Environmental Strategies & Management

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MASSACHUSETTS CONTINGENCY PLAN
IMMEDIATE RESPONSE ACTION STATUS REPORT
and
LANDFILL MONITORING REPORT

2nd QUARTER 2014

TOWN OF EASTHAM LANDFILL
255 OLD ORCHARD ROAD
EASTHAM, MASSACHUSETTS

DEP RTN 4-24301

June 27, 2014

Prepared for:

Town of Eastham
2500 State Highway
Eastham, MA 02642-2544

Prepared by:

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ES&M Project No. 2013-027

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Environmental Strategies & Management

1.0 INTRODUCTION

This Immediate Response Action (IRA) Status report has been prepared in accordance with the Massachusetts Contingency Plan (MCP) by Environmental Strategies & Management, Inc. (ES&M) on behalf of the Town of Eastham. The report addresses activities conducted under Massachusetts Department of Environmental Protection (MassDEP) Release Tracking Number (RTN 4-24301). This report also includes a summary of activities completed under the Town of Eastham's Landfill Monitoring Plan (LMP), approved by MassDEP on August 14, 2012.

1.1 Background

Previous status reports published by ES&M have provided a complete background discussion of the Eastham Landfill and the occurrence of 1,4 dioxane in drinking water wells around the landfill. The most recent report that includes this information is the 1st Quarter 2014 IRA Status Report (ES&M, March 31, 2014). Since the background information does not change, this and future reports will focus on activities completed during the report period.

1.2 Purpose

This IRA Status and Landfill Monitoring Report has been prepared to document activities undertaken at and around the Eastham Landfill from March 1 through May 31, 2014.

2.0 IMMEDIATE RESPONSE ACTION ACTIVITIES

The objective of the Immediate Response Action program has been, and continues to be the identification of private water wells in the vicinity of the landfill that have been impacted by 1,4-dioxane, and to provide alternative safe drinking water to affected residents. In addition, the IRA program has included evaluation of appropriate and feasible mitigating measures to remove 1,4-dioxane from drinking water. The IRA status reports submitted in 2013 provided details of the initial IRA activities. The IRA Plan Modification (ES&M, March 6, 2014) described the implementation of alternate laboratory methods, outlined a revised private well sampling protocol, clarified the ongoing monitoring schedule, and summarized future IRA activities.

The first three Phases of the private well sampling program under the IRA were completed in February, May and July 2013. These sampling events included collection of water samples from private wells hydraulically downgradient and cross-gradient of the landfill. A fourth sampling event (Phase 4) was initiated in December 2013 to include private wells that had not previously been tested, and a fifth event (Phase 5) was initiated in March 2014 to further expand the study area to the north, south and east of the landfill.

2.1 Private Well Sampling - Status Update

During this report period, the private well sampling program outlined in the IRA Plan Modification continued, with sampling activities in the following categories:

- Private wells in the study area that had not been tested during previous sampling phases (primarily seasonal properties);
- Properties included in the Phase 5 sampling event (north side of Glacier Hills Road, east side of Schoolhouse Road near Chester Avenue, and south of Route 6);
- Properties within the study area where concentrations of 1,4-dioxane were detected above the reporting limit of 0.2 µg/L but below the proposed GW-1 Standard of 0.3 µg/L;
- Select properties within the study area that are adjacent to a private well with a concentration of 1,4 dioxane above 0.3 µg/L, and whose previous test results revealed an estimated concentration below 0.3 µg/L; and
- Private wells outside of the study area (referred to as "background" study).

During each sampling event, a field visit form was completed to document the date and time when the sample was collected, the sample location (e.g. kitchen tap, outside spigot), and the configuration of the water system. Field crews also recorded pH, dissolved oxygen (DO), conductivity, and temperature of the water as samples were collected. Field sampling forms summarizing this information are included in Appendix A.

Samples were preserved in the field and brought to Alpha Analytical Laboratories in Mansfield, Massachusetts, for 1,4 dioxane analysis by EPA Method 8270 SIM. As noted in the IRA Plan Modification, water samples were previously analyzed using an EPA Method that had been modified by the laboratory (i.e., 522 Mod) in order to achieve the necessary reporting limit for 1,4-dioxane. All drinking water samples are now being analyzed using EPA Method 8270 SIM, which does not need to be modified in order to achieve the necessary reporting limit for 1,4-dioxane. This method also complies with MassDEP's Compendium of Analytical Methods ("CAM") which outlines the Quality Assurance/Quality Control requirements and performance standards for select laboratory methods. Data generated utilizing a CAM-compliant method meets the standard of "Presumptive Certainty;" and therefore, meets stringent QA/QC standards and can be relied upon to make critical decisions under the MCP.

2.1.1 Summary of Sampling Activities

Although the sampling events conducted during this period were generally intended to satisfy specific categories outlined in the IRA Plan Modification, most events included properties from multiple categories to accommodate homeowner schedules. The sampling activities are summarized below by date:

March 10 through 14, 2014

- ES&M initiated the Phase 5 sampling event, which extended the study area to include properties south of Route 6, east of Schoolhouse Road and north of Glacier Hills Road. The initial work included the collection of 14 samples from 12 residences.
- The Town purchases bottled water from two vendors (Belmont and Poland Springs) for distribution to the Eastham Elementary School and to residences whose water tests indicated a concentration of 1,4 dioxane above 0.3 ug/L (see Table 1). Samples of the bottled water were collected from both sources for analysis of 1,4 dioxane.
- Quarterly drinking water samples were collected from three residential properties for laboratory analysis as prescribed by the LMP, which is further discussed in Section 3.0 of this report.
- Samples were collected by homeowner request from eight homes outside of the study area.

March 24 through 28, 2014

- Samples were collected from five private wells which have exhibited a concentration of 1,4 dioxane between 0.2 and 0.29 µg/L. Since 1,4 dioxane was detected above the reporting limit in each sample, duplicate samples were also analyzed.
- Samples were collected from 11 private wells that are located adjacent to a property with 1,4 dioxane levels above 0.3 ug/L. When 1,4 dioxane was detected above the reporting limit, the duplicate sample was also analyzed.
- Samples were collected by homeowner request from one home outside of the study area.

April 11 and 14, 2014

- Samples were collected from two wells which have exhibited a concentration of 1,4 dioxane between 0.2 and 0.29 µg/L. Since 1,4 dioxane was detected above the reporting limit in each sample, duplicate samples were also analyzed.
- Drinking water samples were collected from two properties included in Phase 4 event and four properties included in Phase 5 event that were not previously available.
- One sample was collected by homeowner request from a home outside of the study area.

May 4 through 9, 2014

- Samples were collected from two wells which have exhibited a concentration of 1,4 dioxane between 0.2 and 0.29 µg/L. Since 1,4 dioxane was detected above the reporting limit in each sample, duplicate samples were also analyzed.
- Samples were collected from 15 properties where 1,4 dioxane had previously been detected above the drinking water standard. Duplicate samples from each well were also analyzed since 1,4 dioxane was detected above the reporting limit in the primary samples.
- Samples were collected from nine wells that are located adjacent to a property with 1,4 dioxane levels above 0.3 ug/L. When 1,4 dioxane was detected above the reporting limit, the duplicate sample was also analyzed.
- Quarterly water samples were collected from the Eastham Elementary School's drinking water system.
- Drinking water samples were collected from two properties that were not available for testing during the Phase 4 or Phase 5 sampling events.
- Quarterly drinking water samples were collected from two of the three residential properties included in the LMP for laboratory analysis.

2.1.2 Sampling Results

Table 2 summarizes 1,4 dioxane results from drinking water samples collected during all phases of the private well sampling program. The Site Map included as Figure 1 shows the properties within the study area; each parcel is color coded with one of four colors to represent the sampling results:

- Gray = 1,4-dioxane was not detected. Well water test results in this category were below the reporting limit for 1,4-dioxane of 0.2 µg/L. Since an estimated concentration ("J" value) was not reported, it is inferred that 1,4-dioxane is not present above the detection limit (approximately 0.04 µg/L).
- Yellow = 1,4-dioxane detected at a concentration below the GW-1 standard of 0.3 µg/L. Laboratory results that are below 0.3 µg/L but above the laboratory reporting limit are quantified results, while results below the laboratory reporting limit and above the method detection limit of 0.04 µg/L are qualified as estimated values (reported with a "J" qualifier).
- Red = 1,4-dioxane detected at or above 0.3 µg/L. All residents in this category have been offered bottled water and have been advised to not use their well water for consumptive purposes.
- White = well water not tested, most likely because homeowners have not been available during scheduled sampling events.

- White with NR = The owners of these properties were contacted by certified mail; however, no response was received or access was not granted.
- White/hatched = no well has been installed on these properties.

Appendix B contains the laboratory reports for samples collected during this report period. As required by 310 CMR 40.1403(10) of the MCP, property owners were notified of the laboratory results for samples collected from their properties. Copies of the homeowner sample result notification letters and BWSC form 123 are included in Appendix C[1].

The following sampling results summarized on Table 2 are noted:

- Water sample results from the Eastham Elementary School (200 Schoolhouse Road) continue to show concentrations of 1,4 dioxane below the laboratory's reporting limit of 0.15 ug/L, and well below the GW-1 drinking water standard of 0.3 ug/L.
- 1,4-Dioxane was not detected above the reporting limit in any of the bottled water samples ("Belmont" and "Poland Water", end of Table 2).
- Water samples were collected from the well at 65 Knowles Avenue on March 27th, since 1,4 dioxane concentrations from July 2013 indicated an estimated "J" value and since this property is adjacent to a well that tested above 0.3 ug/L. The re-test of water from the 65 Knowles Avenue property indicated a 1,4 dioxane concentration of over 5 ug/L, which is approximately 50 times higher than the initial test result from July 2013. The laboratory carefully reviewed the primary and duplicate sample results, and verified that they believe the data to be accurate. ES&M believes these results to be anomalous and not related to 1,4 dioxane associated with the landfill. To better understand this situation, ES&M initiated a focused study of the wells and septic systems at and adjacent to the 65 Knowles Avenue property in June. The preliminary results indicate that 1,4 dioxane is present in the septic water at concentrations significantly higher than in the well water, indicating that consumer products are being used in these homes that contain 1,4 dioxane. The issue of consumer products containing 1,4 dioxane is further discussed in Section 4.1.2 of this report. Full details of the Knowles Avenue study will be included in the next status report.

2.2 Activated Carbon Adsorption Test - Status Update

As described the previous two IRA status reports, an activated carbon system consisting of two carbon vessels and a flow meter was installed at 255 Alston Avenue. Testing of this system has included the collection of influent (untreated), mid-point (between the two carbon vessels) and effluent (after both carbon vessels) samples. During the initial

[1] Although not included in Appendix C, each homeowner received copies of the results from samples collected from their well in addition to a lab report diagram and a 1,4 dioxane information sheet.

phase of the test, samples were collected on a weekly basis so that contaminant "breakthrough" in the first carbon vessel would be detected well before breakthrough in the second vessel. This procedure allowed us to determine that for this residence, the primary adsorber could treat approximately 10,000 to 11,000 gallons of water (about 90 days) before 1,4 dioxane was detected in the mid-point sample above a concentration of 0.3 ug/L. The sampling data collected since November 2013 has shown consistent results; therefore, the ongoing monitoring of this system dictates the collection of water samples every 45 days, and the replacement of the primary adsorber approximately every 90 days[2].

During this report period, three sets of samples were collected. For each sample collection event, the volume of water that was treated was recorded. Water samples were shipped under chain-of-custody to Alpha Analytical for laboratory analysis of 1,4-dioxane by EPA Method 8270. Laboratory reports containing the results from these samples are included in Appendix B.

These test results continue to indicate that coconut-based activated carbon may offer a reliable and consistent means to remove 1,4-dioxane from drinking water.

2.3 Status of Private Well Sampling Program

Since the initiation of Immediate Response Actions in November of 2012, water samples have been collected from approximately 272 private wells around the landfill. Because the sampling program was an iterative process, the sampling events were referred to as Phases 1 through 5. Sampling results from Phase 5, which included properties on the north side of Glacier Hills Road, to the east of Schoolhouse Road (near Chester Avenue) and south of Route 6, show that the extent of 1,4 dioxane emanating from the landfill has been defined. As discussed in Section 4, below, there are many other potential sources of 1,4 dioxane to the drinking water aquifer which are not governed by the ongoing Immediate Response Action. With the completion of the "Phased" sampling program, future private well sampling events will focus on more routine sampling, as outlined in the IRA Plan Modification (ES&M, March 6, 2014).

2.4 MCP Notifications for IRA Status Report Submittal

As required by the MCP, notice of the electronic submittal of this IRA status report to MassDEP is provided to the Town of Eastham Board of Health and Chief Municipal Officer. A copy of the notification letter pertaining to this report is included in Appendix D.

[2] To replace the carbon, the secondary vessel (which has received little, if any influx of 1,4 dioxane) is moved to the primary position, and a new vessel with virgin coconut-based carbon is installed in the secondary position.

3.0 LANDFILL MONITORING PROGRAM ACTIVITIES

The Landfill Monitoring Plan (LMP) was revised in August 2012 to expand the monitoring requirements while discontinuing analysis for some parameters at other locations. A summary of the LMP sampling requirements and schedule are shown on Table 3. The following sections describe sampling and monitoring activities completed during this report period.

3.1 Landfill Monitoring Plan Semi-Annual Sampling

3.1.1 Monitoring Well MW-21S

Groundwater samples have been collected from monitoring well MW 21S semi-annually under the LMP in the past and were due to be collected in May 2014. However, Barnstable County Department of Health and Environment (BCDHE) field personnel have been unable to obtain samples from this well for the past several quarters.

3.1.2 Landfill Soil Gas Monitoring

Personnel from BCDHE conducted semi-annual soil gas monitoring at the Eastham Landfill on June 18, 2014. Six soil gas monitoring points were screened for oxygen (percent), percent methane (reported as % of the lower explosion limit or LEL), hydrogen sulfide (H_2S) in parts per million (ppm), and VOCs (in ppm). The Eastham Landfill Soil Gas report prepared by BCDHE is included in Appendix E and the monitoring results are summarized below:

- Oxygen measurements ranged from 15.7% to 19.2%.
- Methane (% of LEL) both before and after purging was zero at all monitoring points.
- A low concentration of hydrogen sulfide (1 ppm) was detected before purging in GMW-3. Hydrogen sulfide was not detected before or after purging in any other well.
- VOCs were detected at a concentration of 0.1 ppm prior to purging in GMW-2A. VOCs were not detected in any other well before or after purging.

3.2 Landfill Monitoring Plan Quarterly Sampling

3.2.1 Landfill Monitoring Wells

As prescribed by the LMP, quarterly groundwater samples were collected from landfill monitoring wells MW-3I and MW-3D on May 19, 2014. The locations of these wells within the limits of the landfill are shown on Figure 1. Samples were collected by BCDHE personnel and submitted to the Barnstable County Health Laboratory for analysis of VOCs, metals and indicator parameters. The laboratory test results are summarized on Table 4, which includes applicable regulatory standards and/or

guidelines. Field logs are included in Appendix A, and the complete laboratory report from Barnstable County is included in Appendix B.

3.2.2 Private Wells

The LMP includes quarterly sampling of private well water from three homes around the landfill (100 Meetinghouse Road, 180 Old Orchard Road, and 285 Alston Avenue, also shown of Figure 1). Samples were collected from two of these properties on May 6, 2014 (one homeowner did not reply to several attempts to obtain access for sampling). The samples were preserved and submitted to Alpha Analytical in Mansfield, MA, for analysis of VOCs by EPA Method 524.2; 1,4-dioxane by EPA Method 8270 SIM; and arsenic by Method 200.8. The results are also reported on Table 4 and the laboratory reports are included in Appendix B.

4.0 ADDITIONAL RESEARCH AND PROJECT UPDATES

4.1 Background Study

To better understand the occurrence of 1,4 dioxane in groundwater (and consequently in private drinking water wells) in locations not influenced by the landfill, a background study was initiated. The study involved the collection of water samples from private wells located outside of the study area. In addition, a variety of resources were consulted to document the vast array of common consumer products that contain, or may contain 1,4 dioxane.

