westborough Lab for sample(s): 01 Batch: WG1401989-5					
1,1,2-Trichloro-1,2,2-Trifluoroethane	ND		ug/kg	4.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichloroethane-d4	97		70-130
Toluene-d8	97		70-130
4-Bromofluorobenzene	94		70-130
Dibromofluoromethane	100		70-130

Lab Control Sample Analysis Batch Quality Control

Project Name: BIRDSEYE

Project Number: 10963.005

Lab Number: L2033981

Report Date: 08/24/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1401989-3 WG1401989-4								
Methylene chloride	97		92		70-130	5		30
1,1-Dichloroethane	100		96		70-130	4		30
Chloroform	106		103		70-130	3		30
Carbon tetrachloride	118		114		70-130	3		30
1,2-Dichloropropane	95		95		70-130	0		30
Dibromochloromethane	103		101		70-130	2		30
1,1,2-Trichloroethane	93		90		70-130	3		30
2-Chloroethylvinyl ether	104		98		70-130	6		30
Tetrachloroethene	121		119		70-130	2		30
Chlorobenzene	96		96		70-130	0		30
Trichlorofluoromethane	128		120		70-139	6		30
1,2-Dichloroethane	103		100		70-130	3		30
1,1,1-Trichloroethane	113		110		70-130	3		30
Bromodichloromethane	100		99		70-130	1		30
trans-1,3-Dichloropropene	99		96		70-130	3		30
cis-1,3-Dichloropropene	102		102		70-130	0		30
1,1-Dichloropropene	107		104		70-130	3		30
Bromoform	108		103		70-130	5		30
1,1,2,2-Tetrachloroethane	85		82		70-130	4		30
Benzene	99		97		70-130	2		30
Toluene	99		97		70-130	2		30
Ethylbenzene	99		98		70-130	1		30
Chloromethane	92		81		52-130	13		30

Lab Control Sample Analysis

Batch Quality Control

Project Name: BIRDSEYE

Project Number: 10963.005

Lab Number: L2033981

Report Date: 08/24/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1401989-3 WG1401989-4								
Bromomethane	110		100		57-147	10		30
Vinyl chloride	106		96		67-130	10		30
Chloroethane	104		95		50-151	9		30
1,1-Dichloroethene	112		102		65-135	9		30
trans-1,2-Dichloroethene	107		100		70-130	7		30
Trichloroethene	98		97		70-130	1		30
1,2-Dichlorobenzene	95		95		70-130	0		30
1,3-Dichlorobenzene	97		97		70-130	0		30
1,4-Dichlorobenzene	95		95		70-130	0		30
Methyl tert butyl ether	102		98		66-130	4		30
p/m-Xylene	98		97		70-130	1		30
o-Xylene	96		96		70-130	0		30
cis-1,2-Dichloroethene	103		99		70-130	4		30
Dibromomethane	102		100		70-130	2		30
1,4-Dichlorobutane	78		76		70-130	3		30
1,2,3-Trichloropropane	86		83		68-130	4		30
Styrene	96		96		70-130	0		30
Dichlorodifluoromethane	110		98		30-146	12		30
Acetone	108		92		54-140	16		30
Carbon disulfide	98		91		59-130	7		30
2-Butanone	76		77		70-130	1		30
Vinyl acetate	90		86		70-130	5		30
4-Methyl-2-pentanone	87		84		70-130	4		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: BIRDSEYE
Project Number: 10963.005

Lab Number: L2033981
Report Date: 08/24/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1401989-3 WG1401989-4								
2-Hexanone	86		80		70-130	7		30
Ethyl methacrylate	94		91		70-130	3		30
Acrolein	100		87		70-130	14		30
Acrylonitrile	90		78		70-130	14		30
Bromochloromethane	108		102		70-130	6		30
Tetrahydrofuran	92		90		66-130	2		30
2,2-Dichloropropane	108		102		70-130	6		30
1,2-Dibromoethane	102		100		70-130	2		30
1,3-Dichloropropane	97		96		69-130	1		30
1,1,1,2-Tetrachloroethane	99		98		70-130	1		30
Bromobenzene	103		101		70-130	2		30
n-Butylbenzene	94		94		70-130	0		30
sec-Butylbenzene	94		92		70-130	2		30
tert-Butylbenzene	94		92		70-130	2		30
1,3,5-Trichlorobenzene	112		113		70-139	1		30
o-Chlorotoluene	89		89		70-130	0		30
p-Chlorotoluene	89		88		70-130	1		30
1,2-Dibromo-3-chloropropane	101		99		68-130	2		30
Hexachlorobutadiene	103		106		67-130	3		30
Isopropylbenzene	94		93		70-130	1		30
p-Isopropyltoluene	94		92		70-130	2		30
Naphthalene	92		89		70-130	3		30
n-Propylbenzene	92		91		70-130	1		30

