APPENDIX 5
Suggested Notice of Intent (NOI) Form

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY - REGION 1

Request for General Permit Authorization to Discharge Noncontact Cooling Water to be covered by the Noncontact Cooling Water General Permit (NCCWGP) NPDES General Permits No. MAG250000 and NHG250000

A. Facility Information

1. Indicate applicable General Permit: MAG250000 ☑ NHG250000 ☐

2. Facility Information/Location:
Facility Name County Heat Treat LLC
Street/PO Box 32 Howe Avenue City Millbury
State MA Zip Code 01527
Latitude 42.195924 Longitude -71.757637

Type of Business Commercial Heat Treating of Metals
SIC Code(s) 3398 or 332811 NAICS

3. Facility Mailing address (if different from Location Address):
Facility Name County Heat Treat
Street/PO Box PO Box 330 City Millbury
State MA Zip Code 01527

4. Facility Owner:
Name Deepak Pandey
E-mail dpandey@countyheattreat.com
Street/PO Box 3 Courtney Ln City Andover
State MA Zip Code 01810

Contact Person Deepak Pandey Tel 949-632-2606
Owner is (check one): Federal ____ State ____ Tribal ____ Private ✔
Other (describe) ____

5. Facility Operator (if different from above):
Legal Name SAME AS ABOVE
E-mail ____
Street/PO Box ____ City ____ Zip Code ____
State ____ Contact ____ Telephone ____

6. Current permit coverage: yes☐ no■

a) Has a prior NPDES permit (individual or general permit coverage) been granted for the discharge that is listed on the NOI? yes■ no☐ If Yes, permit number MAG250014

b) Is the facility covered by an individual NPDES permit for other discharges? yes☐ no■
If yes, Permit Number: _____

c) Is there a pending NPDES application on file with EPA for this discharge? yes☐ no■
If yes, date of submittal: _____ and permit number, if available _____

7. Attach a topographic map indicating the location of the facility and the outfall(s) to the receiving water.

B. Map attached? ■ **Discharge Information** (attach additional sheets as needed):

1. Name of receiving water into which discharge will occur: Blackstone River
Freshwater ■ Marine Water ☐; State Water Quality Classification Class B
Type of Receiving Water Body (e.g., stream, river, lake, reservoir, estuary, etc.) stream/river

2. Attach a line drawing or flow schematic showing water flow through the facility including sources of intake water, operations contributing to flow, treatment units, outfalls, and receiving water(s).
Line drawing or flow diagram attached? ■

3. Describe the discharge activities for which the owner/applicant is seeking coverage (e.g., building cooling, process line cooling, etc.) Non contact cooling water for electrically operated heat trea

4. Number of Outfalls 1 Latitude and Longitude to the nearest second for each Outfall. See EPA's siting tool at https://www.epa.gov/toxics-release-inventory-tri-program/tri-data-and-tools. Attach additional pages if necessary.

Outfall # Latitude 42.195604 Longitude -71.756779
Outfall # Latitude _____ Longitude _____
Outfall # Latitude _____ Longitude _____

5. For each Outfall provide the following discharge information:

Outfall # 1
a) Maximum Daily Flow 0.055 MGD Average Monthly Flow 1.705 MGD
NOTE: EPA will use the flow reported here as the facility's permitted effluent flow limit.
b) Maximum Daily Temperature 81.00 °F Average Monthly Temperature 71.4 °F
c) Maximum Monthly pH 7.3 s.u. Minimum Monthly pH 6.9 s.u.
d) Outfall's discharge is: continuous ■ intermittent ☐ seasonal ☐

Outfall # NA
a) Maximum Daily Flow _____ MGD Average Monthly Flow _____ MGD
NOTE: EPA will use the flow reported here as the facility's permitted effluent flow limit.
b) Maximum Daily Temperature _____ °F Average Monthly Temperature _____ °F
c) Maximum Monthly pH _____ s.u. Minimum Monthly pH _____ s.u.
d) Outfall's discharge is: continuous ☐ intermittent ☐ seasonal ☐

Outfall # NA

a) Maximum Daily Flow _____MGD Average Monthly Flow _____MGD
NOTE: EPA will use the flow reported here as the facility's permitted effluent flow limit.
b) Maximum Daily Temperature _____°F Average Monthly Temperature _____°F
c) Maximum Monthly pH _____s.u. Minimum Monthly pH _____s.u.
d) Outfall's discharge is: continuous ☐ intermittent ☐ seasonal ☐

6. Is the source of the NCCW potable water? yes☐ no■
If yes, EPA will calculate a Total Residual Chlorine effluent limit for your facility.

7. Provide the reported or calculated seven day-ten year low flow (7Q10) of the receiving water 24.9MGD
Attach any calculation sheets used to support stream flow and/or dilution calculations.

8. **For facilities that discharge to Massachusetts surface waters:**

a) Submit the completed engineering calculation of the surface water temperature rise as shown in Attachment B of the General Permit. Calculation attached? ■
b) Does the discharge occur in an Area of Critical Environmental Concern (ACEC)? yes☐ no■
If yes, provide the name of ACEC _____
c) Does the discharge occur to an Outstanding Resource Water (ORW)? yes☐ no■
If yes, enclose antidegradation waiver approval provided by MassDEP.

Note: See Appendix 1 of the General Permit for more information on ACEC.

C. Chemical Additives

1. Are any non-toxic neutralization and/or dechlorination chemicals used in the discharge(s)? yes☐ no■

2. If yes, attach a list of each chemical used and include the chemical name and manufacturer; maximum and average daily quantity used on a monthly basis, as well as the maximum and average daily expected concentrations (mg/L) in the discharge, and the vendor's reported aquatic toxicity (NOAEL and/or LC_{50} in percent for typically acceptable aquatic organism).

3. Was this list submitted with the facility's 2014 NCCWGP NOI? yes☐ no■

D. NCCW Source Water Information

1. State the source of the NCCW (e.g., municipal water supply, private well, surface water withdrawal, etc.).
Source Onsite Well Water Supply Name of Source Water_____

2. Is the source water registered/permitted under MA Water Management Act or NHDES User Registration Rule (ENV WQ 2202)? yes■ no☐ If yes, registration number PWS#2186000

3. If the source water is groundwater (non-municipal well water), see Appendix 9 of the General Permit and submit effluent (and receiving water hardness) test results, as required in Part 5.4 of the General Permit.
Test results attached? ■

4. Does the facility use both a primary and backup source of NCCW? yes■ no☐ If yes, **attach information** that identifies and describes the primary and backup sources of NCCW and how often any backup supply was used in the past five years.

E. Best Technology Available for Cooling Water Intake Structures (CWISs)

If the facility's non-contact cooling water discharge is covered by this General Permit and the facility **withdraws water from a surface water**, it is subject to the BTA requirements at Part 4.2 of the General Permit.

1. Are you subject to the BTA requirements of the General Permit? yes☐ no■
   a) If no, explain Source not from surface water and skip to F.
   b) If yes, submit a facility-specific BTA description that accurately describes the facility's operations and practices, including, but not limited to, the measures described in Part 5.5 of the General Permit. For additional information and guidance, see Section IV of the Fact Sheet.

Include in your description:
a) Measures to meet the General Permit Part 4.2.1 general BTA requirements, including documentation that describes the facility's monitoring program for impinged fish and/or invertebrates; or the required alternative monitoring plan frequency and/or protocol.
b) The attributes of the current CWIS.
c) The design measures of the CWIS.
d) The operational measures of the CWIS.
e) The historical occurrence of impinged fish for the past five years.
f) If applicable, a demonstration that the facility's intake rate is commensurate with a closed-cycle recirculation system.
g) Other components to reduce impingement and/or entrainment of aquatic life.

