PROJECT DIRECTORY

OWNER:
South Portland Police Department
30 Anthoine Street
South Portland, Maine 04106
Attn: Amy Berry
aberry@southportland.org

SITE:
South Portland Police Department
30 Anthoine Street
South Portland, Maine

CONSULTANT:
Beacon Environmental Consultants, LLC
PO Box 2154
Windham, Maine 04062
Attn: John Cressey, CG
207-376-5001
jcressey@beaconmaine.com
Sealed bids for Firing Range Lead Remediation at the South Portland Police Department (Bid# 25-17) will be received by the South Portland Purchasing Agent at the South Portland City Hall until 2:00 P.M., local time, Tuesday, March 7, 2017 and then said office publicly opened and read aloud. Bids submitted after this time will not be accepted. Each bidder must submit a single sealed envelope, the outside of which must be clearly marked “Bid for Lead Remediation (Bid# 25-17)”.

Pre-Bid Conference. A Mandatory Pre-Bid Conference will be held at 10:00 AM, Thursday February 23, 2017 at the City of South Portland Police Department located at 30 Anthoine Street in South Portland, Maine, for bidders to familiarize themselves with the work area and inform themselves about the work to be done. Bidders and other interested persons will meet with the Owner's representative within the lobby of the Police Department. Attendance at the Pre-Bid Conference is mandatory for prime bidders: The City will not receive or consider a bid from a bidder unless a representative of the bidder attended and signed in at the Mandatory Pre-Bid Conference.

Submission of Bids. Bids must be submitted in writing on the forms provided, in a sealed envelope, in compliance with the requirements of the bid documents. No oral, electronic, or telegraphic modifications to bids will be accepted. The City may reject any bid that does not comply with all prescribed public bidding procedures and the requirements of the bidding documents.

 Contractor Licensing. No bid will be received or considered unless the bidder, or a subcontractor, is licensed by the State of Maine as a Certified Lead Abatement Contractor.

Addenda. The City may issue one or more addenda to modify or add to the terms of the bidding documents, or to change the time or date for submission of proposals. Any addendum will be issued by the City in writing not less than forty-eight (48) hours prior to the deadline for receipt of proposals, and available on the City of South Portland’s Web Page or from the person identified above for printed copies of bid documents. Each proposer is responsible to verify for itself if any addendum has been issued prior to submission of its proposal; the City is not responsible to notify individual prospective proposers of the issuance of an addendum. The requirements or clarifications contained in any addenda issued must be included in the proposals received and will become part of any resulting contract.

The Owner reserves the right to reject any or all Bids, to waive any technical or legal deficiencies, and to accept any Bid that it may deem to be in the best interests of the Owner.

All questions related to this bid should be directed to Deputy Chief Amy Berry at aberry@southportland.org

A completed Bid Form and bid security in the amount of five percent (5%) of the Total Bid must be submitted with the Bid. The Bid Security shall be a guaranty bond executed by a surety company authorized to do business in the State of Maine and listed on the most recent Federal Department of the Treasury listing of “Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies”. Bid Security
shall be made payable to the Owner. Bids submitted without Bid Security will not be considered. No Bid may be withdrawn for 60 days after receipt of Bids unless released by the Owner.

The successful bidder must furnish within 10 calendar days after the Notice of Award the required number of copies of the signed Agreement, 100% Performance Bond, 100% Payment Bond, Insurance Policy and begin execution of this contract within 10 calendar days following the Notice to Proceed. The General Contractor shall be responsible for the full amount of the 100% Performance Bond and the 100% Payment Bonds.

By Order of the City Council of South Portland
SECTION 011100 – SUMMARY OF WORK

PART 1 – GENERAL

1.01 SCOPE OF WORK

A. The work under this contract consists of remediation of lead dust within the firing range identified by the Owner. Provide all material, labor and equipment necessary to accomplish this task.

B. The Contract Sum shall not be affected by changes due to increases in equipment, transportation, labor or material costs, fees, or other similar events.

1.02 RELATED WORK BY THE OWNER AND OTHERS

A. The Owner shall provide access to the facility.

1.03 BASE BID

A. The scope of work included under the base bid shall include cleaning, removal and disposal of lead-impacted materials, and related work as indicated within this section and the attached Lead Sampling Report completed by Beacon Environmental Consultants, LLC (Beacon). The scope of work under the base bid is identified as follows:

1. Removal of ceiling tiles and baffles – The scope of work includes removal of the ceiling tiles and baffles. All removal shall occur inside a regulated negative pressure enclosure. Cleanup and disposal of all waste generated from component removal shall be the responsibility of the Contractor.

2. Thorough cleaning of the walls, floor, space above the ceiling tiles and backstop area. All cleaning shall occur inside a regulated negative pressure enclosure. Cleanup and disposal of all waste generated from the cleaning shall be the responsibility of the Contractor.

3. Thorough cleaning of the ventilation system beginning in the firing range and extending to its discharge point on the eastern exterior of the building. This will include the removal and disposal of the current HEPA filter within the ventilation system. Cleanup and disposal of all waste generated from the cleaning shall be the responsibility of the Contractor.

4. Replacement of baffles and ceiling tiles with materials as specified in Section 221426.16.

B. Weekly progress meetings may be conducted with the Owner, or Owner’s Environmental Consultant throughout the abatement period. The Abatement Contractor’s project site supervisor is required to attend.

C. Contractor is responsible for maintaining work areas in a safe condition throughout abatement.

D. Post remediation wipe samples shall be performed by Beacon under a separate contract with the City of South Portland Police Department. If impacts are determined to be present above 200 ug/cm³, the Contractor shall be required to perform additional cleaning.
1.04 PROJECT SCHEDULE
A. The Owner or Owner’s Environmental Consultant shall schedule a preconstruction conference to be held prior to the start of work. Contractor's superintendent and crew foreman must attend.
B. Contractor shall begin work on submittals and notification no later than five calendar days after written Notification to Proceed is received from the Owner.
C. Work must be completed as soon as possible.

1.05 PERMITS AND FEES
A. After execution of the contract, the Contractor shall obtain and pay for all permits, fees, and licenses necessary to execute and complete the work.
B. Contractor shall maintain the notification to comply with the regulations set forth by MEDEP throughout the construction period. Amended permits shall be submitted to MEDEP as necessary.

1. Project category and required fee. Contractor shall pay all fees associated with notifications and amendments to comply with changes in scope, etc.
2. Daily hours onsite (including clearance air monitoring).
3. Start and stop dates.
5. Disposal procedures.
6. Disposal sites.

1.06 PROJECT STOPPAGE
A. At any time during the work, the Owner or Environmental Consultant may stop the work if violations of the Specifications are observed or if the functioning of the Owner is jeopardized by the activities of the Contractor or his subcontractors. Work shall stop immediately upon verbal direction of Owner or Environmental Consultant. Work may commence when violations are rectified or activities are altered and determined to be acceptable by the Owner or Environmental Consultant.

1.07 VARIATIONS IN QUANTITIES
A. The quantities and location of lead impacted materials indicated on the drawings and the extent of work included in this section are only best estimates that are limited by the physical constraints imposed by occupancy of the building. Where additional lead remediation work is required beyond the above variations, the contract price and time will be adjusted under provisions of applicable clause in the contract. Additional or reduced abatement work beyond the variations stated will be a basis for adjustment of the contract price.

1.08 PRECAUTIONS REGARDING HAZARDOUS MATERIALS
A. Contractor shall comply with all applicable federal and local regulations regarding hazardous materials handling, storage and disposal procedures. Hazardous Materials that are brought on to the site for construction purposes shall be accompanied with appropriate Material Safety Data Sheet (MSDS) information. MSDS's shall be submitted to the Owner in accordance with the specifications. Contractor shall bear all costs associated with handling or clean-up of spills, releases, or environmental concern created from hazardous materials brought, stored, or used on-site. The Contractor is encouraged to minimize hazardous waste materials requiring special disposal. No dumping of hazardous materials in storm drainage or sanitary sewers is permitted.
1.09 SCHEDULE OF VALUES
   A. Prior to conducting field work, the Contractor shall submit a Schedule of Values to the Owner and Environmental Consultant for approval.