4.1.1 Private Well Sampling Outside of Study Area

Over the past year, water samples have been collected from 19 homes that are outside of the landfill study area. The locations of these homes are shown on Figure 2, and a list of properties and the laboratory analytical results are shown on Table 5. Drinking water wells which supply these homes with water are not impacted by the landfill because they are well beyond the limits of the study area; therefore, any contaminants detected in samples from these homes are likely related to discharges from septic systems (i.e., there does not appear to be any other plausible sources of contaminants to the groundwater other than private septic systems). Of particular note are the results from the Cedar Lane area, which is very near a salt water inlet. In this area, the fresh water aquifer is relatively thin (compared to areas further inland and away from the salt water). Consequently, there is a much higher likelihood in this area that well water is drawn from the same aquifer zone that septic systems discharge into. As discussed in Section 2.1.2 above, septic water can contain significant concentrations of 1,4 dioxane from common consumer products. The occurrence of 1,4 dioxane in the drinking water sample from the 30 Cedar Lane residence is most certainly related to septic discharge from one of the residences in this neighborhood.

4.1.2 Consumer Products Information

Our previous status reports have discussed the fact that many common consumer products contain 1,4 dioxane. Residents who use such products are discharging 1,4 dioxane to the shallow drinking water aquifer via their septic systems. Once it is in the drinking water aquifer, 1,4 dioxane may be drawn into other shallow drinking water wells and redistributed further in the environment. In an effort to reduce and minimize these sources, ES&M has reviewed a number of literature sources to help residents identify products in their home that may contain significant concentrations of 1,4 dioxane.

The 1,4 dioxane found in most consumer products is not intentionally added; rather, it is a byproduct of the manufacture of certain ingredients. Hence, product labeling information will not specifically identify 1,4 dioxane as being present (or absent). Consumers are generally advised to associate 1,4 dioxane with any of the following ingredients:

- Compounds containing "-eth" such as cateareth, myreth, oleth and laureth (in particular sodium laureth sulfate);
- "PEG" (polyethylene, polyethylene glycol or polyoxyethylene);
- Ingredients containing "oxynol" or "oleth."

These ingredients, and the possible presence of 1,4 dioxane, are most commonly found in dishwashing soap, hand soap, shampoos and conditioners (including products specifically labeled for use on babies and children), body washes, hand and face lotions, sunscreens and deodorants. The internet displays many resources offering more information on this subject, including lists of products that contain (or don't contain) significant levels of 1,4 dioxane. One such source is www.organicconsumers.org, which has reportedly performed laboratory testing of a wide variety of products. ES&M has not independently verified any information published by this group.

4.2 Risk Characterization Review and Update

The Massachusetts Contingency Plan recently underwent significant modifications, and these changes officially took effect on June 20, 2014. Included in these modifications is the formal promulgation of the revised drinking water standard for 1,4 dioxane to 0.3 µg/L. The Town of Eastham and ES&M recognized this change well in advance of this promulgation date and implemented a bottled water action limit of 0.3 µg/L last summer.

In February 2014, the Eastham Board of Health hosted a public forum to update the community on a variety of issues related to the landfill. The forum speakers included personnel from ES&M, Environmental Partners, MassDEP and Boston University School of Public Health. It was stated in this meeting that bathing/showering in water containing 1,4 dioxane at concentrations less than 10 µg/L (maximum concentration detected in the landfill study area) would not result in unacceptable risk (i.e., below MassDEP's benchmark of one in one hundred thousand cancer risk). To further

document this, ES&M has reviewed MassDEP's most recent Shortforms, which are a risk characterization tool designed to quickly calculate cancer and non-cancer risk for a variety of exposure scenarios. In this case, the most up-to-date Shortforms (SF12rw 10-12; Vlookup v0414) were used to calculate risk estimates for ingestion (drinking), inhalation (breathing of vapors that could volatilize from water) and dermal contact (bathing/showering). The completed Shortform, which is contained in Appendix F, estimated a lifetime average cancer risk of 4.2E-7 (i.e., 4.2 additional cancers per 10,000,000) for inhalation and 5.5E-8 (5.5 additional cancers per 100,000,000) for dermal contact at a concentration of 10 µg/L. These estimates are well below the long term target risk level of one in one hundred thousand (1.0E-5). Ingestion of water is the dominant route of exposure, with an estimated lifetime average cancer risk of 1.9E-5 (1.9 additional cancers per 100,000) at 10 µg/L. It is also noted that approximately 85% of the private wells in the study area have measured or estimated 1,4 dioxane concentrations below 0.3 µg/L. At this concentration, the total estimated lifetime cancer risk from all routes of exposure is 5.7E-7, which is well below the MassDEP long-term target risk benchmark.

5.0 FUTURE SCHEDULE OF IRA AND LMP ACTIVITIES

5.1 Immediate Response Action

During the next reporting period from June through August 2014, the following IRA activities are planned:

- Collection of drinking water samples from residences (primarily seasonal) within the study area that have not yet been tested;
- Collection of drinking water samples under the criteria outlined in the IRA Plan Modification;
- Gathering of well construction information for select wells in the study area;
- Review laboratory results to determine if any additional residences meet the bottled water action limit of 0.3 ug/L;
- Prepare sampling results notification packages for all residents whose drinking water is tested during the upcoming report period; and
- Continued collection of influent, mid-point and effluent samples from the activated carbon system at 255 Alston Avenue.

5.2 Landfill Monitoring Plan

- Review the objectives of the LMP and propose revisions to the sampling plan to be consistent with the current status of the IRA. For example, several residences that are sampled routinely are already being provided bottled water; therefore, continued sampling may provide limited beneficial information;
- Collect quarterly groundwater samples from wells MW-3I and MW-3D in August 2014 for analysis of indicator parameters, metals and VOCs including

1,4-dioxane. Collect groundwater samples from well MW-21S, if possible, for analysis of VOCs and 1,4-dioxane.

- Collect quarterly private well samples from the 285 Alston Avenue, 100 Meetinghouse Road and 180 Old Orchard Road residences in August for analysis of VOCs, 1,4-dioxane and arsenic.

6.0 PUBLIC OUTREACH

Our communication plan continues to include the following elements to keep the public informed of all aspects of this project:

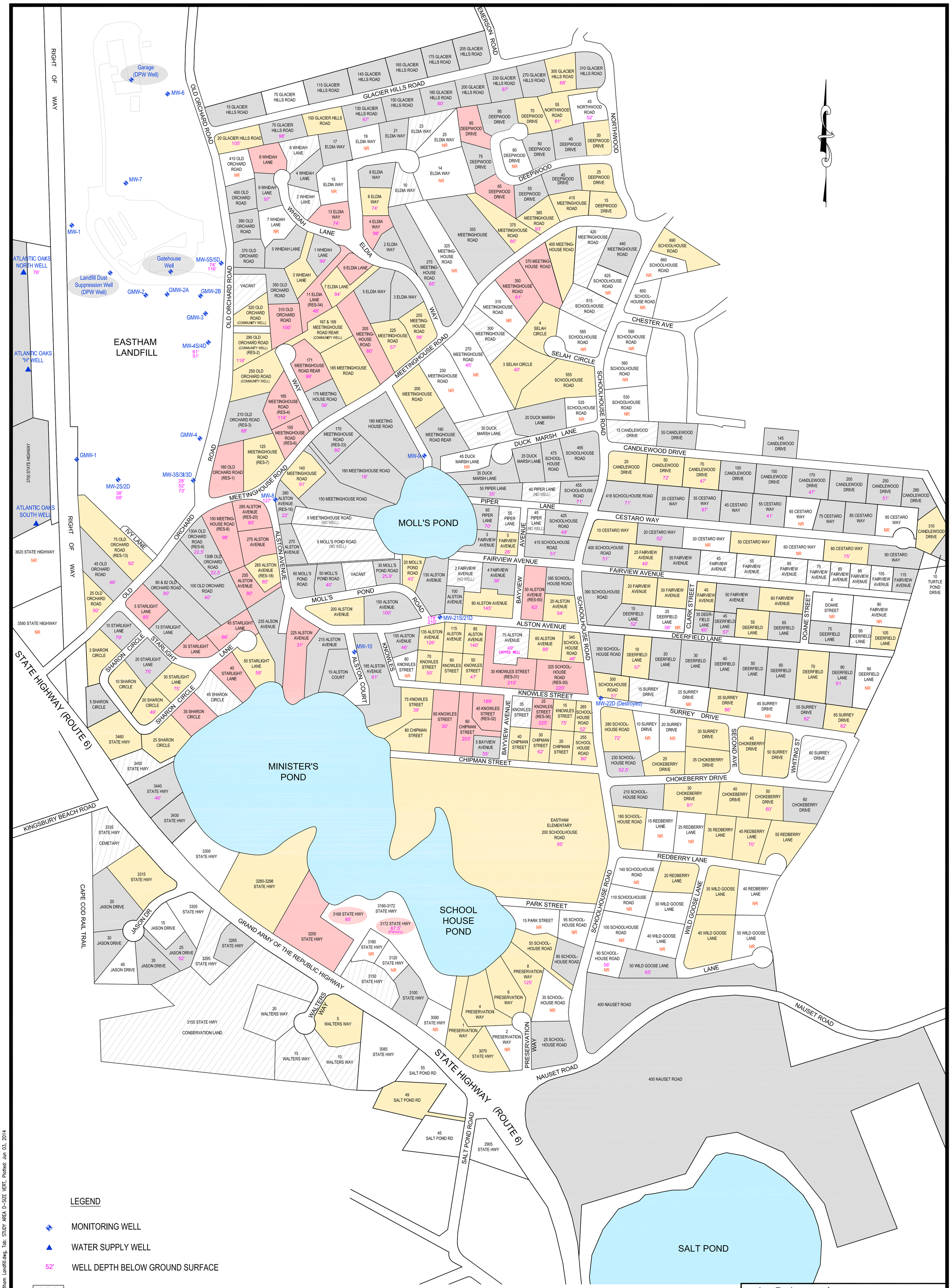
Availability of Reports

All reports required by MassDEP are available on their website (http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301). The Town of Eastham's also posts these reports on their website (http://www.eastham-ma.gov/Public_Documents/EasthamMA_Health/LandfillFolder/). Hard copies of reports are available at Town Hall and at the Eastham Public Library.

Direct Communications
Questions on the ongoing work related to this matter may be directed to:

- Jane Crowley, Health Agent, Eastham Board of Health
  508-240-5900, x229
  jcrowley@eastham-ma.gov
- Doug Heely, Licensed Site Professional, Environmental Strategies & Mgmt.
  508-226-1800
  dheely@esm-inc.com

SITE MAP



LEGEND

- MONITORING WELL
- WATER SUPPLY WELL
- 52' WELL DEPTH BELOW GROUND SURFACE
- VACANT PROPERTY / NO WELL
- 1,4 DIOXANE DETECTED AT OR ABOVE 0.3 ug/L [PROPOSED MCP METHOD 1 GW-1 STANDARD]
- 1,4 DIOXANE DETECTED BELOW 0.3 ug/L
- 1,4 DIOXANE NOT DETECTED
- PROPERTY NOT TESTED

SOURCE: "ENVIRONMENTAL MONITORING LANDFILL MONITORING PLAN" PREPARED FOR EASTHAM LANDFILL, OLD ORCHARD RD, EASTHAM, MA, BY BENNETT ENVIRONMENTAL ASSOCIATES, INC., BREWSTER, MA, DATED 6/17/13.

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GAUGING DATE:	DRAWING DATE:	ACAD FILE:
	06/03/14	EASTHAM LANDFILL

CLIENT:	PM:
TOWN OF EASTHAM	
LOCATION: OLD ORCHARD ROAD, EASTHAM, MASSACHUSETTS	LSP: DH

RTN:	DWG:	PROJECT NO.:	FIGURE:
4-24301	DMR	2013-027	1

C:\Documents and Settings\DRolls\My Documents\ESM\Eastham Landfill\Eastham Landfill.dwg, Tab: STUDY AREA D-SIZE VERT, Plotted: Jun 03, 2014

6

265 NORTH SUNKEN MEADOW ROAD
ND

155 MEADOW DR
ND

60 BISHOP RD
ND

295 MASSASOIT RD
ND

20 GUERRA WAY #42
ND

20 GUERRA WAY #59
0.15J

60 BRIGGS FIELD RD
ND

65 KETTLE HOLE RD
ND

80 KETTLE HOLE RD
ND

1525 NAUSET RD
ND

5 ACORN RD
0.042J

10 BALLWIC RD
ND

APPROXIMATE STUDY AREA

115 KINGSBURY BEACH RD
ND

190 SAMOSET RD
0.048J

1825 BRIDGE RD
ND

6

155 MARY CHASE RD
ND

25 CEDAR LANE
ND

35 CEDAR LANE
ND

20 CEDAR LANE
ND

30 CEDAR LANE
0.289

LEGEND

ADDRESS
0.289

WELL LOCATION

1,4 DIOXANE RESULT IN ug/L
ND = NOT DETECTED

J – RESULT IS LESS THAN THE LABORATORY REPORTING LIMIT BUT GREATER THAN OR EQUAL TO THE METHOD DETECTION LIMIT AND THE CONCENTRATION IS AN APPROXIMATE VALUE

BASE MAP SOURCE: EASTHAM MASSACHUSETTS PUBLIC MAPS ONLINE

0 1200' 2400'
SCALE FEET
APPROXIMATE

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GAUGING DATE:	DRAWING DATE:	ACAD FILE:
	06/18/14	EASTHAM LANDFILL

SAMPLING LOCATIONS
COLLECTED OUTSIDE STUDY AREA

CLIENT:	PM:
TOWN OF EASTHAM	
LOCATION: OLD ORCHARD ROAD EASTHAM, MASSACHUSETTS	LSP: DH

RTN:	DWG:	PROJECT NO.:	FIGURE:
4-24301	DMR	2013-027	2

C:\Documents and Settings\DRolls\My Documents\ESM\Eastham Landfill\Eastham Landfill.dwg, Tab: SAMPLING BEYOND STUDY AREA, Plotted: Jun 18, 2014

TABLE 1
AFFECTED PROPERTIES ELIGIBLE FOR BOTTLED WATER
FOLLOWING ALL PHASED SAMPLING EVENTS
EASTHAM LANDFILL PRIVATE WELL SAMPLING PROGRAM

50 ALSTON AVENUE
225 ALSTON AVENUE
255 ALSTON AVENUE
275 ALSTON AVENUE
285 ALSTON AVENUE
60 CHIPMAN STREET
* 65 DEEPWOOD DRIVE
85 DEEPWOOD DRIVE
* 4 ELDIA WAY
9 ELDIA WAY
11 ELDIA WAY
13 ELDIA WAY
25 KNOWLES STREET
30 KNOWLES STREET (A & B)
45 KNOWLES STREET
* 65 KNOWLES STREET
100 MEETINGHOUSE ROAD (A & B)
155 MEETINGHOUSE ROAD
165 MEETINGHOUSE ROAD
171 MEETINGHOUSE ROAD REAR (A, B & C)
205 MEETINGHOUSE ROAD
350 MEETINGHOUSE ROAD
* 370 MEETINGHOUSE ROAD
180 OLD ORCHARD ROAD
310 OLD ORCHARD ROAD
325 SCHOOLHOUSE ROAD
35 SHARON CIRCLE
5 STARLIGHT LANE
35 STARLIGHT LANE
40 STARLIGHT LANE
45 STARLIGHT LANE
3168 STATE HWY
* 3172 STATE HWY PRIMARY & BACKUP WELL
* 3200 STATE HWY
8 WHIDAH LANE

* Added during this report period.