2. Provide the following information for each CWIS to support your attached facility-specific BTA description:
   a) The design capacity of the of the CWIS _____MGD
   b) Maximum monthly average intake of the CWIS during the previous five years _____MGD
   c) The month and year in which this flow reported in 2.b. occurred _____
   d) The maximum through-screen design intake velocity _____feet/second (fps)

3. For facilities where the CWIS is located on a freshwater river or stream, provide the following information:
   a) The source water's annual mean flow in MGD as available from USGS or other appropriate source _____MGD
   b) The design intake flow as a % of the source water's annual mean flow _____% Attach calculations if equal to or less than 5% of annual mean flow.
   c) The source water's 7Q10 _____MGD
   d) The design intake flow as a percent of the source water's 7Q10 _____%

4. Provide a map showing the location of each cooling water intake structure; NCCW Outfall(s) and CWIS features referred to in the BTA description. **Map attached?** ☐

F. Endangered Species Act Eligibility Information

If your facility is listed in Table A as one of the 37 facilities covered under the 2014 NCCW GP, check this box. ■
Your ESA consultation responsibilities have been satisfied by EPA. Proceed to Part G.

If your facility is not included as one of the 37 facilities covered under the 2014 NCCW GP, complete this Part.

Using the instructions in Appendix 2, Parts B(1) and B(2) of the NCCW GP, which of the following criteria apply to your facility?

United States Fish and Wildlife Service (USFWS) Criteria: A ☐ B ☐ C ☐

National Oceanic and Atmospheric Administration Fisheries Service (NOAA Fisheries) Criteria: A☐ B☐ C☐

1. If you selected USFWS criterion B, has consultation with the USFWS been completed? yes☐ no☐
   If you selected NOAA Fisheries criterion B, has consultation with NOAA Fisheries been completed?
   yes☐ no☐

2. If consultation with USFWS and/or NOAA Fisheries Service was completed, was a written concurrence finding that the discharge is "not likely to adversely affect" listed species or critical habitat received?
   USFWS yes☐ no☐ N/A☐ NOAA Fisheries yes☐ no☐ N/A☐

3. Attach documentation of ESA eligibility for USFWS and NOAA Fisheries as required at Appendix 2, Part C. of the General Permit. **Documentation attached?** USFWS☐ NOAA Fisheries ☐

4. Please indicate if your facility **directly intakes water for non-contact cooling from, or discharges any NCCW effluent to,** any of the following waterbodies:

   ☐ Merrimack River
   ☐ Connecticut River
   ☐ Westfield River
   ☐ Deerfield River
   ☐ Piscataqua River
   ☐ Salmon Falls River
   ☐ Cocheco River
   ☐ Taunton River

   EPA will consult with NOAA Fisheries on any cooling water intakes or discharges covered under this permit in areas (in the above waterbodies) that overlap with the presence of shortnose sturgeon (endangered) and Atlantic sturgeon (threatened/endangered).

   Please indicate if your facility **directly intakes water for non-contact cooling** from, **or discharges non-contact cooling water effluent to**, the Connecticut River Watershed. EPA will consult with the U.S Fish and Wildlife Service on cooling water intakes and discharges covered under this permit in areas of the Connecticut River Watershed that overlap with the presence of the dwarf wedgemussel (endangered).
   yes☐ no☐

G. National Historic Properties Act Eligibility

1. Are any historic properties listed or eligible for listing on the National Register of Historic Places located on the facility site or in proximity to the discharge? yes☐ no■

2. Have any State or Tribal Historic Preservation Officers been consulted in this determination? yes☐no■
   If yes, attach the results of the consultation(s).

3. Which of the three National Historic Preservation Act scenarios listed in Appendix 3, Section C has the facility met?
   ■ 1 ☐ 2 ☐ 3

H. Supplemental Information

Please provide any supplemental information, including antidegradation review information applicable to new or increased discharges. Attach any analytical data used to support the application. Attach any certification(s) required by the General Permit.

I. Signature Requirements

The NOI must be signed by the operator in accordance with the signatory requirements of 40 CFR§ 122.22 (see below) including the following certification:

> I certify under penalty of law that (1) no biocides or other chemical additives except for those used for pH adjustment and/or dechlorination are used in the noncontact cooling water (NCCW) system; (2) the discharge consists solely of NCCW (to reduce temperature) and authorized pH adjustment and/or dechlorination chemicals; (3) the discharge does not come in contact with any raw materials, intermediate product, water product (other than heat) or finished product; (4) if the discharge of noncontact cooling water subsequently mixes with other wastewater (i.e. stormwater) prior to discharging to the receiving water, any monitoring provided under this permit will be only for noncontact cooling water; (5) where applicable, the facility has complied with the requirements of this permit specific to the Endangered Species Act and National Historic Preservation Act; and (6) this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted.
>
> Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, I certify that the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I certify that I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations**.**

Signature  Date 2/19/2025

Printed Name and Title Deepak K. Pandey, Ph.D., President & Customer Success Lead

Federal regulations require this application to be signed as follows:

1. For a corporation, by a principal executive officer of at least the level of vice president;
2. For a partnership or sole proprietorship, by a general partner or the proprietor, respectively, or,
3. For a municipality, State, Federal or other public facility, by either a principal executive officer or ranking elected official.

County Heat Treat

Calculated dilution and temperature rise and additional ancillary information for 2024 NCCW NOI

Massachusetts:

Equation used to calculate the dilution factor at a facility's outfall.

$$\text{Dilution Factor} = \frac{Q_R + Q_P}{Q_P}$$

where:

Q_R = Estimated 7Q10 low flow for the receiving water at the facility's outfall, in million gallons per day (MGD).

Q_P = Maximum design flow of NCCW discharge, in MGD.

Qr = 24.9 MGD

Qp = 0.055 MGD

$$\text{Dilution Factor} = \frac{24.9 + 0.055}{0.055} = 453.73$$

Notes: Volumes may be used in place of the discharge and river masses since it is assumed that volume change with temperature will be negligible for the expected range of temperatures associated with facilities and receiving waters. It is assumed that the facility effluent is warmer than the river water. If we assume that the heat load discharged by the facility is entirely transferred to the river, the effluent and the river will reach the same final temperature, T_F (in °F). Therefore, ΔT_p and ΔT_r are based on this final temperature:

$$\Delta T_p = T_p - T_F$$

$$\Delta T_r = T_F - T_r$$

Tp = 81 ° F

Tr = 45 ° F

Mp = 0.055 MGD

Mr = 24.9 MGD

$$\frac{(0.055 \times 81) + (24.900 \times 45)}{(0.055 + 24.9)} = 45.08$$

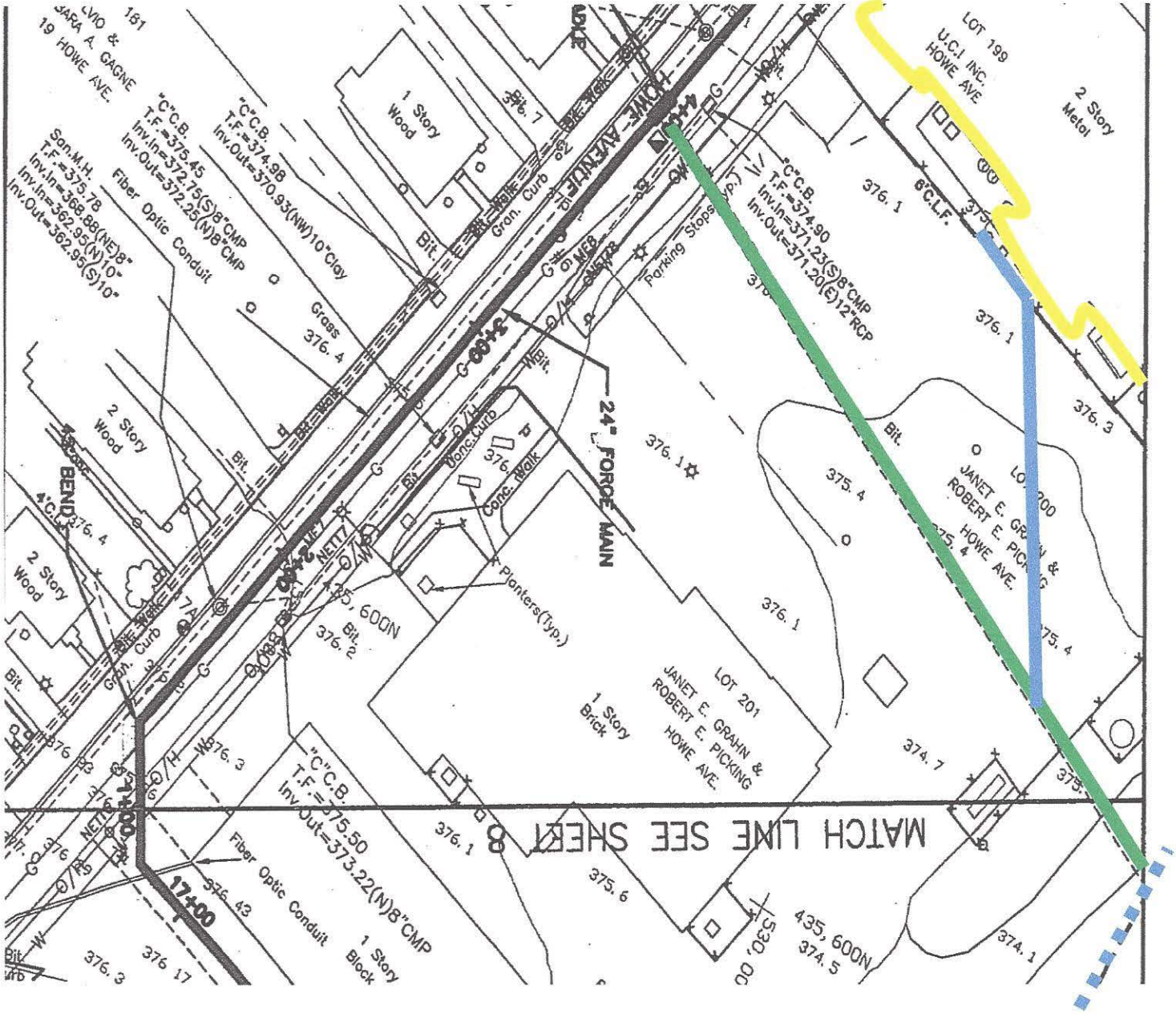
Tr = 45.08 - 45 ° F

Δ Tr = 0.079 ° F

Explanation of use of alternative source water:

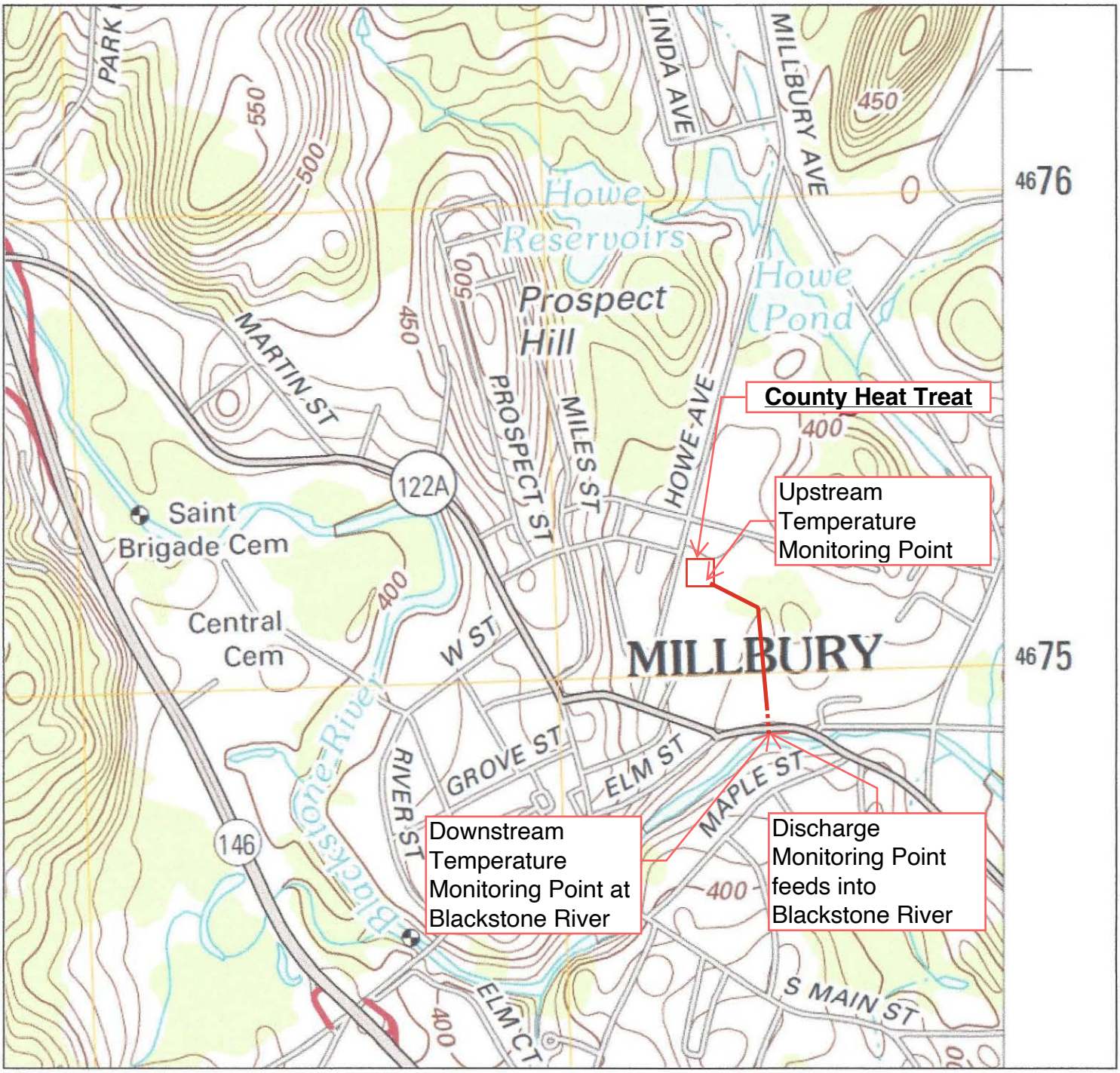
If the facility experiences a failure of the variable frequency drive associated with the pumping system of the well water source used for the non-contact cooling water, then the facility will use city water supply until repairs can be made. Please note that the level of operation will be approximately 30% of normal production levels due to the decrease in available water supply. Failure of the variable frequency drive has only occurred one time over the past 10 years.