1.10 CONTRACT CANCELLATION
   A. The Owner reserves the right to cancel the contract upon written notice at any time, if in its sole judgment, it determines that the Contractor is not meeting the terms of the Specification proposal as submitted and approved.

1.11 PAYMENTS
   A. The owner requests that one payment request be made at the completion of the project.

1.12 INSURANCE
   A. Contractor shall comply with insurance requiring $1,000,000 general liability and pollution liability coverage.

1.13 MICELLANEOUS REQUIREMENTS AND OTHER INFORMATION
   A. All quantities given are estimates. Contractors are responsible for verifying site conditions during the bid period.
   B. Change orders shall be submitted in writing and approved by all parties before change order work is started.
   C. The Contractor shall provide adequate lighting for the duration of the project.
   D. The Contractor shall provide transportation and disposal of lead-impacted waste at a licensed facility.
   E. Any roll-off containers used at the site must be totally enclosed and sealed every night.

PART 2 – PRODUCTS
   Not applicable.

PART 3 – EXECUTION
   Not applicable.

END OF SECTION 011100
SECTION 013546 – AIR MONITORING REQUIREMENTS

PART 1 – GENERAL

1.01 AIR MONITORING BY CONTRACTOR
A. The Contractor will be responsible for all MEDEP clearance air monitoring and documentation.
B. Contractor shall provide a certified supervisor to remain on-site at all times while personnel are inside containment.
C. Contractor shall provide for clean make-up air where necessary to pass air clearances.

1.02 QUALITY ASSURANCE
A. If, at any time during the work, analysis of an air sample taken by the Contractor indicates a dust count in excess of the allowable maximums, the Contractor shall immediately notify the Owner’s Environmental Consultant.
B. Immediately upon notification the Contractor shall perform the following steps in the order presented, at no additional cost to Owner:
   1. Stop remediation work.
   2. Discuss the dust levels, potential cause, and other concerns with the Environmental Consultant. The Environmental Consultant will determine the actions to be taken by the Contractor at no cost to the Owner.
   3. Modify work procedures, and make other changes determined to be the possible cause of the dust release.
   4. Carefully resume work under close air monitoring.

END OF SECTION 013546
SECTION 015000 - TEMPORARY FACILITIES

PART 1 GENERAL

1.01 SCOPE
   A. Contractor shall arrange for and provide temporary facilities and utilities such as water, electricity, gas, etc., as specified herein and as required for proper and expeditious prosecution of work. Contractor shall inspect the Owner's facilities to determine that the capacity and operation of services provided by the Owner are adequate for the execution of the work.
   B. Contractor shall arrange with utility company, rental company, etc. to provide any additional temporary service required, and pay all costs for such power, lighting, water, sanitation facility or any other service used, if temporary service from existing sources is insufficient to meet needs of temporary facilities.
   C. Contractor shall make temporary connections to utilities and services in locations acceptable to Owner and Environmental Consultant and local authorities having jurisdiction thereof; furnish necessary labor and materials, and make installations in manner subject to acceptance of such authorities and Environmental Consultant; maintain such connections; remove temporary installation and connections when no longer required; restore services and sources of supply to proper operating condition upon completion of the project.

PART 2 – PRODUCTS

2.01 MATERIALS
   A. Material may be new or used, but must be adequate in capacity for the required usage, must not create unsafe conditions, and must not violate requirements of applicable codes and standards.

2.02 TEMPORARY ELECTRICAL POWER AND LIGHTING
   A. Temporary Electrical Service: The Contractor shall make arrangements for temporary power as necessary to complete the project. The Contractor shall provide connections and all means of conveying same from existing outlets to required locations and shall pay for any damage to existing systems resulting from misuse thereof. Electrical safety measures, including ground fault protection, waterproof temporary lighting and cords, and deactivation of existing electrical wiring within work areas shall be included as part of the work under this contract.
   B. Contractor shall maintain temporary wiring in safe manner and utilize it so as not to constitute a hazard to persons or property.
   C. When permanent power and lighting system outside of the isolated work area is in operating condition, it may be used provided Contractor obtains Owner's approval, assumes full responsibility for entire power and lighting system, and pays costs for maintenance and restoration of system.
   D. Temporary Lighting: Contractor shall provide temporary lighting in all isolated work areas. Lighting shall be durable, grounded, and provide safe illumination levels throughout the work area.

2.03 TEMPORARY WATER SERVICE
   A. Contractor shall provide water for construction purposes and pay costs of water used. Contractor may make temporary connections to existing facilities; if available.
   B. Contractor shall provide hot water adequate to supply each crew with sufficient warm water to allow a thorough shower during worker decontamination.
2.04  TEMPORARY SANITARY FACILITIES
   A.  Contractor shall provide temporary sanitary facilities for use during the project.

2.05  ACCESS TO SITE
   A.  Contractor shall instruct all vendors, Subcontractors, and employees to enter remediation site from location as indicated by Owner. Use of other entrances shall not be permitted.
   B.  Contractor shall ensure only authorized personnel are allowed access to the remediation areas.

2.06  SECURITY
   A.  Contractor shall take adequate precautions against fire, keep flammable material at the absolute minimum and ensure that such material is properly handled and stored. Open flames, fires or gas-fired space heaters are not permitted.

PART 3 – EXECUTION
Not applicable.

END OF SECTION 015000
SECTION 028300 – LEAD REMEDIATION

PART 1 – GENERAL

1.01 SCOPE
A. This section covers the cleaning or removal of materials that contain or are suspected to contain lead.
B. Contractor shall provide all labor, materials, equipment, services, and insurance required to complete lead remediation procedures as indicated in these Specifications and/or the drawings.

1.02 SUBMITTALS AND NOTICES
A. Contractors shall submit one bound, indexed copy of each submittal package as indicated below.
B. Contractors shall submit to the Owner the following information prior to beginning work on the project.
   1. CONTRACTOR'S LICENSE. Submit proof that the Lead Abatement Contractor is currently and for the duration of the project licensed in the State of Maine to perform lead abatement.
   2. SUPERVISOR. Submit the name and resume of experience of the assigned on-site foreman. At a minimum, the foreman shall have successfully completed the MEDEP Lead abatement course as approved by the State of Maine. Other criteria such as references and similar projects will also be reviewed. At the Owner's request, the Contractor shall arrange an oral interview with the assigned on-site foreman. The Owner reserves the right to reject the foreman from the work at any time during the project. The Contractor shall then assign another on-site foreman for Owner approval as described above.
   3. INSURANCE CERTIFICATE. Submit a copy of the certificate of pollution liability insurance policy, as specified in Section 011100.
   4. WORKER CERTIFICATION. Submit written proof indicating that all employees impacting lead-containing materials are Maine State-certified lead abatement workers. Proof shall include a signature from the Contractor's Principal indicating that all employees assigned to this project have completed such a program, and photocopies of certificates.
   5. RESPIRATOR PROGRAM. Submit written proof indicating respirator program is in compliance with all parts of OSHA Lead Regulations CFR Title 29, Part 1962.62(f).
   6. MEDICAL PROGRAM. Submit written proof medical exam program is in compliance with OSHA Lead Regulations CFR Title 29, Section 1962.62(j).
   7. EMERGENCY PLANS. Submit a written emergency control and cleanup plan to be followed by the Contractor in the event of: an accidental breach in containment, power failure, and accidental disturbance of lead in non-isolated areas.
   8. NOTIFICATION. Submit copy of written notification to MEDEP, of the proposed lead remediation work not fewer than ten days before work commences on this project.
   9. DISPOSAL PLAN. Submit written proof that all required permits and arrangements for transport and disposal of lead-impacted or contaminated materials, supplies, and the like at a site approved by EPA and other responsible agencies have been obtained.
  10. WORK PLAN. Submit a written "work plan" satisfactory to the Owner describing the schedule for lead remediation, decontamination procedures, and plans for construction and location of decontamination enclosure systems, pressure differential exhaust fans,
etc. in compliance with these Specifications and applicable regulations, including calculations for determining required number of negative-air filtration units. The plan shall schedule the systematic flow of work throughout the facility per Specifications on a day-by-day basis, outlining room-by-room, or area-by-area procedures and planned alternative control measures. The Contractor shall keep close coordination of his work with the Owner. The doorway to the firing range and the SWAT Team room shall be labeled as such:

**DANGER**

**LEAD WORK AREA**

MAY DAMAGE FERTILITY OR THE UNBORN CHILD

CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM

DO NOT EAT, DRINK OR SMOKE IN THIS AREA

11. AIR MONITORING. Submit information pertaining to the proposed Air Monitoring Program for this project if appropriate. This information shall include the name(s) of the Certified Industrial Hygienist appointed, the name of the on-site Industrial Hygiene Technician working under his supervision, types of equipment, and sampling schedule, sampling procedures, calibration recordkeeping, and testing laboratory proposed.