TABLE 2
SUMMARY OF
PRIVATE WELL SAMPLING PROGRAM
1,4 DIOXANE
Background Samples
Private Drinking Water Wells Residential Properties
Eastham, MA
(All results in ug/l)

Property	Date	Duplicate	1,4 Dioxane
Standards			
RCGW1			0.3
ORSG			0.3
GW1			0.3
Results			
20 ALSTON AVENUE	2/22/2013		0.18J
50 ALSTON AVENUE	4/14/2014		0.218
	4/14/2014	Duplicate	0.210
	9/18/2013		0.37
	7/25/2013		0.18J
	6/27/2013		0.18J
	5/29/2013		0.20
	5/1/2013		0.18J
	3/14/2013		0.20
	3/4/2013		0.23
	3/4/2013		0.23
	2/14/2013		5.1
	2/14/2013	Duplicate	5.0
65 ALSTON AVENUE	3/24/2014		0.0813J
	2/19/2013		0.099J
80 ALSTON AVENUE	3/28/2014		<0.150
	8/27/2013		0.057J
	2/11/2013		< 0.20
85 ALSTON AVENUE	5/5/2014		0.236
	5/5/2014	Duplicate	0.210
	2/12/2013		0.20
100 ALSTON AVENUE	2/11/2013		< 0.20
115 ALSTON AVENUE	7/22/2013		0.12J
130 ALSTON AVENUE	2/19/2013		< 0.20
135 ALSTON AVENUE	2/11/2013		0.11J
150 ALSTON AVENUE	2/15/2013		< 0.20
155 ALSTON AVENUE	2/11/2013		< 0.20
185 ALSTON AVENUE	2/14/2013		< 0.20
200 ALSTON AVENUE	5/9/2014		<0.144
	12/2/2013		0.15J
	5/1/2013		0.21
215 ALSTON AVENUE	2/12/2013		< 0.20
225 ALSTON AVENUE	5/6/2014		0.350
	5/6/2014	Duplicate	0.365
	4/29/2013		1.2
235 ALSTON AVENUE	7/31/2013		< 0.20

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L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard

Report: Drinking Water Dioxane Only
Datebase: Eastham Database

Environmental Strategies & Management

Property	Date	Duplicate	1,4 Dioxane
255 ALSTON AVENUE	8/27/2013		1.8
	5/6/2013		1.8
	5/6/2013	Duplicate	1.5
	2/14/2013		1.9
	2/14/2013	Duplicate	1.8
265 ALSTON AVENUE	3/28/2014		<0.139
	12/18/2013		< 0.20
	3/14/2013		0.055J
270 ALSTON AVENUE	2/11/2013		< 0.20
275 ALSTON AVENUE	5/16/2013		1.3
	5/16/2013	Duplicate	0.99
280 ALSTON AVENUE	12/18/2013		< 0.20
	2/22/2013		< 0.20
285 ALSTON AVENUE	3/14/2014		0.636
	11/20/2013		0.51
	5/8/2013		0.35
	2/22/2013		0.37
	2/22/2013	Duplicate	0.33
10 ALSTON COURT	2/14/2013		< 0.20
ATLANTIC OAKS 'H' WELL	7/25/2013		< 0.20
ATLANTIC OAKS NORTH WELL	7/25/2013		< 0.20
ATLANTIC OAKS-SOUTH WELL	7/23/2013		< 0.20
5 BAYVIEW AVENUE	2/25/2013		< 0.20
20 CANDLEWOOD DRIVE	5/29/2013		0.056J
50 CANDLEWOOD DRIVE	5/3/2013		0.092J
55 CANDLEWOOD DRIVE	7/25/2013		< 0.20
70 CANDLEWOOD DRIVE	5/3/2013		0.073J
100 CANDLEWOOD DRIVE	5/3/2013		< 0.20
145 CANDLEWOOD DRIVE	5/2/2013		< 0.20
150 CANDLEWOOD DRIVE	5/2/2013		< 0.20
170 CANDLEWOOD DRIVE	7/25/2013		< 0.20
200 CANDLEWOOD DRIVE	5/8/2013		< 0.20
250 CANDLEWOOD DRIVE	5/7/2013		< 0.20
280 CANDLEWOOD DRIVE	5/6/2013		< 0.20
310 CANDLEWOOD DRIVE	4/30/2013		0.060J
395 CANDLEWOOD DRIVE	5/8/2013		< 0.20
10 CESTARO WAY	4/30/2013		0.11J
20 CESTARO WAY	5/2/2013		< 0.20
25 CESTARO WAY	12/3/2013		< 0.20
35 CESTARO WAY	4/30/2013		< 0.20
45 CESTARO WAY	5/2/2013		< 0.20
50 CESTARO WAY	5/6/2013		0.077J
55 CESTARO WAY	5/2/2013		< 0.20
75 CESTARO WAY	5/6/2013		< 0.20
80 CESTARO WAY	2/21/2013		0.061J
85 CESTARO WAY	12/3/2013		< 0.20
90 CESTARO WAY	5/2/2013		< 0.20
20 CHIPMAN STREET	7/25/2013		0.041J
30 CHIPMAN STREET	3/27/2014		0.0969J
	2/11/2013		0.14J

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GW-1 Standard

Environmental Strategies & Management

Property	Date	Duplicate	1,4 Dioxane
40 CHIPMAN STREET	7/31/2013		0.046J
60 CHIPMAN STREET	5/8/2014		0.382
	5/8/2014	Duplicate	0.341
	12/6/2013		0.27
	12/6/2013	Duplicate	0.30
	4/30/2013		0.29
80 CHIPMAN STREET	2/15/2013		0.047J
25 CHOKEBERRY DRIVE	12/2/2013		0.15J
30 CHOKEBERRY DRIVE	5/7/2013		0.17J
35 CHOKEBERRY DRIVE	5/3/2013		0.050J
40 CHOKEBERRY DRIVE	5/2/2013		0.069J
45 CHOKEBERRY DRIVE	5/16/2013		0.11J
	5/9/2013		NS
50 CHOKEBERRY DRIVE	5/10/2013		0.058J
60 CHOKEBERRY DRIVE	4/11/2014		<0.142
15 DEEPWOOD DRIVE	9/17/2013		0.051J
25 DEEPWOOD DRIVE	7/30/2013		0.073J
30 DEEPWOOD DRIVE	7/31/2013		0.040J
40 DEEPWOOD DRIVE	7/24/2013		< 0.20
45 DEEPWOOD DRIVE	7/24/2013		< 0.20
50 DEEPWOOD DRIVE	12/3/2013		< 0.20
55 DEEPWOOD DRIVE	7/25/2013		< 0.20
65 DEEPWOOD DRIVE	3/28/2014		0.297
	3/28/2014	Duplicate	0.336
	7/30/2013		0.29
	7/30/2013	Duplicate	0.24
70 DEEPWOOD DRIVE	7/30/2013		0.073J
75 DEEPWOOD DRIVE	7/30/2013		< 0.20
85 DEEPWOOD DRIVE	9/17/2013		0.63
95 DEEPWOOD DRIVE	12/3/2013		< 0.20
10 DEERFIELD LANE	5/1/2013		0.052J
15 DEERFIELD LANE	4/30/2013		< 0.20
20 DEERFIELD LANE	5/8/2013		< 0.20
30 DEERFIELD LANE	7/22/2013		< 0.20
35 DEERFIELD LANE	2/25/2013		< 0.20
40 DEERFIELD LANE	5/1/2013		< 0.20
45 DEERFIELD LANE	5/2/2013		< 0.20
50 DEERFIELD LANE	5/3/2013		< 0.20
55 DEERFIELD LANE	4/29/2013		0.062J
60 DEERFIELD LANE	5/6/2013		< 0.20
65 DEERFIELD LANE	5/6/2013		< 0.20
70 DEERFIELD LANE	5/8/2013		0.048J
75 DEERFIELD LANE	7/25/2013		< 0.20
80 DEERFIELD LANE	5/1/2013		< 0.20
105 DEERFIELD LANE	5/8/2013		0.067J
DPW GARAGE	2/7/2014		< 0.20
DPW NON-POTABLE WELL	2/25/2013		< 0.20
20 DUCKMARSH LANE	4/30/2013		< 0.20
25 DUCKMARSH LANE	5/2/2013		< 0.20
35 DUCK MARSH LANE	12/6/2013		< 0.20

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GW-1 Standard

Environmental Strategies & Management

Property	Date	Duplicate	1,4 Dioxane
2 ELDIA WAY	8/2/2013		< 0.20
3 ELDIA WAY	5/3/2013		< 0.20
4 ELDIA WAY	5/7/2014		0.451
	5/7/2014	Duplicate	0.449
	5/8/2013		0.089J
5 ELDIA WAY	4/30/2013		< 0.20
6 ELDIA WAY	5/9/2014		<0.144
	12/5/2013		0.15J
7 ELDIA WAY	3/24/2014		<0.150
	5/10/2013		0.045J
	5/10/2013		NS
8 ELDIA WAY	12/5/2013		< 0.20
9 ELDIA WAY	5/6/2014		0.309
	5/6/2014	Duplicate	0.284
	12/5/2013		0.31
	12/5/2013	Duplicate	0.27
	5/2/2013		0.25
11 ELDIA WAY	5/7/2014		3.58
	5/7/2014	Duplicate	3.61
	9/17/2013		3.7
	7/25/2013		3.0
	6/27/2013		4.3
	6/27/2013	Duplicate	3.4
	5/29/2013		4.3
	5/29/2013	Duplicate	3.9B
	4/29/2013		4.2
	4/29/2013	Duplicate	3.3
	3/14/2013		2.9
	3/14/2013	Duplicate	3.1
13 ELDIA WAY	5/9/2014		0.660
	5/9/2014	Duplicate	0.659
	7/24/2013		0.33
17 ELDIA WAY	5/6/2013		< 0.20
21 ELDIA WAY	12/5/2013		< 0.20
3 FAIRVIEW AVENUE	5/10/2013		< 0.20
4 FAIRVIEW AVENUE	4/29/2013		< 0.20
5 FAIRVIEW AVENUE	5/8/2014		<0.144
	2/14/2013		0.047J
20 FAIRVIEW AVENUE	5/7/2013		0.093J
25 FAIRVIEW AVENUE	5/7/2013		0.041J
30 FAIRVIEW AVENUE	12/3/2013		0.063J
35 FAIRVIEW AVENUE	5/2/2013		< 0.20
40 FAIRVIEW AVENUE	5/16/2013		0.065J
	5/9/2013		NS
50 FAIRVIEW AVENUE	5/2/2013		< 0.20
60 FAIRVIEW AVENUE	5/1/2013		0.041J
115 FAIRVIEW AVENUE	7/22/2013		< 0.20
GATEHOUSE AT TRANSFER STATION	2/11/2014		< 0.20
15 GLACIER HILLS ROAD	3/13/2014		<0.139

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Environmental Strategies & Management

Property	Date	Duplicate	1,4 Dioxane
20 GLACIER HILLS ROAD	5/6/2014		<0.144
	2/22/2013		0.071J
70 GLACIER HILLS ROAD	7/22/2013		< 0.20
100 GLACIER HILLS ROAD	5/8/2013		0.058J
115 GLACIER HILLS ROAD	4/14/2014		<0.144
130 GLACIER HILLS ROAD	7/23/2013		< 0.20
145 GLACIER HILLS ROAD	4/14/2014		<0.144
150 GLACIER HILLS ROAD	7/24/2013		< 0.20
165 GLACIER HILLS ROAD	3/13/2014		<0.139
175 GLACIER HILLS ROAD	3/14/2014		<0.139
180 GLACIER HILLS ROAD	8/2/2013		< 0.20
200 GLACIER HILLS ROAD	7/31/2013		< 0.20
205 GLACIER HILLS ROAD	3/14/2014		<0.139
230 GLACIER HILLS ROAD	7/25/2013		< 0.20
270 GLACIER HILLS ROAD	3/11/2014		<0.150
300 GLACIER HILLS ROAD	7/31/2013		0.077J
310 GLACIER HILLS ROAD	7/25/2013		< 0.20
20 JASON DRIVE	3/12/2014		<0.150
25 JASON DRIVE	4/14/2014		<0.147
30 JASON DRIVE	3/10/2014		<0.147
15 KNOWLES STREET	4/26/2013		0.078J
25 KNOWLES STREET	5/8/2014		3.72
	5/8/2014	Duplicate	3.58
	9/18/2013		4.3
	8/27/2013		3.2
	7/25/2013		2.8
	6/27/2013		2.8
	6/27/2013	Duplicate	3.0
	5/29/2013		2.7
	5/29/2013	Duplicate	2.8B
	4/26/2013		2.8
	4/26/2013	Duplicate	2.6
	2/21/2013		3.1
	2/21/2013	Duplicate	2.9
30 KNOWLES STREET	5/6/2014		4.79
	5/6/2014	Duplicate	4.92
	9/17/2013		5.4
	8/28/2013		5.6
	7/30/2013		5.1
	7/30/2013	Duplicate	5.1
	6/27/2013		5.0
	6/27/2013	Duplicate	5.1
	5/29/2013		4.9
	5/29/2013	Duplicate	5.9B
	4/29/2013		6.0
	4/29/2013	Duplicate	5.2
	2/19/2013		6.9
	2/19/2013	Duplicate	6.4

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GW-1 Standard

Environmental Strategies & Management

Property	Date	Duplicate	1,4 Dioxane
45 KNOWLES STREET	5/6/2014		2.22
	5/6/2014	Duplicate	2.38
	8/28/2013		2.0
	5/1/2013		2.3
	5/1/2013	Duplicate	2.4
50 KNOWLES STREET	4/14/2014		<0.144
	2/19/2013		0.26
	2/19/2013	Duplicate	0.23
60 KNOWLES STREET	12/4/2013		0.049J
	2/21/2013		0.063J
65 KNOWLES STREET	3/27/2014		5.03
	3/27/2014	Duplicate	5.42
	7/23/2013		0.11J
70 KNOWLES STREET	2/20/2013		0.057J
75 KNOWLES STREET	5/8/2014		<0.144
	4/30/2013		0.075J
171 MEETINGHOUSE ROAD REAR	5/1/2013		0.58
190 MEETINGHOUSE ROAD REAR	5/9/2014		<0.142
100 MEETINGHOUSE ROAD	5/6/2014		1.90
	3/14/2014		1.73
	11/20/2013		1.3
	8/27/2013		1.9
	5/8/2013		1.8
	5/8/2013	Duplicate	1.7
	2/14/2013		1.6
	2/14/2013	Duplicate	1.5
125 MEETINGHOUSE ROAD	5/8/2013		0.15J
140 MEETINGHOUSE ROAD	3/24/2014		<0.150
	5/10/2013		0.11J
150 MEETINGHOUSE ROAD	2/22/2013		< 0.20
155 MEETINGHOUSE ROAD	7/31/2013		0.46
	7/31/2013	Duplicate	0.35
160 MEETINGHOUSE ROAD	2/12/2013		< 0.20
165 MEETINGHOUSE ROAD	5/9/2014		0.746
	5/9/2014	Duplicate	0.748
	2/15/2013		0.75
	2/15/2013	Duplicate	0.67
170 MEETINGHOUSE ROAD	2/15/2013		< 0.20
175 MEETINGHOUSE ROAD	5/2/2013		< 0.20
180 MEETINGHOUSE ROAD	5/1/2013		< 0.20
185 MEETINGHOUSE ROAD	3/27/2014		<0.139
	4/30/2013		0.081J
200 MEETINGHOUSE ROAD	5/3/2013		0.093J
205 MEETINGHOUSE ROAD	5/5/2014		0.310
	5/5/2014	Duplicate	0.319
	12/3/2013		0.30
	12/3/2013	Duplicate	0.26
225 MEETINGHOUSE ROAD	5/9/2014		0.196
	5/9/2014	Duplicate	0.178
	5/10/2013		0.13J

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Environmental Strategies & Management