COUNTY HEAT TREAT -32 Howe Ave, Millbury, MA 01527



Highlighted Effluent from non-contact cooling water(blue) is released out the large stormwater pipe(green) that is located southeast from the facility behind an existing business located to the southwest of United County Industries dba County Heat Treat (Yellow). Drawing is estimated as there are no known existing engineering documents showing exact locations of piping. Wetland/Stream (blue dotted) located at termination of stormwater piping is shown in lower right.

COUNTY HEAT TREAT - 32 Howe Ave, Millbury, MA 01527



Est. Line Diagram of non-contact cooling: County Heat Treat-Millbury MA

The information depicted on this map is for planning purposes only. It is not adequate for legal boundary definition, regulatory interpretation, or parcel-level analyses.

32 Howe Avenue - Millbury, MA

1/26/2015 1:59:30 PM

1:1128
1"=94'

Shows Stormwater system and locations relative to factory.

County Heat Treat

EPA 2024 Non-Contact Cooling Water General Permit (NCCWGP) NOI
Analytical Data Complete Report received
2/17/2025

ANALYTICAL REPORT

Lab Number:	L2504902
Client:	Industrial Compliance Group 123 Franklin Street Framingham, MA 01702-504
ATTN:	William Judd
Phone:	(508) 875-1197
Project Name:	COUNTY HEAT TREAT
Project Number:	Not Specified
Report Date:	02/17/25

Certifications & Approvals: MA (M-MA086), NH NELAP (2064), CT (PH-0826), IL (200077), IN (C-MA-03), KY (KY98045), ME (MA00086), MD (348), NJ (MA935), NY (11148), NC (25700/666), OR (MA-1316), PA (68-03671), RI (LAO00065), TX (T104704476), VT (VT-0935), VA (460195), USDA (Permit #525-23-122-91930A1).

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

Project Name: COUNTY HEAT TREAT
Project Number: Not Specified

Lab Number: L2504902
Report Date: 02/17/25

Lab Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2504902-01	POST NCCW DISCHARGE	WATER	32 HOWE AVENUE, MILLBURY , MA	01/29/25 09:10	01/29/25
L2504902-02	RECEIVING WATER	WATER	32 HOWE AVENUE, MILLBURY , MA	01/29/25 08:13	01/29/25

Project Name:	COUNTY HEAT TREAT	**Lab Number:**	L2504902
Project Number:	Not Specified	**Report Date:**	02/17/25

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

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

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

HOLD POLICY - For samples submitted on hold, Pace'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 Pace Project Manager and made arrangements for Pace to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

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

Project Name:	COUNTY HEAT TREAT	**Lab Number:**	L2504902
Project Number:	Not Specified	**Report Date:**	02/17/25

Case Narrative (continued)

Report Submission

February 17, 2025: This final report includes the results of all requested analyses.

February 06, 2025: This is a preliminary report.

The analyses of Gross Alpha, Gross Beta, Radium 226, Radium 228, and Uranium were subcontracted. A copy of the laboratory report is included as an addendum. Please note: This data is only available in PDF format and is not available on Data Merger.

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

Authorized Signature: Tiffani Morrissey - Tiffani Morrissey

Title: Technical Director/Representative Date: 02/17/25

METALS

Project Name: COUNTY HEAT TREAT
Lab Number: L2504902
Project Number: Not Specified
Report Date: 02/17/25

SAMPLE RESULTS

Lab ID: L2504902-01
Client ID: POST NCCW DISCHARGE
Sample Location: 32 HOWE AVENUE, MILLBURY , MA
Date Collected: 01/29/25 09:10
Date Received: 01/29/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.00400	--	1	01/30/25 08:00	01/30/25 15:37	EPA 3005A	1,6020B	NTB
Arsenic, Total	ND		mg/l	0.00050	--	1	01/30/25 08:00	01/30/25 15:37	EPA 3005A	1,6020B	NTB
Cadmium, Total	ND		mg/l	0.00020	--	1	01/30/25 08:00	01/30/25 15:37	EPA 3005A	1,6020B	NTB
Chromium, Total	ND		mg/l	0.00100	--	1	01/30/25 08:00	01/30/25 15:37	EPA 3005A	1,6020B	NTB
Copper, Total	0.01711		mg/l	0.00100	--	1	01/30/25 08:00	01/30/25 15:37	EPA 3005A	1,6020B	NTB
Iron, Total	ND		mg/l	0.0500	--	1	01/30/25 08:00	01/30/25 15:37	EPA 3005A	1,6020B	NTB
Lead, Total	ND		mg/l	0.00100	--	1	01/30/25 08:00	01/30/25 15:37	EPA 3005A	1,6020B	NTB
Mercury, Total	ND		mg/l	0.00020	--	1	01/30/25 09:03	01/31/25 18:42	EPA 7470A	1,7470A	DJR
Nickel, Total	ND		mg/l	0.00200	--	1	01/30/25 08:00	01/30/25 15:37	EPA 3005A	1,6020B	NTB
Silver, Total	ND		mg/l	0.00040	--	1	01/30/25 08:00	01/30/25 15:37	EPA 3005A	1,6020B	NTB
Zinc, Total	ND		mg/l	0.01000	--	1	01/30/25 08:00	01/30/25 15:37	EPA 3005A	1,6020B	NTB
Total Hardness (by calculation) - Mansfield Lab											
Hardness	241.0		mg/l	0.5400	NA	1	01/30/25 08:00	01/30/25 15:37	EPA 3005A	1,6020B	NTB

Project Name: COUNTY HEAT TREAT
Lab Number: L2504902
Project Number: Not Specified
Report Date: 02/17/25

SAMPLE RESULTS

Lab ID: L2504902-02
Client ID: RECEIVING WATER
Sample Location: 32 HOWE AVENUE, MILLBURY , MA
Date Collected: 01/29/25 08:13
Date Received: 01/29/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Mansfield Lab											
Antimony, Total	ND		mg/l	0.00400	--	1	01/30/25 08:00	01/30/25 15:42	EPA 3005A	1,6020B	NTB
Arsenic, Total	0.00093		mg/l	0.00050	--	1	01/30/25 08:00	01/30/25 15:42	EPA 3005A	1,6020B	NTB
Cadmium, Total	ND		mg/l	0.00020	--	1	01/30/25 08:00	01/30/25 15:42	EPA 3005A	1,6020B	NTB
Chromium, Total	ND		mg/l	0.00100	--	1	01/30/25 08:00	01/30/25 15:42	EPA 3005A	1,6020B	NTB
Copper, Total	0.00269		mg/l	0.00100	--	1	01/30/25 08:00	01/30/25 15:42	EPA 3005A	1,6020B	NTB
Iron, Total	2.42		mg/l	0.0500	--	1	01/30/25 08:00	01/30/25 15:42	EPA 3005A	1,6020B	NTB
Lead, Total	0.00195		mg/l	0.00100	--	1	01/30/25 08:00	01/30/25 15:42	EPA 3005A	1,6020B	NTB
Mercury, Total	ND		mg/l	0.00020	--	1	01/30/25 09:03	01/31/25 18:46	EPA 7470A	1,7470A	DJR
Nickel, Total	0.00302		mg/l	0.00200	--	1	01/30/25 08:00	01/30/25 15:42	EPA 3005A	1,6020B	NTB
Silver, Total	ND		mg/l	0.00040	--	1	01/30/25 08:00	01/30/25 15:42	EPA 3005A	1,6020B	NTB
Zinc, Total	0.01495		mg/l	0.01000	--	1	01/30/25 08:00	01/30/25 15:42	EPA 3005A	1,6020B	NTB
Total Hardness (by calculation) - Mansfield Lab											
Hardness	145.7		mg/l	0.5400	NA	1	01/30/25 08:00	01/30/25 15:42	EPA 3005A	1,6020B	NTB