12. PRODUCT INFORMATION. Submit complete product information for any materials and products for which the Contractor requests approval for use on this job (other than those specified).

13. EMERGENCY PHONE NUMBER. Submit a local phone number at which the Contractor or on-site foreman can be reached on a twenty-four hour basis during the course of the work.

C. Contractor shall not begin work until submittals are reviewed and accepted by Owner. Allow a five-day review period.

D. During the work the Contractor shall submit to the Owner on a periodic basis as agreed to by the Owner and Contractor:
   1. Waste shipment and disposal documentation.
   2. Air monitoring data.
   3. Notification updates.

E. Contractor shall submit to the Owner in writing all information required above regarding any new lead workers hired by or subcontracted to the Contractor before these new lead remediation workers begin work.

F. Prior to removal of decontamination systems and isolation barriers, the Contractor shall obtain specific written permission from the Owner.

G. Prior to making final application for payment the Contractor shall:
   1. Complete all work under this contract.
   2. Submit to the Owner all required submittals including all Waste Shipment Records completely filled out and signed.
   3. Submit to the Owner "as-abated" drawings along with a signed affidavit stating that all lead-impacted materials have been removed as indicated on the drawings.

1.05 BUILDING PROTECTION

A. Building Security and Protection
   1. The Contractor shall post adequate warning signs at all potential entrances to work areas as required by EPA and OSHA.
   2. Contractor shall protect all existing fixed equipment, building finishes that are to remain, and existing systems and functions from damage during the abatement process. Extra precautions are to be taken in protecting existing electrical panels, light fixtures, etc. Any
damage to existing building, services, and/or equipment shall be remedied by the Contractor at his expense.

3. Contractor shall clean external surfaces of contaminated containers and equipment thoroughly by wet sponging and HEPA vacuum.

1.06 SAFETY
   A. With regard to the work of this contract, the safety of the Contractor's employees, the Owner's employees, and the public is the sole responsibility of the Contractor.

1.07 LIABILITY
   A. The Contractor is an independent contractor and not an employee of the Owner or of the Environmental Consultant. The Owner and Environmental Consultant shall have no liability to the Contractor or any third persons for Contractor's failure to faithfully perform and follow the provisions of these Specifications and the requirements of the governing agencies. Notwithstanding the failure of the Owner or the Environmental Consultant to discover a violation by the Contractor of any of the provisions of these Specifications, or to require the Contractor to fully perform and follow any of them, such failure shall not constitute a waiver of any of the requirements of these Specifications which shall remain fully binding upon the Contractor.

1.08 SUBCONTRACTORS
   A. Any Subcontractors employed by the Contractor shall be bound to all the work and safety standards specified elsewhere in this Specification. Subcontractor's personnel shall be fully trained and supervised by the Contractor during performance of this work.

PART 2 – PRODUCTS

2.01 MATERIALS
   A. All materials to be used shall be approved by the Owner or the Owner’s Representative and shall comply with the requirements of the MEDEP and OSHA regulations.

PART 3 – EXECUTION

3.01 WORK
   A. Contractor shall perform work in accordance with the accepted work plan and comply with all MEDEP, OSHA, and EPA regulations.

3.02 DISPOSAL
   A. Contractor shall affix warning labels having waterproof print and permanent adhesive, to the lid and sides of all containers. Warning labels shall be conspicuous and legible, and contain the following words:

   **DANGER:**
   CLOTHING AND EQUIPMENT CONTAMINATED WITH LEAD. MAY DAMAGE FERTILITY OR THE UNBORN CHILD. CAUSES DAMAGE TO THE CENTRAL NERVOUS SYSTEM. DO NOT EAT, DRINK OR SMOKE WHEN HANDLING. DO NOT REMOVE DUST BY BLOWING OR SHAKING. DISPOSE OF LEAD CONTAMINATED WASH WATER IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, OR FEDERAL REGULATIONS.
B. The Contractor shall determine current waste handling, transportation, and disposal regulations for the work site and for each waste disposal landfill. The Contractor must comply with these regulations and all U.S. Department of Transportation, MEDEP and EPA requirements. Containers shall be delivered to the predesignated disposal site for proper disposal (i.e. treatment, landfill, etc.). Labels and all necessary signs shall be in accordance with MEDEP, and OSHA standards.

C. If the containers are broken or damaged, or the container is contaminated, the Contractor shall clean and decontaminate the entire container for reuse.

D. Contractor shall submit three copies of written proof of disposal at approved disposal site to the Owner prior to completion of the abatement work specified in this Section.

END OF SECTION 028300
SECTION 090150 – CEILING RESTORATION

PART 1 – GENERAL

1.01 SCOPE
   A. This section covers replacement of ceiling tiles and baffles to restore the room.
   B. Contractor shall provide all labor, materials, equipment, services, and insurance required to complete lead remediation procedures as indicated in these Specifications and/or the drawings.

1.02 BAFFLE INSTALLATION
   A. Baffles should be a minimum of 10-gauge steel covered with a minimum of 1 inch of soft wood to prevent back splatter.
   B. Baffles should be installed at a 25° angle as measured from the horizontal plane of the ceiling.

1.03 ACOUSTICAL TILES
   A. Replacement ceiling tiles will be installed throughout the firing range.

PART 2 – PRODUCTS

2.01 MATERIALS
   A. All materials to be used shall be approved by the Owner or the Owner’s Representative and shall comply with the requirements of the MEDEP and OSHA regulations.

PART 3 – EXECUTION

3.01 WORK
   A. Contractor shall perform work in accordance with the accepted work plan and comply with all MEDEP, OSHA, and EPA regulations.

END OF SECTION 090150
SECTION 221426.16 – FACILITY AREA DRAINS

PART 1 – GENERAL

1.01 SCOPE
   A. This section covers the sealing of the floor drain within the firing range.
   B. Contractor shall provide all labor, materials, equipment, services, and insurance required to complete sealing the floor drain as described in these Specifications and/or the drawings.

1.02 FLOOR DRAIN CLOSURE
   A. The floor drain located within the firing range has been determined to be connected to the storm drain system located in Anthoine Street. This usage is not permissible per MEDEP rules, therefore, it has been determined that it should be sealed.
   B. The Contractor shall remove the cover to the floor drain, clean the floor drain by physically wiping it down.
   C. Once the floor drain has been cleaned, sorbent pads will be placed approximately 10 inches below the floor surface to form a blockage in the drain. Concrete will then be mixed and poured into the drain and made to be flush with the floor.

PART 2 – PRODUCTS

2.01 MATERIALS
   A. All materials to be used shall be approved by the Owner or the Owner’s Representative and shall comply with the requirements of the MEDEP and OSHA regulations.

3.01 WORK
   B. Contractor shall perform work in accordance with the accepted work plan and comply with all MEDEP, OSHA, and EPA regulations.