Property	Date	Duplicate	1,4 Dioxane
255 MEETINGHOUSE ROAD	4/26/2013		0.065J
275 MEETINGHOUSE ROAD	7/23/2013		< 0.20
350 MEETINGHOUSE ROAD	5/5/2014		1.23
	5/5/2014	Duplicate	1.24
	7/25/2013		1.3
	7/25/2013	Duplicate	1.2
355 MEETINGHOUSE ROAD	12/5/2013		< 0.20
370 MEETINGHOUSE ROAD	5/8/2014		0.339
	5/8/2014	Duplicate	0.316
	4/30/2013		0.19J
375 MEETINGHOUSE ROAD	3/24/2014		0.175
	3/24/2014	Duplicate	0.156
	8/2/2013		0.19J
385 MEETINGHOUSE ROAD	7/24/2013		0.040J
400 MEETINGHOUSE ROAD	7/24/2013		0.12J
415 MEETINGHOUSE ROAD	12/3/2013		0.14J
440 MEETINGHOUSE ROAD	7/31/2013		< 0.20
20 MOLLS POND ROAD	2/19/2013		0.050J
30 MOLLS POND ROAD	2/15/2013		< 0.20
50 MOLLS POND ROAD	2/11/2013		< 0.20
60 MOLLS POND ROAD	2/11/2013		< 0.20
400 NAUSET ROAD	12/2/2013		< 0.20
55 NORTHWOOD ROAD	8/2/2013		0.15J
25 OLD ORCHARD ROAD	5/6/2013		0.064J
45 OLD ORCHARD ROAD	2/22/2013		< 0.20
75 OLD ORCHARD ROAD	2/21/2013		0.17J
80 OLD ORCHARD ROAD	2/12/2013		< 0.20
100 OLD ORCHARD ROAD	2/12/2013		< 0.20
130A OLD ORCHARD ROAD	12/18/2013		< 0.20
	2/25/2013		< 0.20
130B OLD ORCHARD ROAD	12/18/2013		< 0.20
	2/25/2013		< 0.20
180 OLD ORCHARD ROAD	5/6/2014		0.527
	3/14/2014		0.0953J
	11/20/2013		0.17J
	8/28/2013		0.46
	6/27/2013		0.45
	5/8/2013		0.52
	2/22/2013		0.045J
210 OLD ORCHARD ROAD	12/18/2013		< 0.20
	2/15/2013		< 0.20
290 OLD ORCHARD ROAD	5/16/2013		0.068J
	5/9/2013		NS
	2/15/2013		< 0.20
310 OLD ORCHARD ROAD	5/6/2014		0.431
	5/6/2014	Duplicate	0.433
	4/29/2013		0.41
350 OLD ORCHARD ROAD	5/3/2013		< 0.20
370 OLD ORCHARD ROAD	5/2/2013		< 0.20
390 OLD ORCHARD ROAD	5/7/2013		< 0.20

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Environmental Strategies & Management

Property		Date	Duplicate	1,4 Dioxane
400 OLD ORCHARD ROAD		5/7/2013		< 0.20
50 PIPER LANE		2/20/2013		< 0.20
65 PIPER LANE		7/31/2013		< 0.20
1 PRESERVATION WAY		12/2/2013		0.19J
4 PRESERVATION WAY		3/25/2014		0.208
		3/25/2014	Duplicate	0.196
		12/3/2013		0.18J
		4/30/2013		0.21
6 PRESERVATION WAY		12/2/2013		0.11J
8 PRESERVATION WAY		12/2/2013		0.13J
20 REDBERRY LANE		7/23/2013		0.046J
35 REDBERRY LANE		12/2/2013		0.070J
45 REDBERRY LANE		3/28/2014		0.105J
55 REDBERRY LANE		7/22/2013		0.047J
49 SALT POND ROAD		3/11/2014		0.177
		3/11/2014	Duplicate	0.166
25 SCHOOLHOUSE ROAD		3/10/2014		<0.150
55 SCHOOLHOUSE ROAD		12/4/2013		0.044J
85 SCHOOLHOUSE ROAD		12/5/2013		< 0.20
180 SCHOOLHOUSE ROAD		7/23/2013		0.093J
200 SCHOOLHOUSE ROAD	PRE (filter)	5/6/2014		0.105J
	POST (filter)	2/14/2014		0.094 J
	PRE (filter)	2/14/2014		0.083 J
	PRE (filter)	2/14/2014	Duplicate	0.076 J
	PRE (filter)	2/11/2014		0.081 J
	POST (filter)	2/11/2014		0.096 J
	PRE (filter)	2/11/2014	Duplicate	0.086 J
		2/12/2013		< 0.20
210 SCHOOLHOUSE ROAD		5/6/2013		< 0.20
230 SCHOOLHOUSE ROAD		5/8/2013		< 0.20
255 SCHOOLHOUSE ROAD		7/22/2013		0.055J
265 SCHOOLHOUSE ROAD		2/21/2013		0.053J
280 SCHOOLHOUSE ROAD		2/22/2013		0.071J
300 SCHOOLHOUSE ROAD		5/7/2014		0.168
		5/7/2014	Duplicate	0.177
		2/19/2013		0.14J

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Environmental Strategies & Management

Property		Date	Duplicate	1,4 Dioxane
325 SCHOOLHOUSE ROAD	Untreated	9/19/2013		10
	Mid System	9/19/2013		0.095J
	Effluent	9/19/2013		0.68
	Mid System	8/27/2013		< 0.20
	Effluent	8/27/2013		< 0.20
	Untreated	8/27/2013		7.7
	Effluent	7/31/2013		< 0.20
	Mid System	7/31/2013		< 0.20
	Untreated	7/31/2013		9.4
	Untreated	7/31/2013	Duplicate	8.8
	Untreated	6/27/2013		8.2
	Mid System	6/27/2013		0.041J
	Effluent	6/27/2013		< 0.20
	Untreated	6/27/2013	Duplicate	8.8
	Effluent	5/29/2013		< 0.20
	Untreated	5/29/2013		7.8
	Mid System	5/29/2013		< 0.20
	Untreated	5/29/2013	Duplicate	9.8B
	Mid System	4/29/2013		< 0.20
	Effluent	4/29/2013		< 0.20
	Untreated	4/29/2013		9.8
	Untreated	4/29/2013	Duplicate	8.3
	Mid System	3/21/2013		< 0.20
	Effluent	3/21/2013		< 0.20
	Mid System	3/14/2013		< 0.20
	Effluent	3/14/2013		< 0.20
	Mid System	3/8/2013		< 0.20
	Effluent	3/8/2013		< 0.20
	Effluent	2/25/2013		< 0.20
	Mid System	2/25/2013		< 0.20
	Untreated	2/22/2013		10
	Untreated	2/22/2013	Duplicate	9.7
345 SCHOOLHOUSE ROAD		5/7/2014		<0.153
		2/12/2013		0.12J
350 SCHOOLHOUSE ROAD		8/2/2013		< 0.20
390 SCHOOLHOUSE ROAD		5/7/2013		< 0.20
395 SCHOOLHOUSE ROAD		9/19/2013		< 0.20
400 SCHOOLHOUSE ROAD		5/16/2013		< 0.20
		5/9/2013		NS
415 SCHOOLHOUSE ROAD		2/25/2013		< 0.20
418 SCHOOLHOUSE ROAD		5/2/2013		< 0.20
425 SCHOOLHOUSE ROAD		2/25/2013		< 0.20
455 SCHOOLHOUSE ROAD		5/6/2013		< 0.20
475 SCHOOLHOUSE ROAD		12/6/2013		< 0.20
495 SCHOOLHOUSE ROAD		12/6/2013		< 0.20
555 SCHOOLHOUSE ROAD		5/29/2013		0.048J
		5/9/2013		NS

Notes:
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard

Environmental Strategies & Management

Property	Date	Duplicate	1,4 Dioxane
690 SCHOOLHOUSE ROAD	3/11/2014		0.105J
3 SELAH CIRCLE	4/30/2013		0.072J
4 SELAH CIRCLE	5/6/2014		<0.143
	9/18/2013		0.065J
3 SHARON CIRCLE	7/31/2013		0.064J
5 SHARON CIRCLE	5/3/2013		< 0.20
10 SHARON CIRCLE	5/16/2013		0.088J
	5/9/2013		NS
20 SHARON CIRCLE	3/24/2014		0.104J
	4/30/2013		0.10J
25 SHARON CIRCLE	9/19/2013		< 0.20
35 SHARON CIRCLE	5/1/2013		0.34
21 SMITH LANE	5/9/2013		NS
5 STARLIGHT LANE	5/5/2014		0.394
	5/5/2014	Duplicate	0.362
	2/21/2013		0.37
	2/21/2013	Duplicate	0.37
10 STARLIGHT LANE	5/10/2013		< 0.20
13 STARLIGHT LANE	5/10/2013		< 0.20
20 STARLIGHT LANE	5/7/2013		< 0.20
30 STARLIGHT LANE	3/25/2014		0.278
	3/25/2014	Duplicate	0.249
	12/4/2013		0.22
	12/4/2013	Duplicate	0.17J
	5/3/2013		0.21
35 STARLIGHT LANE	12/4/2013		0.37
	12/4/2013	Duplicate	0.30
	2/15/2013		0.26
40 STARLIGHT LANE	7/23/2013		0.83
45 STARLIGHT LANE	2/12/2013		1.1
	2/12/2013	Duplicate	0.93
50 STARLIGHT LANE	3/27/2014		<0.139
	7/31/2013		0.13J
3070 STATE HWY	12/6/2013		0.18J
3100 A STATE HWY	3/13/2014		<0.139
3168 STATE HWY	5/5/2014		0.334
	5/5/2014	Duplicate	0.350
	12/6/2013		0.33
	12/6/2013	Duplicate	0.27
3172 STATE HWY BACKUP WELL	3/25/2014		0.335
	3/25/2014	Duplicate	0.338
3172 STATE HWY PRIMARY WELL	3/25/2014		0.326
	3/25/2014	Duplicate	0.306
	12/6/2013		0.20
	12/6/2013	Duplicate	0.21
3200 STATE HWY	5/8/2014		0.424
	5/8/2014	Duplicate	0.418
	12/6/2013		0.31
	12/6/2013	Duplicate	0.32
3265 STATE HWY	3/10/2014		<0.147

Notes:
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GW-1 Standard

Environmental Strategies & Management

Property	Date	Duplicate	1,4 Dioxane
3280 STATE HWY	4/14/2014		0.248
	4/14/2014	Duplicate	0.198
3315 STATE HWY	3/12/2014		0.232
	3/12/2014	Duplicate	0.194
3430 STATE HWY	12/2/2013		< 0.20
3440 STATE HWY	4/11/2014		<0.142
3460 STATE HWY	12/6/2013		0.14J
	4/30/2013		0.10J
30 SURREY DRIVE	9/17/2013		0.14J
35 SURREY DRIVE	7/31/2013		0.070J
50 SURREY DRIVE	4/30/2013		0.058J
55 SURREY DRIVE	5/1/2013		< 0.20
65 SURREY DRIVE	7/22/2013		0.047J
10 TURTLE POND ROAD	5/10/2013		< 0.20
5 WALTERS WAY	4/11/2014		0.147
	4/11/2014	Duplicate	<0.144
1 WHIDAH LANE	4/29/2013		< 0.20
3 WHIDAH LANE	5/5/2014		<0.144
	5/16/2013		0.071J
	5/9/2013		NS
4 WHIDAH LANE	7/24/2013		< 0.20
5 WHIDAH LANE	7/30/2013		< 0.20
8 WHIDAH LANE	9/19/2013		0.57
9 WHIDAH LANE	5/7/2013		< 0.20
35 WILD GOOSE LANE	12/6/2013		0.081J
45 WILD GOOSE LANE	12/3/2013		0.058J
50 WILD GOOSE LANE	12/4/2013		< 0.20
BELMONT EES WATER #1	3/10/2014		<0.153
BELMONT EES WATER #2	3/10/2014		<0.156
POLAND WATER	3/14/2014		<0.147

Notes:
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B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard

Environmental Strategies & Management

TABLE 3
SUMMARY OF
EASTHAM LANDFILL MONITORING PLAN REQUIREMENTS

Monitoring Type	RES #	Frequency	Schedule	VOCs & 1,4-Dioxane	Inorganics	Arsenic Only	Indicators	Methane, VOCs, O2 & H2S
Monitoring Wells								
MW-3I/3D		Quarterly	Feb/May/Aug/Nov	x	x		x	
MW-21S		Semi-Annually	May/Nov	x				
MW-2S, 4S & 5S		Annually	December	x	x		x	
MW-8, DPW Well		Annually	December	x				
Residential Wells								
285 Alston	RES-20	Quarterly	Feb/May/Aug/Nov	x		x		
100 Meetinghouse	RES-8	Quarterly	Feb/May/Aug/Nov	x		x		
180 Old Orchard	RES-1	Quarterly	Feb/May/Aug/Nov	x		x		
325 Schoolhouse	RES-30	Semi-Annually	May/Nov	x				
50 Alston	RES-35	Annually	February	x				
265 Alston	RES-18	Annually	February	x	x			
280 Alston	RES-16	Annually	February	x	x			
11 Eldia	RES-34	Annually	February	x				
25 Knowles	RES-36	Annually	February	x				
30 Knowles	RES-31	Annually	February	x				
45 Knowles	RES-32	Annually	February	x				
125 Meetinghouse	RES-7	Annually	February	x	x			
155 Meetinghouse	RES-6	Annually	February	x	x			
165 Meetinghouse	RES-4	Annually	February	x	x			
170 Meetinghouse	RES-33	Annually	February	x				
75 Old Orchard	RES-13	Annually	February	x	x			
130 Old Orchard	RES-9	Annually	February	x	x			
290 Old Orchard	RES-2	Annually	February	x	x			
210 Old Orchard	RES-3	Annually	February	x	x			
Landfill Gas Wells								
GMW-1, 2, 2A, 2B, 3 & 4		Semi-Annually	May/Nov					x

TABLE 4.1.1
SECTION 1
SUMMARY OF
ANALYTICAL RESULTS
Volatile Organic Compounds

Eastham Landfill Monitoring Wells and Private Drinking Wells
Eastham, MA
(All results in ug/l)

Property	LMP Sample Frequency	Date	1,4-Dioxane *	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dichlorobenzene
Standards																
ORSG			0.3	NA	NA	NA	NA	70	NA	NA	NA	NA	NA	NA	NA	NA
MMCL			NA	NA	200	NA	5	NA	7	NA	NA	NA	70	NA	0.2	600
GW1			0.3*	5	200	2	5	70	7	NA	NA	NA	70	NA	NA	600
Results																
DPW Garage Well		2/7/2014	< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Gatehouse Well		2/11/2014	< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Landfill Non-potable Well	Annual	2/25/2013	<0.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/7/2012	<2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 21D		2/25/2013	< 50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0
MW 21S	Semi-Annual	5/16/2013	< 50	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0
		12/7/2012	<2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 2D		2/14/2013	0.14 J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 2S	Annual	12/18/2013	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		2/14/2013	0.47	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		7/10/2012	<500	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 3D	Quarterly	5/19/2014	13	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0
		2/27/2014	12	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0
		11/25/2013	16	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		9/5/2013	<500	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		5/8/2013	17	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		2/14/2013	<500	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		12/6/2012	<2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		10/9/2012	18	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		7/10/2012	<500	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		3/20/2012	<500	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 3I	Quarterly	5/19/2014	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0
		2/27/2014	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0
		11/25/2013	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		9/5/2013	<500	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		5/8/2013	<2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		2/14/2013	< 0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/14/2013	<500	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		12/6/2012	<2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		10/9/2012	<2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		7/10/2012	<500	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		3/20/2012	<500	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 3S		2/14/2013	< 0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 4D		2/14/2013	< 0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 4S	Annual	12/18/2013	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		2/14/2013	1.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	<2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		7/10/2012	<500	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 5D		2/14/2013	< 0.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Proposed GW1 Standard