Project Name: COUNTY HEAT TREAT **Lab Number:** L2504902

Project Number: Not Specified **Report Date:** 02/17/25

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG2025065-1										
Antimony, Total	ND		mg/l	0.00400	--	1	01/30/25 08:00	01/30/25 15:09	1,6020B	NTB
Arsenic, Total	ND		mg/l	0.00050	--	1	01/30/25 08:00	01/30/25 15:09	1,6020B	NTB
Cadmium, Total	ND		mg/l	0.00020	--	1	01/30/25 08:00	01/30/25 15:09	1,6020B	NTB
Chromium, Total	ND		mg/l	0.00100	--	1	01/30/25 08:00	01/30/25 15:09	1,6020B	NTB
Copper, Total	ND		mg/l	0.00100	--	1	01/30/25 08:00	01/30/25 15:09	1,6020B	NTB
Iron, Total	ND		mg/l	0.0500	--	1	01/30/25 08:00	01/30/25 15:09	1,6020B	NTB
Lead, Total	ND		mg/l	0.00100	--	1	01/30/25 08:00	01/30/25 15:09	1,6020B	NTB
Nickel, Total	ND		mg/l	0.00200	--	1	01/30/25 08:00	01/30/25 15:09	1,6020B	NTB
Silver, Total	ND		mg/l	0.00040	--	1	01/30/25 08:00	01/30/25 15:09	1,6020B	NTB
Zinc, Total	ND		mg/l	0.01000	--	1	01/30/25 08:00	01/30/25 15:09	1,6020B	NTB

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Hardness (by calculation) - Mansfield Lab for sample(s): 01-02 Batch: WG2025065-1										
Hardness	ND		mg/l	0.5400	NA	1	01/30/25 08:00	01/30/25 15:09	1,6020B	NTB

Prep Information

Digestion Method: EPA 3005A

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Mansfield Lab for sample(s): 01-02 Batch: WG2025071-1										
Mercury, Total	ND		mg/l	0.00020	--	1	01/30/25 09:03	01/31/25 18:02	1,7470A	DJR

Prep Information

Digestion Method: EPA 7470A

Lab Control Sample Analysis
Batch Quality Control

Project Name: COUNTY HEAT TREAT
Project Number: Not Specified

Lab Number: L2504902
Report Date: 02/17/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG2025065-2								
Antimony, Total	86		-		80-120	-		
Arsenic, Total	98		-		80-120	-		
Cadmium, Total	95		-		80-120	-		
Chromium, Total	87		-		80-120	-		
Copper, Total	100		-		80-120	-		
Iron, Total	102		-		80-120	-		
Lead, Total	90		-		80-120	-		
Nickel, Total	102		-		80-120	-		
Silver, Total	98		-		80-120	-		
Zinc, Total	98		-		80-120	-		
Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-02 Batch: WG2025065-2								
Hardness	100		-		80-120	-		
Total Metals - Mansfield Lab Associated sample(s): 01-02 Batch: WG2025071-2								
Mercury, Total	81		-		80-120	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: COUNTY HEAT TREAT
Project Number: Not Specified

Lab Number: L2504902
Report Date: 02/17/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG2025065-3 WG2025065-4 QC Sample: L2504804-04 Client ID: MS Sample												
Antimony, Total	ND	0.5	0.3972	79		0.4249	85		75-125	7		20
Arsenic, Total	ND	0.12	0.1163	97		0.1197	100		75-125	3		20
Cadmium, Total	ND	0.053	0.04979	94		0.05006	94		75-125	1		20
Chromium, Total	ND	0.2	0.1673	84		0.1699	85		75-125	2		20
Copper, Total	ND	0.25	0.2440	98		0.2489	100		75-125	2		20
Iron, Total	0.10	1	1.03	93		1.06	96		75-125	3		20
Lead, Total	ND	0.53	0.4655	88		0.4772	90		75-125	2		20
Nickel, Total	ND	0.5	0.4873	97		0.4930	99		75-125	1		20
Silver, Total	ND	0.05	0.04893	98		0.04905	98		75-125	0		20
Zinc, Total	ND	0.5	0.4730	95		0.4821	96		75-125	2		20
Total Hardness (by calculation) - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG2025065-3 WG2025065-4 QC Sample: L2504804-04 Client ID: MS Sample												
Hardness	371.4	66.2	419.1	**72**	Q	422.8	78		75-125	1		20
Total Metals - Mansfield Lab Associated sample(s): 01-02 QC Batch ID: WG2025071-3 WG2025071-4 QC Sample: L2504804-04 Client ID: MS Sample												
Mercury, Total	ND	0.005	0.00452	90		0.00451	90		75-125	0		20

INORGANICS
&
MISCELLANEOUS

Project Name: COUNTY HEAT TREAT
Project Number: Not Specified

Lab Number: L2504902
Report Date: 02/17/25

SAMPLE RESULTS

Lab ID: L2504902-01
Client ID: POST NCCW DISCHARGE
Sample Location: 32 HOWE AVENUE, MILLBURY , MA

Date Collected: 01/29/25 09:10
Date Received: 01/29/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chloride	170		mg/l	10	--	10	-	01/29/25 17:06	121,4500CL-E	JER
pH (H)	6.76		SU	-	NA	1	-	01/30/25 10:16	1,9040C	DMO
Chromium, Hexavalent	ND		mg/l	0.010	--	1	01/29/25 22:15	01/29/25 23:03	1,7196A	AAS

Project Name: COUNTY HEAT TREAT
Project Number: Not Specified

Lab Number: L2504902
Report Date: 02/17/25

SAMPLE RESULTS

Lab ID: L2504902-02
Client ID: RECEIVING WATER
Sample Location: 32 HOWE AVENUE, MILLBURY , MA

Date Collected: 01/29/25 08:13
Date Received: 01/29/25
Field Prep: Not Specified

Sample Depth:
Matrix: Water

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab										
Chloride	190		mg/l	10	--	10	-	01/29/25 17:08	121,4500CL-E	JER
pH (H)	6.89		SU	-	NA	1	-	01/30/25 10:16	1,9040C	DMO
Chromium, Hexavalent	ND		mg/l	0.010	--	1	01/29/25 22:15	01/29/25 23:03	1,7196A	AAS

Project Name: COUNTY HEAT TREAT
Project Number: Not Specified
Lab Number: L2504902
Report Date: 02/17/25

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG2024797-1										
Chloride	ND		mg/l	1.0	--	1	-	01/29/25 15:05	121,4500CL-E	JER
General Chemistry - Westborough Lab for sample(s): 01-02 Batch: WG2024975-1										
Chromium, Hexavalent	ND		mg/l	0.010	--	1	01/29/25 22:15	01/29/25 23:00	1,7196A	AAS

Lab Control Sample Analysis
Batch Quality Control

Project Name: COUNTY HEAT TREAT
Project Number: Not Specified

Lab Number: L2504902
Report Date: 02/17/25

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG2024797-2								
Chloride	97		-		90-110	-		
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG2024975-2								
Chromium, Hexavalent	98		-		85-115	-		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 Batch: WG2025021-1								
pH	100		-		99-101	-		5