END OF SECTION 221426.16
TO: City of South Portland  
Attn: Colleen Selberg  
25 Cottage Road  
South Portland, Maine 04106

FROM: (Bidder’s Legal Name)

The undersigned Bidder, having carefully reviewed the entire set of bidding documents, including addenda, and having examined the site and being familiar with the conditions affecting the work, proposes to furnish all material and labor and perform all work for the South Portland Firing Range Lead Remediation project in strict accordance with the bidding requirements and the plans and specifications prepared by Beacon Environmental Consultants, LLC, as follows:

BASE BID, UNIT PRICE BID, AND TOTAL BID

BASE BID: Bidder offers to complete the work of the Base Bid, including all work identified, indicated, and reasonably necessary to complete the work described in the Bidding Documents excepting only the work specifically described in the Unit Price, for a lump sum of:

$ _____________________________

Base bid in numbers

Bidder agrees that the amounts stated above for the Base Bid include all supervision, fees, taxes, profit, overhead, insurance, bonds, licenses, permits, and other costs incidental to but necessary for completion of the work.
ADDENDA

Bidder acknowledges that Bidder has received the following Addenda, and has included the terms and conditions of the Addenda in this Bid: ______________________________________________(insert numbers and dates of addenda received; if none, write "none")

BIDDER’S CERTIFICATIONS

By signing this Bid, the undersigned Bidder certifies that:

1. Bidder is licensed by the MEDEP’s Lead Abatement Division to enter into a contract for the work included in this Bid; and
2. Bidder has not discriminated and will not discriminate against a subcontractor in awarding a subcontract because the subcontractor is a minority, women, or emerging small businesses enterprise or a business enterprise that is owned or controlled by or that employs a disabled veteran; and
3. To the best of Bidder's knowledge, Bidder is in compliance with Maine tax laws; and
4. The price(s) and amount of this Bid have been arrived at independently and without consultation, communication, or agreement with any other contractor, bidder, or potential bidder except as disclosed on a separately attached statement; and

BIDDER’S STATUS

1. The undersigned certifies that Bidder is (check one):
   ___ An individual; or
   ___ A Corporation, organized and existing under the laws of the State of ___________; or
   ___ A Limited Liability Company (LLC), organized and existing under the laws of the State of ___________; or
   ___ A Partnership; or
   ___ A Joint Venture; or
   ___ Another legal entity type: _____________________________ (state identity type), organized and existing under the laws of the State of ________________________. 
BIDDER IDENTIFICATION AND EXECUTION OF BID

This bid is submitted by and on behalf of the Bidder named, and that Bidder agrees, if awarded the contract, to deliver to the Owner within five (5) days after receiving the contract forms, a fully and properly executed contract, and proof of insurance in the forms and amounts required in the Contract Documents.

BY:

______________________________  ____________________________
(Signature)  (Date)

______________________________  ____________________________
(Name of Signer)  (Title)

IF CORPORATION, ATTEST:

______________________________  ____________________________
(Signature of corporate Secretary)  (Date)

If this Bid is submitted by a corporation, the Bid must be signed by an officer of the corporation and attested by the corporate secretary; if submitted by a Limited Liability Company, it must be signed by a member; if submitted by a partnership, it must be signed by a partner; if submitted by a joint venture, it must be signed by a partner or officer of each joint venture party; if signed by an agent under a power of attorney, a copy of the power of attorney delegating authority to the agent to execute the bid must be attached.

BIDDER:

________________________________________________________________
(Bidder’s legal name)

ADDRESS:

________________________________________________________________
________________________________________________________________

TEL/FAX:

__________________________  ____________________________
(Bidder’s primary tel. number)  (Bidder’s fax number)

EMAIL:

________________________________________________________________
(Bidder’s primary email address)

TAX ID NO

________________________________________________________________
(Bidder’s federal tax identification number)

ATTACHMENTS TO BID

_____  First-Tier Subcontractor Disclosure.
FIRST-TIER SUBCONTRACTOR DISCLOSURE FORM

PROJECT NAME: ____________________________________________________________

BID CLOSING: Date: _____________________ Time: _____________________

DISCLOSURE DUE: At the same time as the Bid Closing.

SUBMIT TO: The same location specified in the Invitation to Bid.

INSTRUCTIONS

List below the name of the first-tier subcontractors that will be furnishing labor, or will be furnishing labor and materials, in connection with the work of this contract. Disclose only those subcontractors whose subcontract value is:

1. Equal to or greater than five percent (5%) of the total project bid, or $5,000, whichever is greater.

For each subcontractor disclosed, give the name of the subcontractor, the dollar value of the subcontract, and the category of work that the subcontractor will be performing.

If there are no subcontractors required to be disclosed, enter "NONE". If there are more subcontractors to be disclosed than can be filled in on this form, attach additional copies of the form with those subcontractors listed.

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<tr>
<th>Subcontractor’s Name</th>
<th>Subcontract Value</th>
<th>Category of Work</th>
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FAILURE TO SUBMIT THIS FORM BY THE DISCLOSURE DEADLINE WILL RESULT IN A NONRESPONSIVE BID. A NONRESPONSIVE BID MAY NOT BE CONSIDERED FOR AWARD.

SUBMITTED BY:

Bidder’s Name: ____________________________________________________________

Signature: ___________________________ Phone No.: __________________________

Name (typed): ___________________________ Title: __________________________
BE-031
February 6, 2017

Ms. Amy Berry
South Portland Police Department
30 Anthoine Street
South Portland, Maine 04106

RE: Lead Wipe and Air Sampling
South Portland Police Department
South Portland, Maine

Dear Ms. Berry:

Beacon Environmental Consultants, LLC (Beacon) has prepared this report to document results from sampling performed at the South Portland Police Department on December 23, 2016, January 6 and 17, 2017. The sampling was completed to document lead dust impacts from the firing range located in the basement of the police station.

Background

The South Portland Police Department has maintained a firing range in the basement of the police station for approximately 30 years. The Department had considered repurposing the firing range into a storage room. To determine if this was acceptable, Beacon was retained to complete wipe sampling within the firing range.

First Round of Wipe Sampling

On December 23, 2016, Beacon collected sixteen (16) wipe samples from within the firing range. Samples were collected using nitric acid preserved wipes from the walls, floor, ceiling, vents, and baffles. See Table 1 for sample locations. Each sample was collected within a 10 centimeter (cm) by 10 cm square. The samples were submitted to Alpha Analytical Laboratory (Alpha) of Westborough, Massachusetts for analysis of total lead. Beacon compared the results to the Department of Army and Air Force Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges of 200 µg/cm³ for re-occupancy of a space.

Samples collected from the floor, vent, top of baffle, floor drain, backstop, and walls near the backstop were reported to have lead results above 200 µg/cm³. See Table 2 for analytical results and Attachment A for laboratory reports.

Based on these results, Beacon recommended a second round of wipe samples from both within the firing range and outside of the room. Additionally, a recommendation was made to collect sediment from the catch basin connected to the floor drain and the outfall into the stream.

Second Round of Wipe Sampling and Sediment Sampling

On January 6, 2017, Beacon collected ten (10) additional wipe samples. Samples were collected from the floor outside of the firing range, above the ceiling tiles, within vents and from the exhaust locations of the heating, ventilation, and air conditioning (HVAC) system. The samples were submitted to Alpha for analysis of total lead.
Samples collected from above the ceiling tiles, inside of the vent, and the exhaust of the HVAC system on the roof were reported to have lead results above 200 µg/cm³. See Table 2 for analytical results and Attachment A for laboratory reports.

One sediment sample was collected from the catch basin located to the west of the police department within Anthoine Street. Beacon utilized a 6-inch spring-loaded Ponar sampler on a rope to collect a sample from the bottom of the catch basin. The sample was transferred to a four-ounce unpreserved amber jar. A trowel was used to collect a sample from the outfall of the catch basin into the stream adjacent to the police department. The sample was transferred to a four-ounce unpreserved amber jar. Both samples were submitted to Alpha for analysis of total lead.

Sediment analytical results for both samples were below the USEPA Probable Effect Level for lead. See Table 3 for analytical results and Attachment A for laboratory reports.

Based on the possibility of lead to be distributed within the building by the HVAC system, Beacon recommended indoor air samples be collected for analysis of lead.

### Indoor Air Sampling

On January 17, 2017, Beacon set up eight air sampling devices (Gilian GilAir 5 personal air pumps) in locations throughout the police department. After approximately seven hours, Beacon returned to the police department and removed the samplers and the sample media and submitted them to Alpha of Mansfield, Massachusetts for analysis of total lead.