Environmental Strategies & Management

Property	LMP Sample Frequency	Date		1,4-Dioxane *	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dichlorobenzene
MW 5D		12/5/2012		<2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 5S	Annual	12/18/2013		< 2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		2/14/2013		1.2	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/5/2012		<2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		7/10/2012		<500	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 8	Annual	12/18/2013		< 2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		3/14/2013		0.33	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/7/2012		<2.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
50 ALSTON AVENUE	Annual	9/18/2013		0.37	< 0.50	< 0.50	< 0.50	< 0.50	0.17J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		7/25/2013		0.18J	< 0.50	< 0.50	< 0.50	< 0.50	0.30J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013		0.18J	< 0.50	< 0.50	< 0.50	< 0.50	0.24J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/29/2013		0.20	< 0.50	< 0.50	< 0.50	< 0.50	0.25J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/1/2013		0.18J	< 0.50	< 0.50	< 0.50	< 0.50	0.28J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/14/2013		0.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/4/2013		0.23	< 0.50	< 0.50	< 0.50	< 0.50	0.25J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/4/2013		0.23	< 0.50	< 0.50	< 0.50	< 0.50	0.27J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/14/2013		5.1	< 0.50	< 0.50	< 0.50	< 0.50	0.24J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/14/2013	Duplicate	5.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/7/2012		<2.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
265 ALSTON AVENUE	Annual	12/18/2013		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/14/2013		0.055J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		<2.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		NS	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
275 ALSTON AVENUE		5/16/2013		1.3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/16/2013	Duplicate	0.99	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		12/6/2012		<2.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
280 ALSTON AVENUE	Annual	12/18/2013		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/22/2013		< 0.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		<2.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		NS	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
285 ALSTON AVENUE	Quarterly	3/14/2014		0.636	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		11/20/2013		0.51	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/8/2013		0.35	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/22/2013		0.37	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/22/2013	Duplicate	0.33	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		12/6/2012		<2.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
11 ELDIA WAY	Annual	9/17/2013		3.7	< 0.50	< 0.50	< 0.50	< 0.50	0.17J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		7/25/2013		3.0	< 0.50	< 0.50	< 0.50	< 0.50	0.19J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013		4.3	< 0.50	< 0.50	< 0.50	< 0.50	0.22J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013	Duplicate	3.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/29/2013		4.3	< 0.50	< 0.50	< 0.50	< 0.50	0.20J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/29/2013	Duplicate	3.9B	< 0.50	< 0.50	< 0.50	< 0.50	0.20J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/29/2013		4.2	< 0.50	< 0.50	< 0.50	< 0.50	0.20J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/29/2013	Duplicate	3.3	< 0.50	< 0.50	< 0.50	< 0.50	0.19J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/14/2013		2.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/14/2013	Duplicate	3.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		<2.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
25 KNOWLES STREET	Annual	9/18/2013		4.3	< 0.50	< 0.50	< 0.50	< 0.50	0.22J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		8/27/2013		3.2	< 0.50	< 0.50	< 0.50	< 0.50	0.24J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		7/25/2013		2.8	< 0.50	< 0.50	< 0.50	< 0.50	0.25J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013		2.8	< 0.50	< 0.50	< 0.50	< 0.50	0.21J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013	Duplicate	3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/29/2013		2.7	< 0.50	< 0.50	< 0.50	< 0.50	0.20J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/29/2013	Duplicate	2.8B	< 0.50	< 0.50	< 0.50	< 0.50	0.21J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/26/2013		2.8	< 0.50	< 0.50	< 0.50	< 0.50	0.22J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/26/2013	Duplicate	2.6	< 0.50	< 0.50	< 0.50	< 0.50	0.21J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/21/2013		3.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/21/2013	Duplicate	2.9	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
30 KNOWLES STREET	Annual	9/17/2013		5.4	< 0.50	< 0.50	< 0.50	< 0.50	0.27J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		8/28/2013		5.6	< 0.50	< 0.50	< 0.50	< 0.50	0.32J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		7/30/2013		5.1	< 0.50	< 0.50	< 0.50	< 0.50	0.32J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		7/30/2013	Duplicate	5.1	< 0.50	< 0.50	< 0.50	< 0.50	0.32J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013		5.0	< 0.50	< 0.50	< 0.50	< 0.50	0.35J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013	Duplicate	5.1	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Proposed GW1 Standard

Environmental Strategies & Management

Property	LMP Sample Frequency	Date		1,4-Dioxane *	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dichlorobenzene
30 KNOWLES STREET	Annual	5/29/2013		4.9	< 0.50	< 0.50	< 0.50	< 0.50	0.37J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/29/2013	Duplicate	5.9B	< 0.50	< 0.50	< 0.50	< 0.50	0.36J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/29/2013		6.0	< 0.50	< 0.50	< 0.50	< 0.50	0.36J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/29/2013	Duplicate	5.2	< 0.50	< 0.50	< 0.50	< 0.50	0.36J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/19/2013		6.9	< 0.50	< 0.50	< 0.50	< 0.50	0.41J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/19/2013	Duplicate	6.4	< 0.50	< 0.50	< 0.50	< 0.50	0.40J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
45 KNOWLES STREET	Annual	8/28/2013		2.0	< 0.50	< 0.50	< 0.50	< 0.50	0.19J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/1/2013		2.3	< 0.50	< 0.50	< 0.50	< 0.50	0.23J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/1/2013	Duplicate	2.4	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
100 MEETINGHOUSE ROAD	Quarterly	5/6/2014		1.90	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/14/2014		1.73	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		11/20/2013		1.3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		8/27/2013		1.9	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/8/2013		1.8	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/8/2013	Duplicate	1.7	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/14/2013		1.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/14/2013	Duplicate	1.5	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		<2.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		9/27/2012		NS	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		NS	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/23/2012		NS	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
125 MEETINGHOUSE ROAD	Annual	5/8/2013		0.15J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		NS	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
155 MEETINGHOUSE ROAD	Annual	7/31/2013		0.46	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		7/31/2013	Duplicate	0.35	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
165 MEETINGHOUSE ROAD	Annual	2/15/2013		0.75	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/15/2013	Duplicate	0.67	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		<2.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
170 MEETINGHOUSE ROAD	Annual	2/15/2013		< 0.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/8/2012		<2.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
75 OLD ORCHARD ROAD	Annual	2/21/2013		0.17J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		<2.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		NS	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
80 OLD ORCHARD ROAD		2/12/2013		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		12/6/2012		<2.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
100 OLD ORCHARD ROAD		2/12/2013		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		12/6/2012		<2.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
130 OLD ORCHARD ROAD	Annual	12/6/2012		<2.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		NS	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
130A OLD ORCHARD ROAD	Annual	12/18/2013		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/25/2013		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
130B OLD ORCHARD ROAD	Annual	12/18/2013		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/25/2013		< 0.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
180 OLD ORCHARD ROAD	Quarterly	5/6/2014		0.527	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/14/2014		0.0953J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		11/20/2013		0.17J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		8/28/2013		0.46	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013		0.45	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/8/2013		0.52	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/22/2013		0.045J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		12/6/2012		<2.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		9/27/2012		NS	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		NS	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/23/2012		NS	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
210 OLD ORCHARD ROAD	Annual	12/18/2013		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/15/2013		< 0.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		<2.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		NS	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
290 OLD ORCHARD ROAD	Annual	5/16/2013		0.068J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/9/2013		NS	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Notes:
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Proposed GW1 Standard

Environmental Strategies & Management

Property	LMP Sample Frequency	Date			1,4-Dioxane *	1,1,1,2-Tetrachloroethane	1,1,1-Trichloroethane	1,1,2,2-Tetrachloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,1-Dichloropropene	1,2,3-Trichlorobenzene	1,2,3-Trichloropropane	1,2,4-Trichlorobenzene	1,2,4-Trimethylbenzene	1,2-Dibromo-3-Chloropropane	1,2-Dichlorobenzene
290 OLD ORCHARD ROAD	Annual	2/15/2013			< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012			NS	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
325 SCHOOLHOUSE ROAD	Semi-Annual	9/19/2013	Untreated		10	< 0.50	< 0.50	< 0.50	< 0.50	0.41J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		9/19/2013	Mid System		0.095J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		9/19/2013	Effluent		0.68	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		8/27/2013	Untreated		7.7	< 0.50	< 0.50	< 0.50	< 0.50	0.37J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		8/27/2013	Mid System		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		8/27/2013	Effluent		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		7/31/2013	Untreated		9.4	< 0.50	< 0.50	< 0.50	< 0.50	0.35J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		7/31/2013	Untreated	Duplicate	8.8	< 0.50	< 0.50	< 0.50	< 0.50	0.38J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		7/31/2013	Mid System		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		7/31/2013	Effluent		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013	Untreated		8.2	< 0.50	< 0.50	< 0.50	< 0.50	0.41J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013	Untreated	Duplicate	8.8	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		6/27/2013	Mid System		0.041J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013	Effluent		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/29/2013	Untreated		7.8	< 0.50	< 0.50	< 0.50	< 0.50	0.44J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/29/2013	Untreated	Duplicate	9.8B	< 0.50	< 0.50	< 0.50	< 0.50	0.41J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/29/2013	Mid System		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/29/2013	Effluent		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/29/2013	Untreated		9.8	< 0.50	< 0.50	< 0.50	< 0.50	0.36J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/29/2013	Untreated	Duplicate	8.3	< 0.50	< 0.50	< 0.50	< 0.50	0.37J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/29/2013	Mid System		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/29/2013	Effluent		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/21/2013	Mid System		< 0.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/21/2013	Effluent		< 0.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/14/2013	Mid System		< 0.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/14/2013	Effluent		< 0.20	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/8/2013	Mid System		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/8/2013	Effluent		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/25/2013	Mid System		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/25/2013	Effluent		< 0.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/22/2013	Untreated		10	< 0.50	< 0.50	< 0.50	< 0.50	0.49J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/22/2013	Untreated	Duplicate	9.7	< 0.50	< 0.50	< 0.50	< 0.50	0.49J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		12/7/2012	Untreated		<2.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Notes:
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Proposed GW1 Standard

Environmental Strategies & Management

TABLE 4.1.2
SECTION 2
SUMMARY OF
ANALYTICAL RESULTS
Volatile Organic Compounds

Eastham Landfill Monitoring Wells and Private Drinking Wells
Eastham, MA
(All results in ug/l)

Property	LMP Sample Frequency	Date	1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	4-Chlorotoluene	4-Isopropyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromobenzene	Bromochloromethane
Standards																		
ORSG			NA	NA	NA	NA	NA	NA	NA	4000	NA	NA	NA	350	6300	NA	NA	NA
MMCL			5	5	NA	NA	NA	5	NA	NA	NA	NA	NA	NA	NA	5	NA	NA
GW1			5	5	NA	40	NA	5	NA	4000	NA	NA	NA	350	6300	5	NA	NA
Results																		
DPW Garage Well		2/7/2014	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.63 J	< 0.50	< 0.50	< 0.50
Gatehouse Well		2/11/2014	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.58	< 0.50	< 0.50	< 0.50
Landfill Non-potable Well	Annual	2/25/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/7/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5	NS	NS	< 0.5	< 0.5	< 0.5
MW 21D		2/25/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	2.1J *	< 1.0	< 1.0	< 1.0	< 10	14J	< 1.0	< 1.0	< 1.0
MW 21S	Semi-Annual	5/16/2013	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 10	< 1.0	< 1.0	< 1.0	< 10	< 50	< 1.0	< 1.0	< 1.0
		12/7/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5	NS	NS	< 0.5	< 0.5	< 0.5
MW 2D		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
MW 2S	Annual	12/18/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
		7/10/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
MW 3D	Quarterly	5/19/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	0.79	< 1.0	< 1.0
		2/27/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	1.2	< 1.0	< 1.0
		11/25/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	0.96	< 0.5	< 0.5
		9/5/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.50	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	1.0	< 0.5	< 0.5
		5/8/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	0.91	< 0.5	< 0.5
		2/14/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.51	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	1.0	< 0.5	< 0.5
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
		10/9/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.55	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	1.2	< 0.5	< 0.5
		7/10/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
		3/20/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
MW 3I	Quarterly	5/19/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0	< 1.0	< 1.0	< 1.0
		2/27/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 10	< 1.0	< 1.0	< 1.0
		11/25/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5
		9/5/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
		5/8/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/14/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
		10/9/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
		7/10/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
		3/20/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
MW 3S		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
MW 4D		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5	< 0.5	< 0.5	< 0.5
MW 4S	Annual	12/18/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
		7/10/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
MW 5D		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Proposed GW1 Standard

Environmental Strategies & Management

Property	LMP Sample Frequency	Date		1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	4-Chlorotoluene	4-Isopropyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromobenzene	Bromochloromethane
MW 5D		12/5/2012		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
MW 5S	Annual	12/18/2013		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5
		2/14/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/5/2012		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
		7/10/2012		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	<5.0	< 0.5	< 0.5	< 0.5	<5.0	<5.0	< 0.5	< 0.5	< 0.5
MW 8	Annual	12/18/2013		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 5.0	< 5.0	< 0.5	< 0.5	< 0.5
		3/14/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/7/2012		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NS	< 0.5	< 0.5	< 0.5	NS	NS	< 0.5	< 0.5	< 0.5
50 ALSTON AVENUE	Annual	9/18/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.83J	< 0.50	< 0.50	< 0.50
		7/25/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	2.1J	< 0.50	< 0.50	< 0.50
		6/27/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		5/29/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		5/1/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		3/14/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/4/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	16	< 0.50	< 0.50	< 0.50	< 2.5	7.5	< 0.50	< 0.50	< 0.50
		3/4/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	16	< 0.50	< 0.50	< 0.50	< 2.5	8.4	< 0.50	< 0.50	< 0.50
		2/14/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	0.40J	< 0.50	< 0.50
		2/14/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/7/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
265 ALSTON AVENUE	Annual	12/18/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.75J	< 0.50	< 0.50	< 0.50
		3/14/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NS	< 0.50	< 0.50	< 0.50	NS	NS	< 0.50	< 0.50	< 0.50
275 ALSTON AVENUE		5/16/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	1.1J	< 0.50	< 0.50	< 0.50
		5/16/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.56J	< 0.50	< 0.50	< 0.50
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
280 ALSTON AVENUE	Annual	12/18/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		2/22/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NS	< 0.50	< 0.50	< 0.50	NS	NS	< 0.50	< 0.50	< 0.50
285 ALSTON AVENUE	Quarterly	3/14/2014		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NS	< 0.50	< 0.50	< 0.50	NS	NS	< 0.50	< 0.50	< 0.50
		11/20/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		5/8/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		2/22/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
11 ELDIA WAY	Annual	9/17/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.73J	< 0.50	< 0.50	< 0.50
		7/25/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	1.3J	0.16J	< 0.50	< 0.50
		6/27/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	0.18J	< 0.50	< 0.50
		6/27/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/29/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.56J	0.19J	< 0.50	< 0.50
		5/29/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.63J	0.20J	< 0.50	< 0.50
		4/29/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	0.20J	< 0.50	< 0.50
		4/29/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	0.18J	< 0.50	< 0.50
		3/14/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/14/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
25 KNOWLES STREET	Annual	9/18/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.67J	< 0.50	< 0.50	< 0.50
		8/27/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	1.2J	< 0.50	< 0.50	< 0.50
		7/25/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.76J	< 0.50	< 0.50	< 0.50
		6/27/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		6/27/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.57J	< 0.50	< 0.50	< 0.50
		5/29/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		5/29/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		4/26/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		4/26/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.65J	< 0.50	< 0.50	< 0.50
		2/21/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/21/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
30 KNOWLES STREET	Annual	9/17/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	2.2J	0.26J	< 0.50	< 0.50
		8/28/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	0.28J	< 0.50	< 0.50
		7/30/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.81J	0.29J	< 0.50	< 0.50
		7/30/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	1.4J	0.29J	< 0.50	< 0.50
		6/27/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.90J	0.25J	< 0.50	< 0.50
		6/27/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Proposed GW1 Standard