Matrix Spike Analysis
Batch Quality Control

Project Name: COUNTY HEAT TREAT
Project Number: Not Specified

Lab Number: L2504902
Report Date: 02/17/25

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG2024797-4 QC Sample: L2504460-01 Client ID: MS Sample												
Chloride	25	20	44	95		-	-		58-140	-		7
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG2024975-4 QC Sample: L2504902-01 Client ID: POST NCCW DISCHARGE												
Chromium, Hexavalent	ND	0.1	0.094	94		-	-		85-115	-		20

Lab Duplicate Analysis

Batch Quality Control

Project Name: COUNTY HEAT TREAT

Project Number: Not Specified

Lab Number: L2504902

Report Date: 02/17/25

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG2024797-3 QC Sample: L2504460-01 Client ID: DUP Sample						
Chloride	25	25	mg/l	0		7
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG2024975-3 QC Sample: L2504902-01 Client ID: POST NCCW DISCHARGE						
Chromium, Hexavalent	ND	ND	mg/l	NC		20
General Chemistry - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG2025021-2 QC Sample: L2505040-01 Client ID: DUP Sample						
pH	6.35	6.28	SU	1		5

Project Name: COUNTY HEAT TREAT
Project Number: Not Specified

Lab Number: L2504902
Report Date: 02/17/25

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Cooler Information

Cooler	Custody Seal
A	Absent

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2504902-01A	Plastic 500ml unpreserved	A	7	7	5.2	Y	Absent		HEXCR-7196(1),CL-4500(28),PH-9040(1)
L2504902-01B	Plastic 950ml HNO3 preserved	A	<2	<2	5.2	Y	Absent		SUB-RA228(180),SUB-ALPHA/BETA(180),SUB-URANIUM(180),SUB-RA226(180)
L2504902-01C	Plastic 950ml HNO3 preserved	A	<2	<2	5.2	Y	Absent		SUB-RA228(180),SUB-ALPHA/BETA(180),SUB-URANIUM(180),SUB-RA226(180)
L2504902-01D	Plastic 950ml HNO3 preserved	A	<2	<2	5.2	Y	Absent		SUB-RA228(180),SUB-ALPHA/BETA(180),SUB-URANIUM(180),SUB-RA226(180)
L2504902-01E	Plastic 950ml HNO3 preserved	A	<2	<2	5.2	Y	Absent		SUB-RA228(180),SUB-ALPHA/BETA(180),SUB-URANIUM(180),SUB-RA226(180)
L2504902-01F	Plastic 950ml HNO3 preserved	A	<2	<2	5.2	Y	Absent		SUB-RA228(180),SUB-ALPHA/BETA(180),SUB-URANIUM(180),SUB-RA226(180)
L2504902-01G	Plastic 500ml HNO3 preserved	A	<2	<2	5.2	Y	Absent		SUB-RA228(180),SUB-ALPHA/BETA(180),SUB-URANIUM(180),SUB-RA226(180)
L2504902-01H	Plastic 500ml HNO3 preserved	A	<2	<2	5.2	Y	Absent		FE-6020T(180),CR-6020T(180),NI-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),AS-6020T(180),SB-6020T(180),AG-6020T(180),HG-T(28),CD-6020T(180),HARDT-6020(180)
L2504902-02A	Plastic 500ml unpreserved	A	7	7	5.2	Y	Absent		HEXCR-7196(1),CL-4500(28),PH-9040(1)
L2504902-02B	Plastic 500ml HNO3 preserved	A	<2	<2	5.2	Y	Absent		SUB-RA228(180),SUB-ALPHA/BETA(180),SUB-URANIUM(180),SUB-RA226(180)
L2504902-02C	Plastic 500ml HNO3 preserved	A	<2	<2	5.2	Y	Absent		SUB-RA228(180),SUB-ALPHA/BETA(180),SUB-URANIUM(180),SUB-RA226(180)

*Values in parentheses indicate holding time in days

Project Name: COUNTY HEAT TREAT
Project Number: Not Specified

Lab Number: L2504902
Report Date: 02/17/25

Container Information

Container ID	Container Type	Cooler	Initial pH	Final pH	Temp deg C	Pres	Seal	Frozen Date/Time	Analysis(*)
L2504902-02D	Plastic 500ml HNO3 preserved	A	<2	<2	5.2	Y	Absent		SUB-RA228(180),SUB-ALPHA/BETA(180),SUB-URANIUM(180),SUB-RA226(180)
L2504902-02E	Plastic 500ml HNO3 preserved	A	<2	<2	5.2	Y	Absent		SUB-RA228(180),SUB-ALPHA/BETA(180),SUB-URANIUM(180),SUB-RA226(180)
L2504902-02F	Plastic 500ml HNO3 preserved	A	<2	<2	5.2	Y	Absent		SUB-RA228(180),SUB-ALPHA/BETA(180),SUB-URANIUM(180),SUB-RA226(180)
L2504902-02G	Plastic 500ml HNO3 preserved	A	<2	<2	5.2	Y	Absent		SUB-RA228(180),SUB-ALPHA/BETA(180),SUB-URANIUM(180),SUB-RA226(180)
L2504902-02H	Plastic 500ml HNO3 preserved	A	<2	<2	5.2	Y	Absent		FE-6020T(180),NI-6020T(180),CR-6020T(180),CU-6020T(180),ZN-6020T(180),PB-6020T(180),SB-6020T(180),AS-6020T(180),CD-6020T(180),HARDT-6020(180),HG-T(28),AG-6020T(180)

*Values in parentheses indicate holding time in days

Project Name:	COUNTY HEAT TREAT	**Lab Number:**	L2504902
Project Number:	Not Specified	**Report Date:**	02/17/25

GLOSSARY

Acronyms

DL	- Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EMPC	- Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LOD	- Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
LOQ	- Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.) Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NDPA/DPA	- N-Nitrosodiphenylamine/Diphenylamine.
NI	- Not Ignitable.
NP	- Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.
NR	- No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.
STLP	- Semi-dynamic Tank Leaching Procedure per EPA Method 1315.
TEF	- Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.
TEQ	- Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.
TIC	- Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: Data Usability Report

Project Name:	COUNTY HEAT TREAT	**Lab Number:**	L2504902
Project Number:	Not Specified	**Report Date:**	02/17/25

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

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.

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

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

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

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

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

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

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

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

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

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

J - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

Report Format: Data Usability Report

Project Name:	COUNTY HEAT TREAT	**Lab Number:**	L2504902
Project Number:	Not Specified	**Report Date:**	02/17/25

Data Qualifiers

ND - Not detected at the reporting limit (RL) for the sample.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration 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.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Report Format: Data Usability Report

Project Name: COUNTY HEAT TREAT
Project Number: Not Specified
Lab Number: L2504902
Report Date: 02/17/25

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - VI, 2018.

121 Standard Methods for the Examination of Water and Wastewater. APHA-AWWA-WEF. Standard Methods Online.

LIMITATION OF LIABILITIES

Pace Analytical Services 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 Pace Analytical Services shall be to re-perform the work at it's own expense. In no event shall Pace Analytical Services 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 Pace Analytical Services.

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 – 8 Walkup Dr. Westborough, MA 01581
EPA 624.1: m/p-xylene, o-xylene, Naphthalene
EPA 625.1: alpha-Terpineol
EPA 8260D: NPW: 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene; SCM: Iodomethane (methyl iodide), 1,2,4,5-Tetramethylbenzene; 4-Ethyltoluene.
EPA 8270E: NPW: Dimethylnaphthalene,1,4-Diphenylhydrazine, alpha-Terpineol, Azobenzene; SCM: Dimethylnaphthalene,1,4-Diphenylhydrazine.
SM4500: NPW: Amenable Cyanide; SCM: Total Phosphorus, TKN, NO2, NO3.