Sample results for all eight locations were below the laboratory detection limits. See Table 4 for analytical results and Attachment A for laboratory reports.

### Conclusions and Recommendations

Based on the sample results, Beacon recommends remediating the firing range and associated ventilation system of lead. This should be completed by an experienced lead remediation contractor. A bid specification document should be developed to ensure that the contractor completes the cleaning as necessary to reuse the room. Once the room has been remediated, follow-up wipe sampling for lead analysis should be conducted.

Please feel free to contact me with any questions.

Sincerely,

BEACON ENVIRONMENTAL CONSULTANTS, LLC

[Signature]

John K. Cressey, CG
President
<table>
<thead>
<tr>
<th>Sample #</th>
<th>Date</th>
<th>Location</th>
<th>Distance from Backstop</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-1</td>
<td>12/23/2016</td>
<td>Floor</td>
<td>6&quot;</td>
</tr>
<tr>
<td>S-2</td>
<td>12/23/2016</td>
<td>Wall</td>
<td>1'</td>
</tr>
<tr>
<td>S-3</td>
<td>12/23/2016</td>
<td>Floor</td>
<td>6&quot;</td>
</tr>
<tr>
<td>S-4</td>
<td>12/23/2016</td>
<td>Wall</td>
<td>2&quot;</td>
</tr>
<tr>
<td>S-5</td>
<td>12/23/2016</td>
<td>Top of Baffle</td>
<td>6'</td>
</tr>
<tr>
<td>S-6</td>
<td>12/23/2016</td>
<td>Vent</td>
<td>3'</td>
</tr>
<tr>
<td>S-7</td>
<td>12/23/2016</td>
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<td>4'</td>
</tr>
<tr>
<td>S-8</td>
<td>12/23/2016</td>
<td>Floor</td>
<td>21'</td>
</tr>
<tr>
<td>S-9</td>
<td>12/23/2016</td>
<td>Wall</td>
<td>21'</td>
</tr>
<tr>
<td>S-10</td>
<td>12/23/2016</td>
<td>Floor Drain</td>
<td>40'</td>
</tr>
<tr>
<td>S-11</td>
<td>12/23/2016</td>
<td>Backstop</td>
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<td>S-12</td>
<td>12/23/2016</td>
<td>Floor</td>
<td>54'</td>
</tr>
<tr>
<td>S-13</td>
<td>12/23/2016</td>
<td>Vent</td>
<td>40'</td>
</tr>
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<td>S-14</td>
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<td>S-15</td>
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<tr>
<td>S-16</td>
<td>12/23/2016</td>
<td>Wall Above Tile</td>
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</tr>
<tr>
<td>S-17</td>
<td>1/6/2017</td>
<td>Floor inside doorway to range</td>
<td>59'</td>
</tr>
<tr>
<td>S-18</td>
<td>1/6/2017</td>
<td>Floor to the right outside of range</td>
<td>7' from range door</td>
</tr>
<tr>
<td>S-19</td>
<td>1/6/2017</td>
<td>Floor to the left outside of range</td>
<td>16' from range door</td>
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<tr>
<td>S-20</td>
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<tr>
<td>S-21</td>
<td>1/6/2017</td>
<td>Above ceiling tiles on metal</td>
<td>6.5'</td>
</tr>
<tr>
<td>S-22</td>
<td>1/6/2017</td>
<td>Inside vent</td>
<td>3'</td>
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<tr>
<td>S-23</td>
<td>1/6/2017</td>
<td>Above ceiling tiles on top of vent pipe</td>
<td>22'</td>
</tr>
<tr>
<td>S-24</td>
<td>1/6/2017</td>
<td>Above ceiling tiles on top of cinder blocks</td>
<td>60'</td>
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<tr>
<td>S-25</td>
<td>1/6/2017</td>
<td>Vent on the exterior wall of the building</td>
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<tr>
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<tr>
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<td>Floor</td>
</tr>
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<tr>
<td>LOCATION</td>
<td>Wall</td>
<td>Floor Drain</td>
<td>Backstop</td>
<td>Floor</td>
<td>Vent</td>
<td>Baffle</td>
<td>Ceiling Tile</td>
<td>Wall</td>
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<tr>
<td>DOD Units Qual</td>
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<th>S-21</th>
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<td>6-Jan-17</td>
<td>6-Jan-17</td>
<td>6-Jan-17</td>
<td>6-Jan-17</td>
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<td>25-Dec-16</td>
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<td>L1700562-08</td>
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<tr>
<td>LOCATION</td>
<td>Floor</td>
<td>Floor</td>
<td>Floor</td>
<td>Floor</td>
<td>Above ceiling tiles</td>
<td>Inside Vent</td>
<td>Above Ceiling Tiles</td>
<td>Wall</td>
</tr>
<tr>
<td>DOD Units Qual</td>
<td>200 ug/ft²</td>
<td>70 ug/ft²</td>
<td>2.8 ug/ft²</td>
<td>6.4 ug/ft²</td>
<td>&lt;2.5 ug/ft²</td>
<td>9500 ug/ft²</td>
<td>14000 ug/ft²</td>
<td>&lt;2.5 ug/ft²</td>
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<table>
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<th>S-26</th>
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<td>6-Jan-17</td>
<td>6-Dec-17</td>
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<td>LOCATION</td>
<td>Above Ceiling Tiles</td>
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<td>600 ug/ft²</td>
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Notes:

- DOD - Department of Army and Air Force Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges
- < = Below laboratory detection limits
- [BOLD] - above cleanup guidelines
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<thead>
<tr>
<th>SAMPLE ID</th>
<th>CB 3607</th>
<th>OUTFALL AC10</th>
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<tr>
<td>LOCATION</td>
<td>Catch Basin</td>
<td>Outfall to stream</td>
</tr>
<tr>
<td>PEL</td>
<td>Qual</td>
<td>Qual</td>
</tr>
<tr>
<td>Solids, Total</td>
<td>%</td>
<td>73.1</td>
</tr>
<tr>
<td>Total Metals</td>
<td>Lead, Total</td>
<td>91.3</td>
</tr>
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</table>

**Notes:**
- [BOLD] - above cleanup guidelines
- PEL = EPA Probable effect level; dry weight (Smith et al. 1996).
FIGURE 1: INDOOR FIRING RANGE SAMPLE LOCATIONS
Project No: BE-031
FIGURE 2: SITE PLAN
Project No: BE-031
ATTACHMENT A

LABORATORY ANALYTICAL REPORTS
ANALYTICAL REPORT

<table>
<thead>
<tr>
<th>Lab Number:</th>
<th>L1642076</th>
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<tbody>
<tr>
<td>Client:</td>
<td>Beacon Environmental Consultants, LLC</td>
</tr>
<tr>
<td></td>
<td>P.O. Box 2154</td>
</tr>
<tr>
<td></td>
<td>33 Hawthorne Drive</td>
</tr>
<tr>
<td></td>
<td>Windham, ME 04062</td>
</tr>
<tr>
<td>ATTN:</td>
<td>John Cressey</td>
</tr>
<tr>
<td>Phone:</td>
<td>(207) 376-5001</td>
</tr>
<tr>
<td>Project Name:</td>
<td>SOUTH PORTLAND PD</td>
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<tr>
<td>Project Number:</td>
<td>BE-028</td>
</tr>
<tr>
<td>Report Date:</td>
<td>01/03/17</td>
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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 (LA000065), ME (MA00086), PA (68-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).
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<tr>
<td>L1642076-01</td>
<td>S-1</td>
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<tr>
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<td>WIPE</td>
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<tr>
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</tr>
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<td>SOUTH PORTLAND, ME</td>
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<td>12/23/16</td>
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<tr>
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<tr>
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<td>12/23/16 10:36</td>
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</tr>
</tbody>
</table>
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. 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.