Environmental Strategies & Management

Property	LMP Sample Frequency	Date		1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	4-Chlorotoluene	4-Isopropyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromobenzene	Bromochloromethane
30 KNOWLES STREET	Annual	5/29/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	1.0J	0.31J	< 0.50	< 0.50
		5/29/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.86J	0.31J	< 0.50	< 0.50
		4/29/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	0.28J	< 0.50	< 0.50
		4/29/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.92J	0.31J	< 0.50	< 0.50
		2/19/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	0.34J	< 0.50	< 0.50
		2/19/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	0.34J	< 0.50	< 0.50
45 KNOWLES STREET	Annual	8/28/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	0.18J	< 0.50	< 0.50
		5/1/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/1/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	0.23J	< 0.50	< 0.50
100 MEETINGHOUSE ROAD	Quarterly	5/6/2014		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NS	< 0.50	< 0.50	< 0.50	NS	NS	< 0.50	< 0.50	< 0.50
		3/14/2014		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50
		11/20/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.91J	< 0.50	< 0.50	< 0.50
		8/27/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	1.1J	< 0.50	< 0.50	< 0.50
		5/8/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		5/8/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/14/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		2/14/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
		9/27/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NS	< 0.50	< 0.50	< 0.50	NS	NS	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NS	< 0.50	< 0.50	< 0.50	NS	NS	< 0.50	< 0.50	< 0.50
		3/23/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NS	< 0.50	< 0.50	< 0.50	NS	NS	< 0.50	< 0.50	< 0.50
125 MEETINGHOUSE ROAD	Annual	5/8/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NS	< 0.50	< 0.50	< 0.50	NS	NS	< 0.50	< 0.50	< 0.50
155 MEETINGHOUSE ROAD	Annual	7/31/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	1.3J	< 0.50	< 0.50	< 0.50
		7/31/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.62J	< 0.50	< 0.50	< 0.50
165 MEETINGHOUSE ROAD	Annual	2/15/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/15/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
170 MEETINGHOUSE ROAD	Annual	2/15/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/8/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
75 OLD ORCHARD ROAD	Annual	2/21/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NS	< 0.50	< 0.50	< 0.50	NS	NS	< 0.50	< 0.50	< 0.50
80 OLD ORCHARD ROAD		2/12/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.70J	< 0.50	< 0.50	< 0.50
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
100 OLD ORCHARD ROAD		2/12/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.80J	< 0.50	< 0.50	< 0.50
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
130 OLD ORCHARD ROAD	Annual	12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NS	< 0.50	< 0.50	< 0.50	NS	NS	< 0.50	< 0.50	< 0.50
130A OLD ORCHARD ROAD	Annual	12/18/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	1.9J	< 0.50	< 0.50	< 0.50
		2/25/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
130B OLD ORCHARD ROAD	Annual	12/18/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		2/25/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
180 OLD ORCHARD ROAD	Quarterly	5/6/2014		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NS	< 0.50	< 0.50	< 0.50	NS	NS	< 0.50	< 0.50	< 0.50
		3/14/2014		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	NS	<0.50	<0.50	<0.50	NS	NS	<0.50	<0.50	<0.50
		11/20/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		8/28/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		6/27/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		5/8/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		2/22/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
		9/27/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NS	< 0.50	< 0.50	< 0.50	NS	NS	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NS	< 0.50	< 0.50	< 0.50	NS	NS	< 0.50	< 0.50	< 0.50
		3/23/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NS	< 0.50	< 0.50	< 0.50	NS	NS	< 0.50	< 0.50	< 0.50
210 OLD ORCHARD ROAD	Annual	12/18/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		2/15/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NS	< 0.50	< 0.50	< 0.50	NS	NS	< 0.50	< 0.50	< 0.50
290 OLD ORCHARD ROAD	Annual	5/16/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/9/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50

Notes:
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Proposed GW1 Standard

Environmental Strategies & Management

Property	LMP Sample Frequency	Date			1,2-Dichloroethane	1,2-Dichloropropane	1,3,5-Trimethylbenzene	1,3-Dichlorobenzene	1,3-Dichloropropane	1,4-Dichlorobenzene	2,2-Dichloropropane	2-Butanone (MEK)	2-Chlorotoluene	4-Chlorotoluene	4-Isopropyltoluene	4-Methyl-2-pentanone	Acetone	Benzene	Bromobenzene	Bromochloromethane
290 OLD ORCHARD ROAD	Annual	2/15/2013			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		6/21/2012			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	NS	< 0.50	< 0.50	< 0.50	NS	NS	< 0.50	< 0.50	< 0.50
325 SCHOOLHOUSE ROAD	Semi-Annual	9/19/2013	Untreated		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	0.57	< 0.50	< 0.50
		9/19/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		9/19/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	1.5J	< 0.50	< 0.50	< 0.50
		8/27/2013	Untreated		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	1.4J	0.63	< 0.50	< 0.50
		8/27/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.57J	< 0.50	< 0.50	< 0.50
		8/27/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		7/31/2013	Untreated	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	1.0J	0.60	< 0.50	< 0.50
		7/31/2013	Untreated		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	1.3J	0.59	< 0.50	< 0.50
		7/31/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		7/31/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		6/27/2013	Untreated		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	1.2J	0.54	< 0.50	< 0.50
		6/27/2013	Untreated	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		6/27/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		6/27/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		5/29/2013	Untreated	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	0.58	< 0.50	< 0.50
		5/29/2013	Untreated		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.68J	0.65	< 0.50	< 0.50
		5/29/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	1.6J	< 0.50	< 0.50	< 0.50
		5/29/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		4/29/2013	Untreated	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	0.54	< 0.50	< 0.50
		4/29/2013	Untreated		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	0.57	< 0.50	< 0.50
		4/29/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.67J	< 0.50	< 0.50	< 0.50
		4/29/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		3/21/2013	Mid System		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/21/2013	Effluent		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/14/2013	Mid System		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/14/2013	Effluent		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/8/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		3/8/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	0.61J	< 0.50	< 0.50	< 0.50
		2/25/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		2/25/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	< 0.50	< 0.50	< 0.50
		2/22/2013	Untreated	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	0.63	< 0.50	< 0.50
		2/22/2013	Untreated		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 2.5	< 0.50	< 0.50	< 0.50	< 2.5	< 2.5	0.66	< 0.50	< 0.50
		12/7/2012	Untreated		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50		< 0.50	< 0.50	< 0.50			< 0.50	< 0.50	< 0.50

Notes: NS - Not Sampled

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

B - Analyte detected in Blank and Sample

* Proposed GW1 Standard

Environmental Strategies & Management

TABLE 4.1.3
SECTION 3
SUMMARY OF
ANALYTICAL RESULTS
Volatile Organic Compounds

Eastham Landfill Monitoring Wells and Private Drinking Wells
Eastham, MA
(All results in ug/l)

Property	LMP Sample Frequency	Date	Bromoform	Bromomethane	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromomethane	Dichlorobromomethane	Dichlorodifluoromethane	Ethylbenzene
Standards																
ORSG			NA	10	NA	NA	NA	NA	70	NA	NA	NA	NA	NA	1400	NA
MMCL			NA	NA	5	100	NA	NA	NA	NA	70	NA	NA	NA	NA	700
GW1			4	10	5	100	2	NA	70	NA	70	NA	NA	3	NA	700
Results																
DPW Garage Well		2/7/2014	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Gatehouse Well		2/11/2014	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
Landfill Non-potable Well	Annual	2/25/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/7/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 21D		2/25/2013	< 1.0	< 2.0	< 1.0	< 1.0	< 0.50	< 2.0	< 1.0	< 2.0	< 1.0	< 0.40	< 1.0	< 0.50	< 1.0	< 1.0
MW 21S	Semi-Annual	5/16/2013	< 1.0	< 2.0	< 1.0	< 1.0	< 0.50	< 2.0	< 1.0	< 2.0	< 1.0	< 0.40	< 1.0	< 0.50	< 1.0	< 1.0
		12/7/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 2D		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 2S	Annual	12/18/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		7/10/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 3D	Quarterly	5/19/2014	< 1.0	< 1.0	< 1.0	1.3	< 5.0	< 1.0	< 1.0	< 1.0	1.1	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0
		2/27/2014	< 1.0	< 1.0	< 1.0	1.6	< 5.0	< 1.0	< 1.0	< 1.0	2.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0
		11/25/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	1.3	< 0.5	1.4	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		9/5/2013	< 0.5	< 0.5	< 0.5	1.6	< 0.5	< 0.5	< 0.5	< 0.5	1.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		5/8/2013	< 0.5	< 0.5	< 0.5	1.4	< 0.5	< 0.5	< 0.5	< 0.5	1.1	< 0.5	< 0.5	< 0.5	0.60	< 0.5
		2/14/2013	< 0.5	< 0.5	< 0.5	1.6	< 0.5	< 0.5	< 0.5	< 0.5	1.5	< 0.5	< 0.5	< 0.5	0.51	< 0.5
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		10/9/2012	< 0.5	< 0.5	< 0.5	1.9	< 0.5	0.58	< 0.5	< 0.5	1.3	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		7/10/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		3/20/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 3I	Quarterly	5/19/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0
		2/27/2014	< 1.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0
		11/25/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		9/5/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		5/8/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/14/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.84	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		10/9/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		7/10/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		3/20/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 3S		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 4D		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 4S	Annual	12/18/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		7/10/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 5D		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/5/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 5S	Annual	12/18/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.51	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/5/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.51	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		7/10/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

Notes:
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Proposed GW1 Standard

Environmental Strategies & Management

Property	LMP Sample Frequency	Date		Bromoform	Bromomethane	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromomethane	Dichlorobromomethane	Dichlorodifluoromethane	Ethylbenzene
MW 8	Annual	12/18/2013		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		3/14/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/7/2012		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
50 ALSTON AVENUE	Annual	9/18/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		7/25/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/29/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/1/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/14/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/4/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.33J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/4/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.37J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/14/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.24J	0.17J	< 0.50	0.74	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/14/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/7/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
265 ALSTON AVENUE	Annual	12/18/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.18J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/14/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
275 ALSTON AVENUE		5/16/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.72	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/16/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.75	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
280 ALSTON AVENUE	Annual	12/18/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/22/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
285 ALSTON AVENUE	Quarterly	3/14/2014		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.65	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		11/20/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.51	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/8/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.47J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/22/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.55	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/22/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.59	0.29J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
11 ELDIA WAY	Annual	9/17/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.22J	< 0.50	< 0.50	0.60	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		7/25/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.84	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.27J	< 0.50	< 0.50	0.86	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/29/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.36J	< 0.50	< 0.50	0.85	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/29/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.32J	< 0.50	< 0.50	0.79	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/29/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.78	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/29/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.30J	< 0.50	< 0.50	0.89	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/14/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/14/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
25 KNOWLES STREET	Annual	9/18/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.12J	0.39J	< 0.50	1.7	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		8/27/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.14J	0.43J	< 0.50	2.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		7/25/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.43J	0.078J	2.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		6/27/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.15J	0.36J	< 0.50	1.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/29/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.15J	0.38J	< 0.50	1.7	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/29/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.19J	0.37J	< 0.50	1.7	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/26/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.34J	< 0.50	1.7	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/26/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.39J	< 0.50	1.8	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/21/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/21/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
30 KNOWLES STREET	Annual	9/17/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.28J	0.16J	< 0.50	1.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		8/28/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.28J	0.19J	< 0.50	1.4	< 0.50	< 0.50	< 0.50	0.22J	< 0.50
		7/30/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.26J	0.18J	< 0.50	1.5	< 0.50	< 0.50	< 0.50	0.23J	< 0.50
		7/30/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.27J	0.18J	0.25J	1.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.32J	0.20J	0.16J	1.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/29/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.43J	0.20J	< 0.50	1.8	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/29/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.44J	0.21J	< 0.50	1.8	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/29/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.34J	0.18J	< 0.50	1.7	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/29/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.20J	0.080J	1.8	< 0.50	< 0.50	< 0.50	0.25J	< 0.50
		2/19/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.40J	0.21J	0.17J	1.9	< 0.50	< 0.50	< 0.50	0.33J *	< 0.50
		2/19/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.35J	0.21J	< 0.50	1.9	< 0.50	< 0.50	< 0.50	0.30J *	< 0.50
45 KNOWLES STREET	Annual	8/28/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.16J	0.18J	< 0.50	0.91	< 0.50	< 0.50	< 0.50	0.24J	< 0.50
		5/1/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Proposed GW1 Standard

Environmental Strategies & Management

Property	LMP Sample Frequency	Date		Bromoform	Bromomethane	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromomethane	Dichlorobromomethane	Dichlorodifluoromethane	Ethylbenzene
45 KNOWLES STREET	Annual	5/1/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.0	< 0.50	< 0.50	< 0.50	0.22J	< 0.50
100 MEETINGHOUSE ROAD	Quarterly	5/6/2014		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.52	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/14/2014		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.67	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		11/20/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.52	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		8/27/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.39J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/8/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.46J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/8/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/14/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.42J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/14/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		9/27/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/23/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
125 MEETINGHOUSE ROAD	Annual	5/8/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
155 MEETINGHOUSE ROAD	Annual	7/31/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		7/31/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
165 MEETINGHOUSE ROAD	Annual	2/15/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/15/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
170 MEETINGHOUSE ROAD	Annual	2/15/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/8/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
75 OLD ORCHARD ROAD	Annual	2/21/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
80 OLD ORCHARD ROAD		2/12/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
100 OLD ORCHARD ROAD		2/12/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
130 OLD ORCHARD ROAD	Annual	12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
130A OLD ORCHARD ROAD	Annual	12/18/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/25/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.13J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
130B OLD ORCHARD ROAD	Annual	12/18/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/25/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
180 OLD ORCHARD ROAD	Quarterly	5/6/2014		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.40J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/14/2014		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		11/20/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.34J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		8/28/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.51	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.35J	< 0.50	0.13J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/8/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.54	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/22/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.28J	0.063J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		9/27/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/23/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
210 OLD ORCHARD ROAD	Annual	12/18/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.19J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/15/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
290 OLD ORCHARD ROAD	Annual	5/16/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/9/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.25J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/15/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.38J	0.099J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
325 SCHOOLHOUSE ROAD	Semi-Annual	9/19/2013	Untreated	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.48J	< 0.50	< 0.50	2.7	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		9/19/2013	Mid System	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		9/19/2013	Effluent	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		8/27/2013	Untreated	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.59	< 0.50	< 0.50	2.4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		8/27/2013	Mid System	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		8/27/2013	Effluent	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		7/31/2013	Untreated	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.51	< 0.50	< 0.50	2.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		7/31/2013	Untreated	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.49J	< 0.50	0.11J	2.1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		7/31/2013	Mid System	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.084J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		7/31/2013	Effluent	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013	Untreated	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.52	< 0.50	< 0.50	2.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Notes:
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Proposed GW1 Standard

Environmental Strategies & Management

Property	LMP Sample Frequency	Date			Bromoform	Bromomethane	Carbon tetrachloride	Chlorobenzene	Chlorodibromomethane	Chloroethane	Chloroform	Chloromethane	cis-1,2-Dichloroethene	cis-1,3-Dichloropropene	Dibromomethane	Dichlorobromomethane	Dichlorodifluoromethane	Ethylbenzene
325 SCHOOLHOUSE ROAD	Semi-Annual	6/27/2013	Untreated	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		6/27/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/27/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/29/2013	Untreated	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.64	< 0.50	< 0.50	2.3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/29/2013	Untreated		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.51	< 0.50	< 0.50	2.4	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/29/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		5/29/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/29/2013	Untreated	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.50	< 0.50	< 0.50	2.1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/29/2013	Untreated		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.51	< 0.50	< 0.50	1.9	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/29/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		4/29/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/21/2013	Mid System		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/21/2013	Effluent		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/14/2013	Mid System		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/14/2013	Effluent		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/8/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/8/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/25/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.23J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/25/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/22/2013	Untreated	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.59	< 0.50	< 0.50	2.7	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		2/22/2013	Untreated		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.63	< 0.50	< 0.50	2.7	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		12/7/2012	Untreated		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Notes: NS - Not Sampled

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

B - Analyte detected in Blank and Sample

* Proposed GW1 Standard

Environmental Strategies & Management

TABLE 4.1.4
SECTION 4
SUMMARY OF
ANALYTICAL RESULTS
Volatile Organic Compounds

Eastham Landfill Monitoring Wells and Private Drinking Wells
Eastham, MA
(All results in ug/l)

Property	LMP Sample Frequency	Date	Hexachlorobutadiene	Isopropylbenzene	Methyl tert-butyl ether	Methylene Chloride	Naphthalene	n-Butylbenzene	N-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene	Trichlorofluoromethane	Vinyl chloride	Total Xylenes
Standards																				
ORSG			NA	NA	70	NA	140	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
MMCL			NA	NA	NA	5	NA	NA	NA	NA	100	NA	5	1000	100	NA	5	NA	2	10000
GW1			0.6	NA	70	5	140	NA	NA	NA	100	NA	5	1000	100	NA	5	NA	2	10000
Results																				
DPW Garage Well		2/7/2014	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
Gatehouse Well		2/11/2014	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
Landfill Non-potable Well	Annual	2/25/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/7/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 21D		2/25/2013	< 0.40	< 1.0	0.20J	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.40	< 1.0	< 1.0	< 0.50	< 2.0
MW 21S	Semi-Annual	5/16/2013	< 0.40	< 1.0	0.16J	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.40	< 1.0	< 1.0	< 1.0	< 2.0
		12/7/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 2D		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 2S	Annual	12/18/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		7/10/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 3D	Quarterly	5/19/2014	< 0.50	< 1.0	0.95	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0
		2/27/2014	< 0.50	< 1.0	1.2	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0
		11/25/2013	< 0.5	< 0.5	< 0.5	0.92	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		9/5/2013	< 0.5	< 0.5	0.95	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		5/8/2013	< 0.5	< 0.5	1.1	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		2/14/2013	< 0.5	< 0.5	1.2	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		10/9/2012	< 0.5	< 0.5	1.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.58	< 0.5
		7/10/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		3/20/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 3I	Quarterly	5/19/2014	< 0.50	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0
		2/27/2014	< 0.50	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 0.50	< 1.0	< 1.0	< 1.0	< 1.0
		11/25/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		9/5/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		5/8/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/14/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		10/9/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		7/10/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		3/20/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 3S		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 4D		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 4S	Annual	12/18/2013	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		2/14/2013	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		7/10/2012	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