Lab Control Sample Analysis **Batch Quality Control**

Project Name: BIRDSEYE
Project Number: 10963.005

Lab Number: L2033981
Report Date: 08/24/20

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by EPA 5035 Low - Westborough Lab Associated sample(s): 01 Batch: WG1401989-3 WG1401989-4								
1,2,3-Trichlorobenzene	109		108		70-130	1		30
1,2,4-Trichlorobenzene	113		112		70-130	1		30
1,3,5-Trimethylbenzene	91		89		70-130	2		30
1,2,4-Trimethylbenzene	90		89		70-130	1		30
trans-1,4-Dichloro-2-butene	84		80		70-130	5		30
Ethyl ether	102		95		67-130	7		30
Methyl Acetate	87		79		65-130	10		30
Ethyl Acetate	88		87		70-130	1		30
Isopropyl Ether	88		84		66-130	5		30
Cyclohexane	106		101		70-130	5		30
Tert-Butyl Alcohol	103		90		70-130	13		30
Ethyl-Tert-Butyl-Ether	96		93		70-130	3		30
Tertiary-Amyl Methyl Ether	99		98		70-130	1		30
1,4-Dioxane	108		101		65-136	7		30
Methyl cyclohexane	110		108		70-130	2		30
1,1,2-Trichloro-1,2,2-Trifluoroethane	130		120		70-130	8		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichloroethane-d4	97		97		70-130
Toluene-d8	98		97		70-130
4-Bromofluorobenzene	93		93		70-130
Dibromofluoromethane	104		102		70-130

INORGANICS & MISCELLANEOUS

Project Name: BIRDSEYE**Project Number:** 10963.005**Lab Number:** L2033981**Report Date:** 08/24/20**SAMPLE RESULTS****Lab ID:** L2033981-01**Client ID:** 8S**Sample Location:** CARIBOU, ME**Date Collected:** 08/19/20 10:53**Date Received:** 08/19/20**Field Prep:** Not Specified**Sample Depth:****Matrix:** Soil

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Solids, Total	87.2		%	0.100	NA	1	-	08/20/20 09:36	121,2540G	RI



Project Name: BIRDSEYE**Lab Number:** L2033981**Project Number:** 10963.005**Report Date:** 08/24/20**Sample Receipt and Container Information**

Were project specific reporting limits specified?

YES

Cooler Information**Cooler** **Custody Seal**

A Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2033981-01A	Vial MeOH preserved	A	NA		4.4	Y	Absent		8260HLW(14)
L2033981-01B	Vial water preserved	A	NA		4.4	Y	Absent	20-AUG-20 00:33	8260HLW(14)
L2033981-01C	Vial water preserved	A	NA		4.4	Y	Absent	20-AUG-20 00:33	8260HLW(14)
L2033981-01D	Plastic 2oz unpreserved for TS	A	NA		4.4	Y	Absent		ME-TS-2540(7)

Project Name: BIRDSEYE
Project Number: 10963.005

Lab Number: L2033981
Report Date: 08/24/20

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
	Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Footnotes

Report Format: Data Usability Report



Project Name: BIRDSEYE
Project Number: 10963.005

Lab Number: L2033981
Report Date: 08/24/20

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenzo(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. If a 'Total' result is requested, the results of its individual components will also be reported.

The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA, this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

- A** - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- F** - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The lower value for the two columns has been reported due to obvious interference.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- ND** - Not detected at the reporting limit (RL) for the sample.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration

Report Format: Data Usability Report



Project Name: BIRDSEYE**Lab Number:** L2033981**Project Number:** 10963.005**Report Date:** 08/24/20**Data Qualifiers**

Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

Project Name: BIRDSEYE
Project Number: 10963.005

Lab Number: L2033981
Report Date: 08/24/20

REFERENCES

- 1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.
- 121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



Alpha Analytical, Inc.

ID No.:17873

Facility: **Company-wide**

Revision 17

Department: **Quality Assurance**

Published Date: 4/28/2020 9:42:21 AM

Title: **Certificate/Approval Program Summary**

Page 1 of 1

Certification Information

The following analytes are not included in our Primary NELAP Scope of Accreditation:

Westborough Facility**EPA 624/624.1:** m/p-xylene, o-xylene, Naphthalene**EPA 8260C:** NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.**EPA 8270D:** NPW: Dimethylnaphthalene, 1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene, 1,4-Diphenylhydrazine.**SM4500:** NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO₂, NO₃.**Mansfield Facility****SM 2540D:** TSS**EPA 8082A:** NPW: PCB: 1, 5, 31, 87, 101, 110, 141, 151, 153, 180, 183, 187.**EPA TO-15:** Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.**EPA TO-12** Non-methane organics**EPA 3C** Fixed gases**Biological Tissue Matrix:** EPA 3050B