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
SM 2540D: TSS.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.
MADEP-APH.
Nonpotable Water: EPA RSK-175 Dissolved Gases
Biological Tissue Matrix: EPA 3050B

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
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.
Nonpotable Water: EPA RSK-175 Dissolved Gases

The following test method is not included in our New Jersey Secondary NELAP Scope of Accreditation:

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
Determination of Selected Perfluorinated Alkyl Substances by Solid Phase Extraction and Liquid Chromatography/Tandem Mass Spectrometry Isotope Dilution (via Alpha SOP 23528)

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

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581

Drinking Water
EPA 300.0: Chloride, Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B, SM4500NO2-B**
EPA 524.2: THMs and VOCs; **EPA 504.1:** EDB, DBCP.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT,SM9222D**.

Non-Potable Water
SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2320B, SM4500CL-E, SM4500F-BC, SM4500NH3-BH: Ammonia-N and Kjeldahl-N, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **EPA 351.1, SM4500NO3-F, EPA 353.2**: Nitrate-N, **SM4500P-E, SM4500P-B, E, SM4500SO4-E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, EPA 420.1, SM4500-CN-CE, SM2540D, EPA 300: Chloride, Sulfate, Nitrate.**
EPA 624.1: Volatile Halocarbons & Aromatics,
EPA 608.3: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625.1: SVOC (Acid/Base/Neutral Extractables).
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, EPA 1600, EPA 1603, SM9222D.**

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048

Drinking Water
EPA 200.7: Al, Ba, Cd, Cr, Cu, Fe, Mn, Ni, Na, Ag, Ca, Zn. **EPA 200.8:** Al, Sb, As, Ba, Be, Cd, Cr, Cu, Pb, Mn, Ni, Se, Ag, TL, Zn. **EPA 245.1** Hg.
EPA 522, EPA 537.1.

Non-Potable Water
EPA 200.7: Al, Sb, As, Be, Cd, Ca, Cr, Co, Cu, Fe, Pb, Mg, Mn, Mo, Ni, K, Se, Ag, Na, Sr, TL, Ti, V, Zn.
EPA 200.8: Al, Sb, As, Be, Cd, Cr, Cu, Fe, Pb, Mn, Ni, K, Se, Ag, Na, TL, Zn.
EPA 245.1 Hg.
SM2340B

Certification IDs:

Westborough Facility – 8 Walkup Dr. Westborough, MA 01581
CT PH-0826, IL 200077, IN C-MA-03, KY JY98045, ME MA00086, MD 348, MA M-MA086, NH 2064, NJ MA935, NY 11148, NC (DW) 25700, NC (NPW/SCM) 666, OR MA-1316, PA 68-03671, RI LAO00065, TX T104704476, VT VT-0935, VA 460195

Mansfield Facility – 320 Forbes Blvd. Mansfield, MA 02048
CT PH-0825, ANAB/DoD L2474, IL 200081, IN C-MA-04, KY KY98046, LA 3090, ME MA00030, MI 9110, MN 025-999-495, NH 2062, NJ MA015, NY 11627, NC (NPW/SCM) 685, OR MA-0262, PA 68-02089, RI LAO00299, TX T-104704419, VT VT-0015, VA 460194, WA C954

Mansfield Facility – 120 Forbes Blvd. Mansfield, MA 02048
ANAB/DoD L2474, ME MA01156, MN 025-999-498, NH 2249, NJ MA025, NY 12191, OR 4203, TX T104704583, VA 460311, WA C1104.

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

CHAIN OF CUSTODY

PAGE OF

ALPHA ANALYTICAL

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193
Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Date Rec'd in Lab: 1/29/25 ALPHA Job #: L2504902

Project Information

Project Name: County Heat Treat

Project Location: 32 Howe Avenue, Millbury Ma

Project #:

Project Manager: William D. Judd

ALPHA Quote #:

Client Information

Client: INDUSTRIAL COMPLIANCE GROUP, INC.

Address: 123 Franklin Street

Framingham, MA 01702

Phone: 508-864-8807

Fax: 508-405-4101

Email: bjudd@indcompgroup.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Report Information Data Deliverables

☐ FAX ☒ EMAIL
☐ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements/Report Limits

State/Fed Program Criteria

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

☐ Yes ☒ No Are MCP Analytical Methods Required?
☐ Yes ☒ No Are CT RCP (Reasonable Confidence Protocols) Required?

Other Project Specific Requirements/Comments/Detection Limits:

Attached to this COC are two pages that contains the EPA Analytical testing requirements, and the MassDEP requirements for Ground Water NCCW Maximum Radionuclide Contaminant Levels.

ANALYSIS

SAMPLE HANDLING
Filtration
☐ Done
☐ Not Needed
☐ Lab to do
Preservation
☐ Lab to do
(Please specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	6020-AG,AS,CD,CR,CU,FE,HG,NI,PB,SB,ZN	HARDT-6020	Hex-Cr	Chloride	pH	Gross Alpha	Gross Beta	RA226	RA228	Uranium-200.8			Sample Specific Comments	TOTAL # BOTTLES
04902-01	Post NCCW Discharge	1/29	9:10	GW	CB	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐		
02	Receiving Water	1/29	8:13	SW	CB	☒	☒	☒	☒	☒	☒	☒	☒	☒	☒	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
				Container Type		P	P	P	P	P	P	P	P	P	P	-	-		
				Preservative		C	C	A	C	C	C	C	C	C	C	-	-		

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

FORM NO: 01-01(I) (rev. 5-JAN-12)

Relinquished By:	Date/Time	Received By:	Date/Time
[signature]	1/29/25 11:37AM	[signature] AAL	1/29/25 11:37

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

GRANITE STATE
ANALYTICAL SERVICES, LLC.
22 Manchester Road, Unit 2, Derry, NH 03038
Phone (800) 699-9920 | (603) 432-3044 website www.granitestateanalytical.com

Laboratory Report

Alpha Analytical-Westborough
8 Walkup Dr.
Westborough, MA 01581

Date Printed:	**02/17/2025**
Work Order #:	**2501-05383**
Client Job #:	
Date Received:	**01/30/2025**
Sample collected in:	**Massachusetts**

Attached please find results for the analysis of the samples received on the date referenced above.

Unless otherwise noted in the attached report, the analyses performed met the requirements of the analyzing laboratory's Quality Assurance Plan, Standard Operating Procedures and State Accreditation. This certificate shall not be reproduced, except in full, without the written approval of the analyzing laboratory. The results presented in this report relate to the samples listed on the following pages in the condition in which they were received. Accreditation for each analyte is identified by the * symbol following the analyte name. Location of our analyzing laboratory is identified by the code in the Analyst Column.