Notes:
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Proposed GW1 Standard

Environmental Strategies & Management

Property	LMP Sample Frequency	Date		Hexachlorobutadiene	Isopropylbenzene	Methyl tert-butyl ether	Methylene Chloride	Naphthalene	n-Butylbenzene	N-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene	Trichlorofluoromethane	Vinyl chloride	Total Xylenes
MW 5D		2/14/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/5/2012		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 5S	Annual	12/18/2013		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		2/14/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/5/2012		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		7/10/2012		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
MW 8	Annual	12/18/2013		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
		3/14/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/7/2012		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
50 ALSTON AVENUE	Annual	9/18/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		7/25/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		6/27/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		5/29/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		5/1/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.14J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		3/14/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/4/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		3/4/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	3.8	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		2/14/2013		< 0.50	< 0.50	0.84	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		2/14/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/7/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
265 ALSTON AVENUE	Annual	12/18/2013		< 0.50	< 0.50	0.26J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		3/14/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
275 ALSTON AVENUE		5/16/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		5/16/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
280 ALSTON AVENUE	Annual	12/18/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		2/22/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
285 ALSTON AVENUE	Quarterly	3/14/2014		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		11/20/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		5/8/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		2/22/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		2/22/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
11 ELDIA WAY	Annual	9/17/2013		< 0.50	< 0.50	0.85	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.20J	< 1.0
		7/25/2013		< 0.50	< 0.50	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		6/27/2013		< 0.50	< 0.50	1.3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.24J	< 1.0
		6/27/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/29/2013		< 0.50	< 0.50	1.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.23J	< 1.0
		5/29/2013	Duplicate	< 0.50	< 0.50	1.3	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.24J	< 1.0
		4/29/2013		< 0.50	< 0.50	1.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.22J	< 1.0
		4/29/2013	Duplicate	< 0.50	< 0.50	1.2	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.23J	< 1.0
		3/14/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/14/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
25 KNOWLES STREET	Annual	9/18/2013		< 0.50	< 0.50	0.26J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		8/27/2013		< 0.50	< 0.50	0.35J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.081J	< 1.0
		7/25/2013		< 0.50	< 0.50	0.33J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.083J	< 1.0
		6/27/2013		< 0.50	< 0.50	0.27J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		6/27/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/29/2013		< 0.50	< 0.50	0.25J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		5/29/2013	Duplicate	< 0.50	< 0.50	0.25J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		4/26/2013		< 0.50	< 0.50	0.27J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.066J	< 1.0
		4/26/2013	Duplicate	< 0.50	< 0.50	0.23J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		2/21/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/21/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
30 KNOWLES STREET	Annual	9/17/2013		< 0.50	< 0.50	0.61	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.14J	< 1.0
		8/28/2013		< 0.50	< 0.50	0.76	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.14J	< 1.0
		7/30/2013		< 0.50	< 0.50	0.77	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		7/30/2013	Duplicate	< 0.50	< 0.50	0.74	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		6/27/2013		< 0.50	< 0.50	0.76	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.15J	< 1.0

Notes:
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Proposed GW1 Standard

Environmental Strategies & Management

Property	LMP Sample Frequency	Date		Hexachlorobutadiene	Isopropylbenzene	Methyl tert-butyl ether	Methylene Chloride	Naphthalene	n-Butylbenzene	N-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene	Trichlorofluoromethane	Vinyl chloride	Total Xylenes
30 KNOWLES STREET	Annual	6/27/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/29/2013		< 0.50	< 0.50	0.79	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		5/29/2013	Duplicate	< 0.50	< 0.50	0.81	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		4/29/2013		< 0.50	< 0.50	0.85	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.18J	< 1.0
		4/29/2013	Duplicate	< 0.50	< 0.50	0.85	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		2/19/2013		< 0.50	< 0.50	1.1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.19J	< 1.0
		2/19/2013	Duplicate	< 0.50	< 0.50	1.1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.16J	< 1.0
45 KNOWLES STREET	Annual	8/28/2013		< 0.50	< 0.50	0.32J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.13J	< 1.0
		5/1/2013		< 0.50	< 0.50	0.45J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.19J	< 1.0
		5/1/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
100 MEETINGHOUSE ROAD	Quarterly	5/6/2014		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/14/2014		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		11/20/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		8/27/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		5/8/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		5/8/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/14/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		2/14/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		9/27/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/23/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
125 MEETINGHOUSE ROAD	Annual	5/8/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
155 MEETINGHOUSE ROAD	Annual	7/31/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		7/31/2013	Duplicate	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
165 MEETINGHOUSE ROAD	Annual	2/15/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/15/2013	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
170 MEETINGHOUSE ROAD	Annual	2/15/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/8/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
75 OLD ORCHARD ROAD	Annual	2/21/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
80 OLD ORCHARD ROAD		2/12/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
100 OLD ORCHARD ROAD		2/12/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
130 OLD ORCHARD ROAD	Annual	12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
130A OLD ORCHARD ROAD	Annual	12/18/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		2/25/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
130B OLD ORCHARD ROAD	Annual	12/18/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		2/25/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
180 OLD ORCHARD ROAD	Quarterly	5/6/2014		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/14/2014		<0.50	<0.50	0.25J	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
		11/20/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		8/28/2013		< 0.50	< 0.50	0.19J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		6/27/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		5/8/2013		< 0.50	< 0.50	0.25J	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		2/22/2013		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		9/27/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		3/23/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
210 OLD ORCHARD ROAD	Annual	12/18/2013		< 0.50	< 0.50	1.1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		2/15/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
		6/21/2012		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
290 OLD ORCHARD ROAD	Annual	5/16/2013		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS

Notes:
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
* Proposed GW1 Standard

Environmental Strategies & Management

Property	LMP Sample Frequency	Date			Hexachlorobutadiene	Isopropylbenzene	Methyl tert-butyl ether	Methylene Chloride	Naphthalene	n-Butylbenzene	N-Propylbenzene	sec-Butylbenzene	Styrene	tert-Butylbenzene	Tetrachloroethene	Toluene	trans-1,2-Dichloroethene	trans-1,3-Dichloropropene	Trichloroethene	Trichlorofluoromethane	Vinyl chloride	Total Xylenes
290 OLD ORCHARD ROAD	Annual	5/9/2013			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		2/15/2013			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		6/21/2012			< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
325 SCHOOLHOUSE ROAD	Semi-Annual	9/19/2013	Untreated		< 0.50	< 0.50	1.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.23J	< 1.0
		9/19/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		9/19/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		8/27/2013	Untreated		< 0.50	< 0.50	1.7	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.21J	< 1.0
		8/27/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		8/27/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		7/31/2013	Untreated		< 0.50	< 0.50	1.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.22J	< 1.0
		7/31/2013	Untreated	Duplicate	< 0.50	< 0.50	1.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.22J	< 1.0
		7/31/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		7/31/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		6/27/2013	Untreated		< 0.50	< 0.50	1.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.26J	< 1.0
		6/27/2013	Untreated	Duplicate	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		6/27/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		6/27/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		5/29/2013	Untreated		< 0.50	< 0.50	1.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		5/29/2013	Untreated	Duplicate	< 0.50	< 0.50	1.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.27J	< 1.0
		5/29/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		5/29/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		4/29/2013	Untreated		< 0.50	< 0.50	1.6	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.23J	< 1.0
		4/29/2013	Untreated	Duplicate	< 0.50	< 0.50	1.7	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		4/29/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		4/29/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		3/21/2013	Mid System		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/21/2013	Effluent		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/14/2013	Mid System		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/14/2013	Effluent		NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/8/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		3/8/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		2/25/2013	Mid System		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		2/25/2013	Effluent		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.0
		2/22/2013	Untreated		< 0.50	0.053J	1.9	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.30J	< 1.0
		2/22/2013	Untreated	Duplicate	< 0.50	< 0.50	1.9	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.27J	< 1.0
		12/7/2012	Untreated		< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

Notes: NS - Not Sampled

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

B - Analyte detected in Blank and Sample

* Proposed GW1 Standard

Environmental Strategies & Management

TABLE 4.2
SUMMARY OF
GROUNDWATER ANALYTICAL RESULTS
Metals

Eastham Landfill
Eastham, MA
(All results in ug/l)

Property	Sample Frequency	Date	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Selenium	Silver	Zinc
Standards														
GW-1			10	2000	5	100	NA	NA	15	NA	2.0	50	100	5000
MMCL			10	2000	5	100	NA	NA	15	NA	2.0	50	NA	NA
SMCL			NA	NA	NA	NA	1000	300	NA	50	NA	NA	100	5000
Results														
MW 2D		12/6/2012	< 3.0	3.2	< 3.0	< 3.0	< 3.0	< 100	< 3.0	51	< 0.5	< 15	< 2.0	< 60
MW 2S	Annual	12/18/2013	< 3.0	10	< 3.0	< 3.0	< 3.0	500	< 3.0	410	< 0.3	< 15	< 3.0	< 60
		12/6/2012	< 3.0	13	< 3.0	< 3.0	< 3.0	680	< 3.0	430	< 0.5	< 15	< 2.0	< 60
		7/10/2012	< 3.0	13	< 3.0	< 3.0	< 3.0	580	< 3.0	390	< 0.5	< 15	< 2.0	< 100
MW 3D	Quarterly	5/19/2014	66	82	< 3.0	< 3.0	< 3.0	31000	< 3.0	1300	82	< 15	< 2.0	< 60
		2/27/2014	54	77	< 1.0	< 2.0	< 3.0	42000	< 6.0	1800	< 0.5	< 6.0	< 2.0	12
		11/25/2013	68	88	< 3.0	3.3	< 3.0	30000	< 3.0	1400	NS	< 15	< 3.0	< 60
		9/5/2013	64	89	< 3.0	4.7	< 3.0	36000	< 3.0	1300	< 0.3	< 15	< 3.0	< 60
		5/8/2013	74	96	< 3.0	6.3	< 3.0	40000	< 3.0	1300	< 0.5	< 15	< 3.0	< 60
		2/14/2013	68	96	< 3.0	5.9	< 3.0	40000	< 3.0	1700	< 0.5	< 15	< 2.0	< 60
		12/6/2012	62	97	< 3.0	< 3.0	< 3.0	40000	< 3.0	1800	< 0.5	< 15	< 2.0	< 60
		10/9/2012	65	90	< 3.0	3.0	< 3.0	39000	< 3.0	1400	< 0.5	< 15	< 2.0	< 100
		7/10/2012	66	99	< 3.0	< 3.0	< 3.0	38000	< 3.0	1400	< 0.5	< 15	< 2.0	< 100
		3/20/2012	69	100	< 3.0	< 3.0	< 3.0	40000	< 3.0	1700	< 0.5	< 15	< 2.0	< 60
MW 3I	Quarterly	5/19/2014	41	11	< 3.0	< 3.0	< 3.0	64000	< 3.0	1100	< 0.3	< 15	< 2.0	< 60
		2/27/2014	23	10	5.0	< 2.0	< 3.0	78000	< 6.0	1400	< 0.5	< 6.0	< 2.0	16
		11/25/2013	< 3.0	7.1	< 3.0	< 3.0	< 3.0	33000	< 3.0	1100	NS	< 15	< 3.0	< 60
		9/5/2013	38	10	< 3.0	< 3.0	< 3.0	68000	< 3.0	1100	< 0.3	< 15	< 3.0	< 60
		5/8/2013	37	9	< 3.0	< 3.0	< 3.0	64000	< 3.0	980	< 0.5	< 15	< 3.0	< 60
		2/14/2013	41	12	< 3.0	< 3.0	< 3.0	69000	< 3.0	1100	< 0.5	< 15	< 2.0	< 60
		12/6/2012	39	11	< 3.0	< 3.0	< 3.0	72000	< 3.0	1100	< 0.5	< 15	< 2.0	< 60
		10/9/2012	40	11	< 3.0	< 3.0	< 3.0	65000	< 3.0	1000	< 0.5	< 15	< 2.0	< 100
		7/10/2012	42	< 3.0	< 3.0	< 3.0	< 3.0	68000	< 3.0	1100	< 0.5	< 15	< 2.0	< 100
		3/20/2012	44	11	< 3.0	< 3.0	< 3.0	65000	< 3.0	1400	< 0.5	< 15	< 2.0	< 60
MW 3S		12/6/2012	< 3.0	30	< 3.0	< 3.0	< 3.0	250	< 3.0	280	< 0.5	< 15	< 2.0	< 60
MW 4D		12/6/2012	< 3.0	28	< 3.0	< 3.0	< 3.0	< 100	< 3.0	160	< 0.5	< 15	< 2.0	< 60
MW 4S	Annual	12/18/2013	< 3.0	24	< 3.0	< 3.0	< 3.0	2100	< 3.0	4200	< 0.3	< 15	< 3.0	< 60
		12/6/2012	3.4	28	< 3.0	< 3.0	< 3.0	2400	< 3.0	5100	< 0.5	< 15	< 2.0	< 60
		7/10/2012	< 3.0	31	< 3.0	< 3.0	< 3.0	2400	< 3.0	4400	< 0.5	< 15	< 2.0	< 100
MW 5D		12/5/2012	< 3.0	64	< 3.0	< 3.0	< 3.0	<150	< 3.0	51	< 0.5	< 15	< 2.0	< 60