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:  01/03/17
**Sample Results**

- **Parameter:** Total Metals - Mansfield Lab
- **Result:** 1900
- **Qualifier:** ug Abs
- **Units:** ug Abs
- **RL:** 2.5
- **MDL:** --
- **Date Prepared:** 12/27/16 22:00
- **Date Analyzed:** 12/30/16 13:37
- **Prep Method:** EPA 3050B
- **Analytical Method:** 1.6010C
- **Analyst:** PS

---

*Note: The document includes project information, client ID, date collected, date received, sample location, matrix, and laboratory data for a specific parameter.*
**Project Name:** SOUTH PORTLAND PD  
**Project Number:** BE-028  
**Lab Number:** L1642076  
**Report Date:** 01/03/17

**SAMPLE RESULTS**

**Lab ID:** L1642076-02  
**Client ID:** S-2  
**Sample Location:** SOUTH PORTLAND, ME  
**Matrix:** Wipe

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<th>RL</th>
<th>MDL</th>
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<th>Date Analyzed</th>
<th>Prep Method</th>
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<td>ug Abs</td>
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### SAMPLE RESULTS

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<th>RL</th>
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**Project Name:** SOUTH PORTLAND PD  
**Project Number:** BE-028  
**Lab Number:** L1642076  
**Report Date:** 01/03/17  

### SAMPLE RESULTS

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### SAMPLE RESULTS

**Parameter** | **Result** | **Qualifier** | **Units** | **RL** | **MDL** | **Dilution Factor** | **Date Prepared** | **Date Analyzed** | **Prep Method** | **Analytical Method** | **Analyst** |
---|---|---|---|---|---|---|---|---|---|---|---|
Total Metals - Mansfield Lab

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**Analytical Method:** 1,6010C  
**Analyst:** PS
**Total Metals - Mansfield Lab**

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Total Metals - Mansfield Lab

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### SAMPLE RESULTS

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**Client ID:** S-11  
**Sample Location:** SOUTH PORTLAND, ME  
**Matrix:** Wipe  

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**Sample Results**

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### SAMPLE RESULTS

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**Project Name:** SOUTH PORTLAND PD  
**Project Number:** BE-028  
**Lab Number:** L1642076  
**Report Date:** 01/03/17  
**Date Collected:** 12/23/16 10:30  
**Date Received:** 12/23/16  
**Field Prep:** Not Specified  
**Matrix:** Wipe  
**Sample Location:** SOUTH PORTLAND, ME  
**Client ID:** S-14  
**Date Collected:** 12/23/16 10:30  
**Date Received:** 12/23/16  
**Field Prep:** Not Specified  
**Matrix:** Wipe  
**Sample Location:** SOUTH PORTLAND, ME  
**Client ID:** S-14  
**Date Collected:** 12/23/16 10:30  
**Date Received:** 12/23/16  
**Field Prep:** Not Specified  

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**Some additional information**

- **Client ID:** S-14  
- **Sample Location:** SOUTH PORTLAND, ME  
- **Matrix:** Wipe  
- **Date Collected:** 12/23/16 10:30  
- **Date Received:** 12/23/16  
- **Field Prep:** Not Specified

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**Additional notes**

- **Analytical Method:** Not specified
- **Prep Method:** Not specified
- **Date Prepared:** 12/27/16 22:00  
- **Date Analyzed:** 12/30/16 18:55  
- **Prep Method:** Not specified  
- **Analytical Method:** Not specified

**Additional details**

- **Serial No:** 01031712:40

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**Footer**

- **Page 18 of 29**
### SAMPLE RESULTS

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**Total Metals - Mansfield Lab**
### SAMPLE RESULTS

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## Method Blank Analysis
### Batch Quality Control

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**Prep Information**

Digestion Method: EPA 3050B
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**Project Name:** SOUTH PORTLAND PD  
**Project Number:** BE-028  
**Lab Control Sample Analysis**  
**Batch Quality Control**  
**Lab Number:** L1642076  
**Report Date:** 01/03/17
Sample Receipt and Container Information

Were project specific reporting limits specified?  YES

Cooler Information  Custody Seal
Cooler
A  Absent

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*Values in parentheses indicate holding time in days
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.

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.

NDPA/DPA  
- N-Nitrosodiphenylanine/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.

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

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. 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
Data Qualifiers

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.
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.
REFERENCES


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 its 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

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

Westborough Facility
EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO₂, NO₃.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility
SM 2540D: TSS
EPA 3005A NPW
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethlythiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnapthalene.

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

Westborough Facility:
Drinking Water
EPA 332: Perchlorate; EPA 524.2: THMs and VOCs; EPA 504.1: EDB, DBCP.
Microbiology: SM9215B; SM9223-P/A, SM2923B-Colilert-QT, SM9222D.
Non-Potable Water
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chloroform, 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: SVO (Acid/Base/Neutral Extractables), EPA 600/4-B1-045: PCB-Oil.
Microbiology: SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF.

Mansfield Facility:
Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. EPA 200.8: Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. EPA 245.1 Hg.

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, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

**Serial No:** 01031712:40

**Client Information**
- **Client:** Beacon Environmental
- **Address:** PO Box 2154
  - Wiscasset, ME 04578
- **Alpha Manager:** Cressen
- **Project #:** RE-028
- **Phone:** (207) 376-5061
- **Email:** cressen@beaconmaine.com

**Project Information**
- **Project Name:** South Farm PD
- **Project Location:** South Portland, ME
- **Alpha Quote #:** 1962

**Date Rec'd in Lab:** 12/23/16
**ALPHA Job #:** L1642076

**Billing Information**
- **PO #:** BE-028

**Regulatory Requirements & Project Information Requirements**
- Yes No Matrix Spike Required on this SDG? (Required for MCP Inorganics)
- Yes No No GW1 Standards (Info Required for Metals & EPH with Targets)
- Yes No No Other Requirements

**Turn-Around Time**
- **Standard:**
- **Rush (only confirmed if pre-approved):**
- **Date Due:**

**ALPHA Lab ID (Lab Use Only)**

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**Containers**
- **Container Type:**
  - P = Plastic
  - V = Vial
  - G = Glass
  - B = Bacteria cup
  - C = Cube
  - O = Other
  - E = Encore
  - D = BOD Bottle

**Preservative:**
- A = None
- B = HO3
- C = HNO3
- D = H2SO4
- E = Acetic
- F = NaOH
- G = Na2SO4
- H = Acetic Acid
- J = NH4Cl
- K = Other

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

**FORM NO:** 01-01 (rev. 12-Mar-2012)
**CHAIN OF CUSTODY**

**Client Information**
- **Client:** BEACON ENVIRONMENT
- **Address:** PO Box 2154 WINDHAM, ME 04062
- **Phone:** (207) 376-5001
- **Email:** cressle@beaconmaine.com

**Turn-Around Time**
- **Standard**
- **RUSH (only continued if pre-approved)**

**Additional Project Information:**

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<td>I= Ascorbic Acid</td>
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**Relinquished By:**
- **Date/Time:** 12/23/12 12:23:34 PM

**Received By:**
- **Date/Time:** 12/23/12 12:23:34 PM

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

Lab Number: L1700562
Client: Beacon Environmental Consultants, LLC
P.O. Box 2154
33 Hawthorne Drive
Windham, ME 04062
ATTN: John Cressey
Phone: (207) 376-5001
Project Name: SOUTH PORTLAND PD
Project Number: BE-029
Report Date: 01/12/17

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 (88-03671), VA (460195), MD (348), IL (200077), NC (666), TX (T104704476), DOD (L2217), USDA (Permit #P-330-11-00240).