The following analytes are included in our Massachusetts DEP Scope of Accreditation

Westborough Facility:**Drinking Water****EPA 300.0:** Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2:** Nitrate-N, Nitrite-N; **SM4500NO3-F:** Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE,****EPA 180.1, SM2130B, SM4500CI-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B****EPA 332:** Perchlorate; **EPA 524.2:** THMs and VOCs; **EPA 504.1:** EDB, DBCP.**Microbiology:** **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, SM9222D.****Non-Potable Water****SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH:** Ammonia-N and Kjeldahl-N, **EPA 350.1:** Ammonia-N, **LACHAT 10-107-06-1-B:** Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2:** Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300:** Chloride, Sulfate, Nitrate.**EPA 624.1:** Volatile Halocarbons & Aromatics,**EPA 608.3:** Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs**EPA 625.1:** SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045:** PCB-Oil.**Microbiology:** **SM9223B-Colilert-QT; Enterolert-QT, SM9221E, EPA 1600, EPA 1603.****Mansfield Facility:****Drinking Water****EPA 200.7:** Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.**EPA 522.****Non-Potable Water****EPA 200.7:** Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.**EPA 200.8:** Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.**EPA 245.1** Hg.**SM2340B**

For a complete listing of analytes and methods, please contact your Alpha Project Manager.

PAGE _____ OF _____

8/19/20

ALPHA Job #: L2033981

320 Forbes Blvd
Mansfield, MA 02048
Tel: 508-822-9300

Project Information

Project Name: Birdseye

Project Location: Caribou ME

Project #: 10963.005

Project Manager: DH

ALPHA Quote #:

☒ Standard ☐ RUSH (only confirmed if pre-approved)

Date Due:

Additional Project Information:

Report Information - Data Deliverables

☐ ADEx ☐ EMAIL☐ Same as Client info PO #:

☐ Yes ☐ No MA MCP Analytical Methods ☐ Yes ☐ No CT RCP Analytical Methods
☐ Yes ☐ No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
☐ Yes ☐ No GW1 Standards (Info Required for Metals & EPH with Targets)
☐ Yes ☐ No NPDES RGP
☐ Other State /Fed Program _____ Criteria _____

ANALYSIS

VOC: ☒ 3200 ☐ 624 ☐ 324.2

SVOC: ☐ ABN ☐ PAH

METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15

EPH: ☐ RCRA5 ☐ RCRA8 ☐ PP13

VPH: ☐ Ranges & Targets ☐ Ranges Only

☐ PCB ☐ PEST

TPH: ☐ Quant Only ☐ Fingerprint

SAMPLE INFO

Filtration

☐ Field

☐ Lab to do

Preservation
☐ Lab to do

TOTAL # BOTTLES

Sample Comments

ALPHA Lab ID
(Lab Use Only)

Sample ID

Collection

Time

Sample Matrix

Sampler	
Initials	

33981-0)

55

8/19	
------	--

10:50-53	S	DIA	✓
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Container Type

P= Plastic
A= Amber glass
V= Vial
G= Glass
B= Bacteria cup
C= Cube
O= Other
E= Encore
D= BOD Bottle

Preservative

A = None
B = HCl
C = HNO₃
D = H₂SO₄
E = NaOH
F = MeOH
G = NaHSO₄
H = Na₂S₂O₃
I = Ascorbic Acid
J = NH₄Cl
K = Zn Acetate
O = Other

Container Type

Preservative

Relinquished By:

Date/Time

Received By:

Date/Time

All samples submitted are subject to Alpha's Terms and Conditions.
See reverse side.

FORM NO: 01-01 (rev. 12-Mar-2012)



EMSL Analytical, Inc.

161 John Roberts Road South Portland, ME 04106

Tel/Fax: (207) 517-6921 / (207) 517-6922

<http://www.EMSL.com> / portlandlab@emsl.com

EMSL Order: 622001141

Customer ID: CESI62

Customer PO:

Project ID:

Attention: Dave Hopkins
CES/Summit Environmental Consultants
PO Box 414
Easton, ME 04740

Phone: 227-3446

Fax: (207) 989-4881

Received Date: 08/14/2020 3:14 PM

Analysis Date: 08/18/2020

Collected Date: 08/05/2020

Project: 10963.005

Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
20200805-001	ACM1	Gray Fibrous		82% Non-fibrous (Other)	18% Chrysotile
622001141-0001		Homogeneous			

Report Comment: ME CERT # BA-0197

Analyst(s)

Thomas Stegeman (1)

Zackary Carbee, Laboratory Manager
or Other Approved Signatory

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Samples analyzed by EMSL Analytical, Inc. South Portland, ME NVLAP Lab Code 500094-0, MA AA000236, VT AL197271, ME LM-0039, CT PH-0346

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