A & L Laboratory:
Identified by ME in Analyst Column
155 Center Street, Auburn, Maine 04210
www.allaboratory.com

Granite State Analytical Services LLC:
Identified by NH in Analyst Column
22 Manchester Road, Derry, NH 03038
www.granitestateanalytical.com

Nashoba Analytical:
Identified by MA in the Analyst Column
31A Willow Road, Ayer, MA 01432
www.nashobaanalytical.com

ANALYSIS RELATED NOTES:

- RL: "Reporting limit" means the lowest level of an analyte that can be accurately recovered from the matrix of interest.
- DF: "Dilution factor" means the ratio of the volume of the sample to the volume of the final (dilute) solution.
- MDL: "Minimum Detection Limit" means the minimum result which can be reliably discriminated from a blank with a predetermined confidence level.
- ND: Non-detect. Results reported as Non-Detect (ND) have been evaluated down to the concentration listed in the MDL column.
- A & L Laboratory / Granite State Analytical Services LLC / Nashoba Analytical. accreditation lists can be found on our websites listed above.
- Subcontracted samples will be identified by the Accreditation number of the subcontract laboratory in the analyst field for each analyte and the appropriate laboratory will be listed here.This report contains data that were produced by a subcontracted laboratory accredited for the fields of testing performed, if available. Accreditation for each analyte is identified by the * symbol following the analyte name.
  KNL Laboratory Services, 3202 North Florida Avenue, Tampa, FL 33603 Accreditation # M-FL117
- Data Qualifiers (DQ) Flags provide additional information in regards to the receipt, analysis or quality control of a sample. These are indicated under the DQ Flags Column on your report and listed here if necessary: Data Qualifier (DQ) Flags: None

SAMPLE STATE SPECIFIC NOTES:

Additional Narrative or Comments: None

We appreciate the opportunity to provide you with laboratory services. If you have any questions regarding the enclosed report, please contact the laboratory and we will be happy to assist you.

Donald A. D'Anjou, Ph. D.
Laboratory Director

A & L Laboratory: Accreditations: Maine ME00021, New Hampshire 2501, Maine Radon Registration ID # SPC20
Granite State Analytical Services, LLC: Accreditations: New Hampshire 1015; Maine NH00003;
Massachusetts M-NH0003; Rhode Island 101513; Vermont VT-101507
Nashoba Analytical: Accreditations: Massachusetts M-MA1118

GRANITE STATE
ANALYTICAL SERVICES, LLC.
22 Manchester Road, Unit 2, Derry, NH 03038
Phone (800) 699-9920 | (603) 432-3044 website www.granitestateanalytical.com

CERTIFICATE OF ANALYSIS

DATE PRINTED: 02/17/2025
CLIENT NAME: Alpha Analytical-Westborough
CLIENT ADDRESS: 8 Walkup Dr.
Westborough, MA 01581

RECEIPT TEMPERATURE: ON ICE 0.3° CELSIUS

SAMPLE ID #: 2501-05383-001
SAMPLED BY: Client-Customer

DATE AND TIME COLLECTED: 01/29/2025 09:10AM
DATE AND TIME RECEIVED: 01/30/2025 11:46AM
SAMPLE LOCATION:

SAMPLE SITE: L2504902-01
POST NCCW DISCHARGE
MA

CLIENT JOB #:

Test Description	Results	Units	DQ Flag	MDL	LOQ (RL)	DF	Method	Analyst	Date & Time Analyzed
Uranium*	2.1	ug/L		0.103	1	1	EPA 200.8	NM-NH	01/31/2025 04:20PM
Uranium	1.4	pCi/L		0.67	0.67	1	EPA 200.8 Calc.	NM-NH	01/31/2025 04:20PM
Analytical Gross Alpha*	3.9±1.7	pCi/L		3	3	1	EPA 900	2530	02/03/2025 02:23PM
Gross Beta*	6.3±1.6	pCi/L		---	---	1	EPA 900.0	2530	02/03/2025 02:23PM
Radium 226*	<1	pCi/L		1	1	1	EPA 903.0	2530	02/11/2025 09:08PM
Radium 228*	<1	pCi/L		1	1	1	EPA Ra-05	2530	02/14/2025 01:23PM
Combined Radium	<1	pCi/L		1	1	1	N/A Calculation	2530	02/14/2025 01:23PM
Compliance Gross Alpha*	<3	pCi/L		3	3	1	N/A Calculation	WP-NH	02/03/2025 02:23PM

Donald A. D'Anjou, Ph. D.
Laboratory Director

GRANITE STATE
ANALYTICAL SERVICES, LLC.
22 Manchester Road, Unit 2, Derry, NH 03038
Phone (800) 699-9920 | (603) 432-3044 website www.granitestateanalytical.com

CERTIFICATE OF ANALYSIS

DATE PRINTED: 02/17/2025
CLIENT NAME: Alpha Analytical-Westborough
CLIENT ADDRESS: 8 Walkup Dr.
Westborough, MA 01581

RECEIPT TEMPERATURE: ON ICE 0.3° CELSIUS

SAMPLE ID #: 2501-05383-002
SAMPLED BY: Client-Customer

DATE AND TIME COLLECTED: 01/29/2025 08:13AM
DATE AND TIME RECEIVED: 01/30/2025 11:46AM
SAMPLE LOCATION:

SAMPLE SITE: L2504902-02
RECEIVING WATER
MA

CLIENT JOB #:

Test Description	Results	Units	DQ Flag	MDL	LOQ (RL)	DF	Method	Analyst	Date & Time Analyzed
Uranium*	<1	ug/L		0.103	1	1	EPA 200.8	JP-NH	02/03/2025 01:14PM
Uranium	<0.67	pCi/L		0.67	0.67	1	EPA 200.8 Calc.	JP-NH	02/03/2025 01:14PM
Analytical Gross Alpha*	<3	pCi/L		3	3	1	EPA 900	2530	02/03/2025 02:23PM
Gross Beta*	5.9±1.6	pCi/L		---	---	1	EPA 900.0	2530	02/03/2025 02:23PM
Radium 226*	<1	pCi/L		1	1	1	EPA 903.0	2530	02/11/2025 09:08PM
Radium 228*	<1	pCi/L		1	1	1	EPA Ra-05	2530	02/14/2025 01:23PM
Combined Radium	<1	pCi/L		1	1	1	N/A Calculation	2530	02/14/2025 01:23PM
Compliance Gross Alpha*	<3	pCi/L		3	3	1	N/A Calculation	WP-NH	02/03/2025 02:23PM

Donald A. D'Anjou, Ph. D.
Laboratory Director

Pace

Subcontract Chain of Custody

Granite State Analytical Services LLC
22 Manchester Rd
Derry, NH 03038

Pace Job Number
L2504902

Page 1

Client Information

Client: Pace Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Report To:west.subreports@pacelabs.com
Bill To:invoices@pacelabs.coupahost.com

Phone: 508.439.5137
Email: Nichole.Hunt@pacelabs.com

Project Information

Project Location: MA
Project Manager: Nichole Hunt

Turnaround & Deliverables Information

Due Date: 02/05/25 (RUSH)
Deliverables:

Regulatory Requirements/Report Limits

State/Federal Program:
Regulatory Criteria:

Report to RL 2501-5383

Project Specific Requirements and/or Report Requirements

Reference following Pace Job Number on final report/deliverables: L2504902 Report to include Method and/or Regulatory required batch QC

Additional Comments: 5 day RUSH

Lab ID	Pace ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Sample Level Comments	Sample Specific QC	Container Count
001	L2504902-01	POST NCCW DISCHARGE	01-29-25 09:10	WATER	Gross Alpha/Beta			6
				WATER	Radium 226			6
				WATER	Radium 228			6
				WATER	Uranium by EPA 200.8			6
002	L2504902-02	RECEIVING WATER	01-29-25 08:13	WATER	Gross Alpha/Beta			6
				WATER	Radium 226			6
				WATER	Radium 228			6
				WATER	Uranium by EPA 200.8			6
				* Drinking water per client -NS 1-30-25				

	Relinquished By:	Date/Time:	Received By:	Date/Time:
		1/30/25 10:14		1-30-25 1014
		1-30-25		1.30.25 1146
Form No: AL_subcoc				

ice 0.3°C