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

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:  Melissa Cripps  
Title: Technical Director/Representative  Date: 01/12/17
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**Client ID:** S-18  
**Sample Location:** SOUTH PORTLAND, ME  
**Matrix:** Wipe  
**Date Collected:** 01/06/17 09:20  
**Date Received:** 01/06/17  
**Field Prep:** Not Specified

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### Total Metals - Mansfield Lab

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**SAMPLE RESULTS**

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Date Collected: 01/06/17 09:35
Date Received: 01/06/17
Field Prep: Not Specified
**Total Metals - Mansfield Lab**

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### Total Metals - Mansfield Lab

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**Project Name:** SOUTH PORTLAND PD  
**Project Number:** BE-029  
**Lab Number:** L1700562  
**Report Date:** 01/12/17

## SAMPLE RESULTS

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### SAMPLE RESULTS

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### Project Name: SOUTH PORTLAND PD
### Project Number: BE-029

#### SAMPLE RESULTS

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% Solids: 74%
### Method Blank Analysis
### Batch Quality Control

#### Total Metals - Mansfield Lab for sample(s): 11-12 Batch: WG968466-1

<table>
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**Prep Information**

- **Digestion Method:** EPA 3050B

#### Total Metals - Mansfield Lab for sample(s): 01-10 Batch: WG968497-1

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**Prep Information**

- **Digestion Method:** EPA 3050B
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<th>LCSD %Recovery</th>
<th>Qual</th>
<th>%Recovery Limits</th>
<th>RPD</th>
<th>Qual</th>
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## Matrix Spike Analysis
### Batch Quality Control

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<td>QC Sample: L1700607-01</td>
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Project Name: SOUTH PORTLAND PD  
Project Number: BE-029  
Lab Number: L1700562  
Report Date: 01/12/17  

Lab Duplicate Analysis  
Batch Quality Control  
QC Batch ID: WG968466-4  
QC Sample: L1700607-01  
Client ID: DUP Sample  
Associated sample(s): 11-12  
Serial_No:01121718:21
INORGANICS
&
MISCELLANEOUS
### SAMPLE RESULTS

<table>
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<tbody>
<tr>
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<tr>
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<td>01/10/17 13:11</td>
<td>121,254G</td>
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Project Name: SOUTH PORTLAND PD  
Project Number: BE-029  
Lab Number: L1700562  
Report Date: 01/12/17  
Date Collected: 01/06/17 10:30  
Date Received: 01/06/17  
Field Prep: Not Specified

SAMPLE RESULTS

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Associated sample(s): 11-12  QC Batch ID: WG968336-1  QC Sample: L1700562-11  Client ID: CB 3607
Sample Receipt and Container Information

Were project specific reporting limits specified?  YES

Cooler Information  Custody Seal
Cooler
A  Absent

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<th>Temp deg C</th>
<th>Pres</th>
<th>Seal</th>
<th>Analysis(*)</th>
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<td>A</td>
<td>N/A</td>
<td>3.1</td>
<td>Y</td>
<td>Absent</td>
<td>PB-TI(180)</td>
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<tr>
<td>L1700562-02A</td>
<td>Glass 100ml 0.2% HNO3 preserved</td>
<td>A</td>
<td>N/A</td>
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<td>Y</td>
<td>Absent</td>
<td>PB-TI(180)</td>
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<td>L1700562-03A</td>
<td>Glass 100ml 0.2% HNO3 preserved</td>
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<td>PB-TI(180)</td>
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<td>Absent</td>
<td>PB-TI(180)</td>
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<tr>
<td>L1700562-05A</td>
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<td>N/A</td>
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<td>PB-TI(180)</td>
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<td>Absent</td>
<td>PB-TI(180)</td>
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<td>L1700562-11A</td>
<td>Glass 120ml/4oz unpreserved</td>
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<td>PB-TI(180)</td>
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<td>L1700562-11B</td>
<td>Glass 60ml unpreserved split</td>
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<td>Y</td>
<td>Absent</td>
<td>ME-TS-2540(7)</td>
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<td>3.1</td>
<td>Y</td>
<td>Absent</td>
<td>ME-TS-2540(7)</td>
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</table>

*Values in parentheses indicate holding time in days
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.

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.

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.

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

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 of 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

Report Format: Data Usability Report
Data Usability Report

Project Name: SOUTH PORTLAND PD
Project Number: BE-029
Lab Number: L1700562
Report Date: 01/12/17

Data Qualifiers

- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- 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.
- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The lower value for the two columns has been reported due to obvious interference.
- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- 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.
- The RPD between the results for the two columns exceeds the method-specified criteria.
- 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.)
- Analytical results are from sample re-analysis.
- Analytical results are from sample re-extraction.
- Analytical results are from modified screening analysis.
- Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- Not detected at the reporting limit (RL) for the sample.

Serial No:01121718:21
Page 27 of 31
REFERENCES


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

Westborough Facility

EPA 624: m/p-xylene, o-xylene
EPA 8260C: NPW; 1,2,4,5-Tetramethylo benzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: Perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility

SM 2540D: TSS
EPA 3005A NPW
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 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
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chloride, 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
SM4500B: PCBs; EPA 600/4-B1-045: PCB-Oil.
Microbiology: SM9223B-Colilert-QT; Enterolert-QT.

Mansfield Facility:

Drinking Water
EPA 200.7: Ba, Be, Cd, Cr, Cu, Ni, Na, Ca. EPA 200.8: Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Ni, Se, TL. EPA 245.1 Hg.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, 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, Pb, Mn, Ni, Se, Ag, TL, Zn.
EPA 245.1 Hg.
SM2340B

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

## Project Information
- **Project Name:** South Portland PD
- **Project Location:** South Portland, ME
- **Project #:** RE-029
- **ALPHA Quote #:** 19102

## Turn-Around Time
- **Date Due:** 1/13

## Additional Project Information:
- **Client:** Beacon Environmental
- **Address:** PO Box 2154
- **Phone:** (207) 376-5001
- **Email:** creesey@beaconmaine.com

## ALPHA Lab ID (Lab Use Only)

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- **DATE:** 01/10/17
- **HOURS:** 8:20
- **RECEIVED BY:** JLC
- **DATE/TIME:** 01/10/17 8:20

---

**Container Type**
- PE: Plastic
- AE: Amber glass
- VE: Vial
- GE: Glass
- CE: Cube
- DE: Other
- EE: Encore
- DB: BOD Bottle

**Preservative**
- A: None
- B: HCl
- C: HNO3
- D: H2SO4
- E: NaOH
- G: NaHCO3
- H: Na2SO3
- I: Ascorbic Acid
- J: NH4Cl
- K: Zn Acetate
- Q: Other

---

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

**All samples submitted are subject to Alpha's Terms and Conditions.**

**See reverse side**
ANALYTICAL REPORT

Lab Number: L1701685
Client: Beacon Environmental Consultants, LLC
P.O. Box 2154
33 Hawthorne Drive
Windham, ME 04062
ATTN: John Cressey
Phone: (207) 376-5001
Project Name: SOUTH PORTLAND PD
Project Number: BE-031
Report Date: 01/25/17

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: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), ME (MA00030), PA (68-02089), VA (460194), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), USFWS (Permit #LE2069641), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

320 Forbes Boulevard, Mansfield, MA 02048-1806
508-822-9300 (Fax) 508-822-3288 800-624-9220 - www.alphalab.com
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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. 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.
Case Narrative (continued)

Metals in Air

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:

Christopher J. Anderson

Title: Technical Director/Representative

Date: 01/25/17
METALS
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### Project Details

- **Project Name:** SOUTH PORTLAND PD
- **Project Number:** BE-031
- **Lab Number:** L1701685
- **Report Date:** 01/25/17
- **Date Collected:** 01/17/17 16:02
- **Date Received:** 01/18/17
- **Field Prep:** Not Specified

### Sample Location

- **Sample Location:** SOUTH PORTLAND, ME
- **Matrix:** Air Media

### SAMPLE RESULTS

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**Client ID:** AIR-3  
**Sample Location:** SOUTH PORTLAND, ME  
**Matrix:** Air Media

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### SAMPLE RESULTS

**Parameter** | **Result** | **Qualifier** | **Units** | **RL** | **MDL** | **Dilution Factor** | **Date Prepared** | **Date Analyzed** | **Prep Method** | **Analytical Method** | **Analyst**
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**Project Name:** SOUTH PORTLAND PD  
**Project Number:** BE-031  
**Lab Number:** L1701685  
**Report Date:** 01/25/17

### SAMPLE RESULTS

- **Lab ID:** L1701685-05  
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- **Sample Location:** SOUTH PORTLAND, ME  
- **Matrix:** Air Media  
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**Total Metals - Mansfield Lab**

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Sample Location: SOUTH PORTLAND, ME
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#### Client ID: AIR-7

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**Matrix:** Air Media  
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**Date Received:** 01/18/17  
**Field Prep:** Not Specified

#### Parameter: Total Metals - Mansfield Lab

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</tbody>
</table>
### SAMPLE RESULTS

**Lab ID:** L1701685-08  
**Client ID:** AIR-8  
**Sample Location:** SOUTH PORTLAND, ME  
**Matrix:** Air Media

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Result</th>
<th>Qualifier</th>
<th>Units</th>
<th>RL</th>
<th>MDL</th>
<th>Dilution Factor</th>
<th>Date Prepared</th>
<th>Date Analyzed</th>
<th>Prep Method</th>
<th>Analytical Method</th>
<th>Analyst</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead, Total</td>
<td>ND</td>
<td></td>
<td>ug/m3</td>
<td></td>
<td>0.03592</td>
<td>--</td>
<td>01/24/17 13:44</td>
<td>01/25/17 10:44</td>
<td>EPA 3050B</td>
<td>1.6020A</td>
<td>BV</td>
</tr>
</tbody>
</table>
### Method Blank Analysis
#### Batch Quality Control

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Result</th>
<th>Qualifier</th>
<th>Units</th>
<th>RL</th>
<th>MDL</th>
<th>Dilution Factor</th>
<th>Date Prepared</th>
<th>Date Analyzed</th>
<th>Analytical Method</th>
<th>Analyst</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Metals - Mansfield Lab for sample(s): 01-08 Batch: WG972104-1</td>
<td>ND</td>
<td>ug/cart</td>
<td>0.07500</td>
<td>--</td>
<td>1</td>
<td>01/24/17 13:44</td>
<td>01/25/17 09:54</td>
<td>1.6020A</td>
<td>BV</td>
<td></td>
</tr>
</tbody>
</table>

**Prep Information**

Digestion Method: EPA 3050B
<table>
<thead>
<tr>
<th>Parameter</th>
<th>LCS %Recovery</th>
<th>Qual</th>
<th>LCSD %Recovery</th>
<th>Qual</th>
<th>%Recovery Limits</th>
<th>RPD</th>
<th>Qual</th>
<th>RPD Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Metals - Mansfield Lab</td>
<td>110</td>
<td></td>
<td>109</td>
<td></td>
<td>75-125</td>
<td>1</td>
<td></td>
<td>20</td>
</tr>
</tbody>
</table>

Associated sample(s): 01-08 Batch: WG972104-2 WG972104-3 SRM Lot Number: A2METSPIKE
**Sample Receipt and Container Information**

Were project specific reporting limits specified?  YES

**Cooler Information  Custody Seal**

<table>
<thead>
<tr>
<th>Cooler</th>
<th>Custody Seal</th>
</tr>
</thead>
<tbody>
<tr>
<td>N/A</td>
<td>Absent</td>
</tr>
</tbody>
</table>

**Container Information**

<table>
<thead>
<tr>
<th>Container ID</th>
<th>Container Type</th>
<th>Cooler</th>
<th>pH</th>
<th>Temp deg C</th>
<th>Pres</th>
<th>Seal</th>
<th>Analysis(*)</th>
</tr>
</thead>
<tbody>
<tr>
<td>L1701685-01A</td>
<td>Air Cartridge</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Y</td>
<td>Absent</td>
<td>A2-PB-6020T(180)</td>
</tr>
<tr>
<td>L1701685-02A</td>
<td>Air Cartridge</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Y</td>
<td>Absent</td>
<td>A2-PB-6020T(180)</td>
</tr>
<tr>
<td>L1701685-03A</td>
<td>Air Cartridge</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Y</td>
<td>Absent</td>
<td>A2-PB-6020T(180)</td>
</tr>
<tr>
<td>L1701685-04A</td>
<td>Air Cartridge</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Y</td>
<td>Absent</td>
<td>A2-PB-6020T(180)</td>
</tr>
<tr>
<td>L1701685-05A</td>
<td>Air Cartridge</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Y</td>
<td>Absent</td>
<td>A2-PB-6020T(180)</td>
</tr>
<tr>
<td>L1701685-06A</td>
<td>Air Cartridge</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Y</td>
<td>Absent</td>
<td>A2-PB-6020T(180)</td>
</tr>
<tr>
<td>L1701685-07A</td>
<td>Air Cartridge</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Y</td>
<td>Absent</td>
<td>A2-PB-6020T(180)</td>
</tr>
<tr>
<td>L1701685-08A</td>
<td>Air Cartridge</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>Y</td>
<td>Absent</td>
<td>A2-PB-6020T(180)</td>
</tr>
</tbody>
</table>

*Values in parentheses indicate holding time in days*
**Acronyms**

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDL</td>
<td>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.</td>
</tr>
<tr>
<td>EPA</td>
<td>Environmental Protection Agency.</td>
</tr>
<tr>
<td>LCS</td>
<td>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.</td>
</tr>
<tr>
<td>LCSD</td>
<td>Laboratory Control Sample Duplicate: Refer to LCS.</td>
</tr>
<tr>
<td>LFB</td>
<td>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.</td>
</tr>
<tr>
<td>MDL</td>
<td>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.</td>
</tr>
<tr>
<td>MS</td>
<td>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.</td>
</tr>
<tr>
<td>MSD</td>
<td>Matrix Spike Sample Duplicate: Refer to MS.</td>
</tr>
<tr>
<td>NA</td>
<td>Not Applicable.</td>
</tr>
<tr>
<td>NC</td>
<td>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.</td>
</tr>
<tr>
<td>NDPA/DPA</td>
<td>N-Nitrosodiphenylamine/Diphenylamine.</td>
</tr>
<tr>
<td>NI</td>
<td>Not Ignitable.</td>
</tr>
<tr>
<td>NP</td>
<td>Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.</td>
</tr>
<tr>
<td>RL</td>
<td>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.</td>
</tr>
<tr>
<td>RPD</td>
<td>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.</td>
</tr>
<tr>
<td>SRM</td>
<td>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.</td>
</tr>
<tr>
<td>STLP</td>
<td>Semi-dynamic Tank Leaching Procedure per EPA Method 1315.</td>
</tr>
<tr>
<td>TIC</td>
<td>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.</td>
</tr>
</tbody>
</table>

**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.
Data Qualifiers

- Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- 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.
- The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- The lower value for the two columns has been reported due to obvious interference.
- Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- 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.
- The RPD between the results for the two columns exceeds the method-specified criteria.
- 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.)
- Analytical results are from sample re-analysis.
- Analytical results are from sample re-extraction.
- Analytical results are from modified screening analysis.
- Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- Not detected at the reporting limit (RL) for the sample.
REFERENCES


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

Westborough Facility

EPA 624: m,p-xylene, o-xylene
EPA 8260C: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene, Azobenzene; SCM: Iodomethane (methyl iodide), Methyl methacrylate, 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270D: NPW: Dimethylnaphthalene,1,4-Diphenyldihydrazine; SCM: Dimethylnaphthalene,1,4-Diphenyldihydrazine.
EPA 300: DW: Bromide
EPA 6860: NPW and SCM: perchlorate
EPA 9010: NPW and SCM: Amenable Cyanide Distillation
EPA 9012B: NPW: Total Cyanide
EPA 9050A: NPW: Specific Conductance
SM3500: NPW: Ferrous Iron
SM4500: NPW: Amenable Cyanide, Dissolved Oxygen; SCM: Total Phosphorus, TKN, NO2, NO3.
SM5310C: DW: Dissolved Organic Carbon

Mansfield Facility

SM 2540D: TSS
EPA 3005A NPW
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.

Biological Tissue Matrix: EPA 3050B

For a complete listing of analytes and methods, please contact your Alpha Project Manager.
These samples have been previously analyzed by Alpha if (Use Project name as Project #)

For PCBs, selection is REQUIRED:
- Congeners
- Homologs
- Aroclors (Low Vol only)

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS. (See reverse side.)