Notes: NS - Not Sampled

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

B - Analyte detected in Blank and Sample

Report: GW Metals

Datebase: Eastham Landfill Monitoring

Environmental Strategies & Management

Property	Sample Frequency	Date	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Selenium	Silver	Zinc
MW 5S	Annual	12/18/2013	< 3.0	37	< 3.0	< 3.0	< 3.0	8600	< 3.0	3200	< 0.3	< 15	< 3.0	< 60
		12/5/2012	< 3.0	44	< 3.0	< 3.0	< 3.0	5500	< 3.0	3600	< 0.5	< 15	< 2.0	< 60
		7/10/2012	< 3.0	47	< 3.0	< 3.0	< 3.0	8500	< 3.0	3200	< 0.5	< 15	< 2.0	< 100
MW 8	Annual	12/18/2013	< 3.0	35	< 3.0	< 3.0	< 3.0	< 100	< 3.0	300	< 0.3	< 15	< 3.0	< 60
265 ALSTON AVENUE	Annual	12/18/2013	0.11J	13B	< 0.50	0.43J	220B	NS	1.2	NS	< 0.20	< 1.0	< 0.50	39B
		12/6/2012	< 3.0	13	< 3.0	< 3.0	27	NS	3.3	NS	< 0.5	< 15	< 3.0	< 60
		6/21/2012	< 10	10	< 1.0	< 2.0	< 100	< 100	< 6.0	< 100	< 0.5	< 6.0	< 2.0	< 100
280 ALSTON AVENUE	Annual	12/18/2013	0.26J	22B	< 0.50	0.29J	840B	NS	1.9	NS	< 0.20	< 1.0	0.025J	1200B
		12/6/2012	< 3.0	19	< 3.0	< 3.0	1300	NS	5.1	NS	< 0.5	< 15	< 3.0	350
		6/21/2012	< 10	14	< 1.0	< 2.0	< 100	< 100	< 6.0	< 100	< 0.5	< 6.0	< 2.0	< 100
285 ALSTON AVENUE	Quarterly	3/14/2014	0.43J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		11/20/2013	0.15J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/8/2013	< 3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/22/2013	< 3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	< 3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
100 MEETINGHOUSE ROAD	Quarterly	5/6/2014	< 1.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/14/2014	0.32J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		11/20/2013	0.22J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		8/27/2013	< 3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/8/2013	< 3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/14/2013	< 3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	< 3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		9/27/2012	< 3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		6/21/2012	< 10	25	< 1.0	< 2.0	< 100	< 100	< 6.0	< 100	< 0.5	< 6.0	<2.0	< 100
		3/23/2012	< 3.0	27	< 3.0	< 3.0	38	< 100	< 3.0	76	< 0.5	< 15	< 2.0	< 60
125 MEETINGHOUSE ROAD	Annual	5/8/2013	< 3.0	42	< 3.0	< 3.0	25	NS	< 3.0	NS	< 0.3	< 15	< 3.0	< 60
		6/21/2012	< 10	42	< 1.0	< 2.0	< 100	< 100	< 6.0	430	< 0.5	< 6.0	< 2.0	< 100
155 MEETINGHOUSE ROAD	Annual	8/15/2013	< 3.0	25	< 3.0	< 3.0	47	NS	< 3.0	NS	< 0.3	< 15	< 3.0	< 60
		7/31/2013	< 3.0	25	< 3.0	< 3.0	97	NS	17	NS	< 0.3	< 15	< 3.0	76
165 MEETINGHOUSE ROAD	Annual	12/6/2012	< 3.0	92	< 3.0	< 3.0	17	NS	< 3.0	NS	< 0.5	< 15	< 3.0	< 60
75 OLD ORCHARD ROAD	Annual	12/6/2012	< 3.0	9	< 3.0	< 3.0	79	NS	< 3.0	NS	< 0.5	< 15	< 3.0	< 60
		6/21/2012	< 10	6	< 1.0	< 2.0	< 100	< 100	< 6.0	< 100	< 0.5	< 6.0	< 2.0	< 100
130B OLD ORCHARD ROAD		12/18/2013	< 1.0	13B	< 0.50	0.074J	92B	NS	0.63J	NS	< 0.20	< 1.0	< 0.50	16B
130A OLD ORCHARD ROAD		12/18/2013	< 1.0	16B	< 0.50	0.21J	180B	NS	0.91J	NS	< 0.20	< 1.0	0.037J	13B
130 OLD ORCHARD ROAD		12/6/2012	< 3.0	16	< 3.0	< 3.0	18	NS	< 3.0	NS	< 0.5	< 15	< 3.0	< 60
		6/21/2012	< 10	12	< 1.0	< 2.0	< 100	< 100	< 6.0	< 100	< 0.5	< 6.0	< 2.0	< 100
180 OLD ORCHARD ROAD	Quarterly	5/6/2014	0.34J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		3/14/2014	0.25J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		11/20/2013	0.10J	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		8/28/2013	< 3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		5/8/2013	< 3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		2/22/2013	< 3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		12/6/2012	< 3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		9/27/2012	< 3.0	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
		6/21/2012	< 10	14	< 1.0	< 2.0	< 100	< 100	< 6.0	< 100	< 0.5	< 6.0	< 2.0	< 100
		3/23/2012	< 3.0	12	< 3.0	< 3.0	40	< 100	< 3.0	4.2	< 0.5	< 15	< 2.0	< 60
210 OLD ORCHARD ROAD	Annual	12/18/2013	< 1.0	59B	< 0.50	< 1.5	50B	NS	4.1	NS	< 0.20	< 1.0	< 0.50	89B

Notes: NS - Not Sampled

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

B - Analyte detected in Blank and Sample

Environmental Strategies & Management

Property	Sample Frequency	Date	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Selenium	Silver	Zinc
210 OLD ORCHARD ROAD	Annual	12/6/2012	< 3.0	55	< 3.0	< 3.0	18	NS	< 3.0	NS	< 0.5	< 15	< 3.0	< 60
		6/21/2012	< 10	54	< 1.0	< 2.0	< 100	< 100	< 6.0	540	< 0.5	< 6.0	< 2.0	< 100
290 OLD ORCHARD ROAD	Annual	6/21/2012	< 10	25	< 1.0	< 2.0	160	< 100	< 6.0	< 100	< 0.5	< 6.0	< 2.0	< 100

Notes: NS - Not Sampled

J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

B - Analyte detected in Blank and Sample

Report: GW Metals

Datebase: Eastham Landfill Monitoring

Environmental Strategies & Management

TABLE 4.3
SUMMARY OF
GROUNDWATER ANALYTICAL RESULTS
Inorganic Indicator Parameters

Eastham Landfill
Eastham, MA

Property	Sample Frequency	Date	Alkalinity mg/L as CaCO	Chloride mg/L	COD mg/L	Total Cyanide mg/L	Nitrate mg/L	Sulfate mg/L	Total Dissolved Solids mg/L
Standards									
MMCL						0.2	10		
SMCL				250				250	500
Results									
MW 2D		12/6/2012	23	22	<3.0	NS	0.6	6.7	81
MW 2S	Annual	12/18/2013	140	26	< 5.0	< 0.010	< 0.05	24	310
		12/6/2012	150	27	<3.0	NS	0.45	40	280
		7/10/2012	150	28	10	< 0.010	0.27	36	300
MW 3D	Quarterly	5/19/2014	830	80	27	< 0.010	< 0.10	51	1,300
		2/27/2014	720	86	62	< 0.010	8.0	35	1,200
		11/25/2013	840	100	50	< 0.010	3.1	58	1,200
		9/5/2013	870	96	56	< 0.010	< 0.10	66	2,500
		5/8/2013	870	100	63	< 0.010	0.87	68	1,400
		2/14/2013	920	120	70	< 0.010	< 0.10	68	1,600
		12/6/2012	960	91	63	NS	1.4	73	1,700
		10/9/2012	960	130	5.8	< 0.010	6.2	70	1,500
		7/10/2012	970	100	71	< 0.010	0.72	67	1,700
		3/20/2012	1,000	240	62	< 0.010	1.7	68	1,500
MW 3I		5/19/2014	200	19	20	< 0.010	< 0.10	29	300
		2/27/2014	110	17	22	< 0.010	0.60	36	300
		11/25/2013	200	16	9.0	< 0.010	1.4	46	260
		9/5/2013	190	12	13	< 0.010	< 0.10	39	240
		5/8/2013	160	13	7.0	< 0.010	0.32	49	260
		2/14/2013	180	14	15	< 0.010	0.14	70	250
		12/6/2012	190	10	17	NS	0.35	81	290
		10/9/2012	180	12	<3.0	< 0.010	< 0.10	79	270
		7/10/2012	180	19	18	< 0.010	0.19	66	320
		3/20/2012	180	19	15	< 0.010	0.42	63	290
MW 3S		12/6/2012	16	10	<3.0	NS	3.0	10	61
MW 4D		12/6/2012	16	50	<3.0	NS	2.3	18	140

Notes:

Environmental Strategies & Management

Property	Sample Frequency	Date	Alkalinity mg/L as CaCO	Chloride mg/L	COD mg/L	Total Cyanide mg/L	Nitrate mg/L	Sulfate mg/L	Total Dissolved Solids mg/L
MW 4S	Annual	12/18/2013	170	20	6.0	< 0.010	< 0.05	14	300
		12/6/2012	180	21	14	NS	< 0.10	22	240
		7/10/2012	180	26	13	< 0.010	0.18	20	300
MW 5D		12/5/2012	23	77	<3.0	NS	2.3	25	230
MW 5S	Annual	12/18/2013	210	28	11	< 0.010	0.40	22	370
		12/5/2012	200	34	8.0	NS	0.45	29	320
		7/10/2012	220	33	12	< 0.010	0.28	29	380
MW 8		12/18/2013	110	34	< 2.0	< 0.010	1.6	16	280
265 ALSTON AVENUE		6/21/2012	8.6	27	<3.0	< 0.010	2.2	16	100
280 ALSTON AVENUE		6/21/2012	23	66	<3.0	< 0.010	2.7	7.3	200
100 MEETINGHOUSE ROA	Quarterly	6/21/2012	61	43	<3.0	< 0.010	0.2	18	180
		3/23/2012	NS	45	4.7	< 0.010	0.23	19	150
125 MEETINGHOUSE ROA	Annual	6/21/2012	80	21	<3.0	< 0.010	0.9	23	160
75 OLD ORCHARD ROAD		6/21/2012	26	25	<3.0	< 0.010	1.0	7.8	96
130 OLD ORCHARD ROAD		6/21/2012	37	69	<3.0	< 0.010	3.5	8.6	220
180 OLD ORCHARD ROAD	Quarterly	6/21/2012	11	32	<3.0	< 0.010	2.0	14	120
		3/23/2012	NS	35	<3.0	< 0.010	2.0	16	100
210 OLD ORCHARD ROAD	Annual	6/21/2012	42	42	<3.0	< 0.010	2.4	23	170
290 OLD ORCHARD ROAD		6/21/2012	17	32	<3.0	< 0.010	3.3	14	130

Notes:

Environmental Strategies & Management

TABLE 5
SUMMARY OF
PRIVATE WELL SAMPLING PROGRAM
1,4 DIOXANE
Background Samples
Private Drinking Water Wells Residential Properties
Eastham, MA
(All results in ug/l)

Property	Date	Duplicate	1,4 Dioxane
Standards			
RCGW1			0.3
ORSG			0.3
GW1			0.3
BACKGROUND SAMPLES			
Results			
5 ACORN ROAD	5/3/2013		0.042J
10 BALLWIC ROAD	3/13/2014		<0.139
60 BISHOP ROAD	3/11/2014		<0.147
1825 BRIDGE ROAD	3/11/2014		<0.150
60 BRIGGS FIELD ROAD	5/1/2013		< 0.20
20 CEDAR LANE	5/7/2014		<0.144
25 CEDAR LANE	5/7/2014		<0.144
30 CEDAR LANE	3/25/2014		0.289
	3/25/2014	Duplicate	0.285
35 CEDAR LANE	5/7/2014		<0.142
20 GUERRA WAY #42	4/29/2013		< 0.20
20 GUERRA WAY #59	4/29/2013		0.15J
65 KETTLE HOLE ROAD	4/26/2013		< 0.20
80 KETTLE HOLE ROAD	5/1/2013		< 0.20
115 KINGSBURY BEACH ROAD	3/12/2014		<0.150
155 MARY CHASE ROAD	4/14/2014		<0.145
295 MASSASOIT ROAD	3/10/2014		<0.144
155 MEADOW DRIVE	3/13/2014		<0.139
1525 NAUSET ROAD	3/10/2014		<0.153
265 NORTH SUNKEN MEADOW ROAD	3/13/2014		<0.139
190 SAMOSET ROAD	12/6/2013		0.048J

Notes:
NS - Not Sampled
J - Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B - Analyte detected in Blank and Sample
L - LCS or LCSD exceeded the control limits. Results may be biased high.
GW-1 Standard

Report: Drinking Water Dioxane Only
Datebase: Eastham Database

Environmental Strategies & Management

Eastham Landfill
Private Well Sampling Log

Date: 3/10/14
Sampler: EC
Weather Conditions: light snow, 0-5 mph wind
Temperature: 30° F

Location: 30 Jason Drive
Property Owner: Peter Amato
Property Contact:
Phone: 508-255-9331
Email:
Contact Log Attached: Yes: No:

Analysis Required: ~~VOC (524.2)~~ and 1,4-Dioxane (~~522.1, with RL of 0.2 ug/l~~)
Analytical Lab: ~~TestAmerica~~ Alpha
Sample Location: Basement, pre-treatment
Describe water system including treatment: Iron removal system, small filter
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 0918 Finish: 0833

Time	pH	DO	Conductivity	Temperature
0820	8.89	10.42	0.671	10.20
0823	8.35	9.95	0.650	10.10
0826	7.83	9.91	0.630	10.11
0830	7.46	9.90	0.603	10.11
0833	7.40	9.88	0.606	10.13

Volume Purged: 30 gallons
Equipment Utilized: YSI 600 MDS
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 3/10/14
Sampler: EC
Weather Conditions: light snow, 0-5 mph wind
Temperature: 30°F

Location: 25 Schoolhouse Rd.
Property Owner:
Property Contact: Gloria Schrapfer
Phone: 508-255-2825
Email:
Contact Log Attached: Yes: No:

Analysis Required: VOC (524.2) and 1,4-Dioxane (~~522.1, with RL of 0.2 ug/l~~)
Analytical Lab: ~~TestAmerica~~ Alpha
Sample Location: Utility sink in basement
Describe water system including treatment: Pressure tank, no treatment or filtration
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1005 Finish: 1020

Time	pH	DO	Conductivity	Temperature
1005	7.80	2.77	0.208	6.07
1008	7.22	1.05	0.208	6.60
1012	6.97	0.92	0.208	7.87
1015	6.62	0.98	0.207	9.72
1018	6.57	0.82	0.207	10.36
1020	6.56	0.84	0.207	10.33

Volume Purged: 35 gallons
Equipment Utilized: YSI 600 MDS
Attach Equipment Calibration Log:

≈35'

Eastham Landfill
Private Well Sampling Log

Date: 3/10/14
Sampler: EC
Weather Conditions: cloudy, 0-5 mph wind
Temperature: 30°F

Location: 1525 Nauset Rd.
Property Owner: Will Dower
Property Contact:
Phone: 508-255-1252
Email:
Contact Log Attached: Yes: No:

Analysis Required: VOC (524.2) and 1,4-Dioxane (~~522.1, with RL of 0.2 ug/l~~)
Analytical Lab: ~~TestAmerica~~ Alpha
Sample Location: Pressure tank, pre-treatment
Describe water system including treatment: Pressure tank, acid neutralizer, filter
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1205 Finish: 1220

Time	pH	DO	Conductivity	Temperature
1205	7.34	10.02	0.385	12.89
1210	7.55	9.21	0.379	11.51
1213	7.53	9.15	0.363	11.38
1216	7.33	9.22	0.342	11.22
1218	7.27	9.11	0.340	11.18
1220	7.27	9.10	0.340	11.17

Volume Purged: 23 gallons
Equipment Utilized: YSI 600 MDS
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 3/10/14

Sampler: EC

Weather Conditions: partly cloudy, 0-5 mph wind

Temperature: 35°F

Location: 3265 State Highway

Property Owner: George Krouch

Property Contact:

Phone: 508-240-3202

Email:

Contact Log Attached: Yes: No:

Analysis Required: ~~VOC(524.2)~~ and 1,4-Dioxane (~~522.1, with RL of 0.2 ug/l~~)

Analytical Lab: ~~TestAmerica~~ Alpha

Sample Location: Kitchen sink

Describe water system

Including treatment:

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1405 Finish: 1425

Time	pH	DO	Conductivity	Temperature
1408	6.88	8.00	0.262	9.38
1411	6.84	6.83	0.261	9.97
1415	6.36	6.53	0.261	10.46
1419	6.29	6.47	0.261	10.81
1423	6.28	6.42	0.261	10.89

Volume Purged: 20 gallons gallons

Equipment Utilized: YSI 600 MDS

Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 3/10/14
Sampler: EC
Weather Conditions: mostly sunny, 5-10 mph wind
Temperature: 40°F

Location: 295 Massasoit Rd.
Property Owner: Laura Kelley
Property Contact:
Phone: 774-553-6511
Email:
Contact Log Attached: Yes: No:

Analysis Required: VOC (524.2) and 1,4-Dioxane (~~522.1, with RL of 0.2 ug/l~~)
Analytical Lab: ~~TestAmerica~~ Alpha
Sample Location: Pressure tank in basement
Describe water system including treatment: Pressure tank + acid neutralizer
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1500 Finish: 1520

Time	pH	DO	Conductivity	Temperature
1502	7.15	8.90	1.019	14.35
1507	7.31	8.76	0.988	13.11
1511	7.45	9.03	0.987	12.82
1516	7.28	9.05	0.981	12.66
1520	7.24	9.06	0.981	12.63

Volume Purged: 25 gallons
Equipment Utilized: YSI 600 MDS
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 3/11/14
Sampler: EC
Weather Conditions: partly cloudy, 0-5 mph wind
Temperature: 40°F

Location: 690 Schoolhouse Rd.
Property Owner: Ovila Richer
Property Contact:
Phone: 508-255-6062
Email:
Contact Log Attached: Yes: _____ No: _____

Analysis Required: ~~VOC (524.2)~~ and 1,4-Dioxane ~~(522.1, with RL of 0.2 ug/l)~~
Analytical Lab: ~~TestAmerica~~ Alpha
Sample Location: Kitchen sink
Describe water system including treatment: Pressure tank in basement, no treatment or filtration
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 0832 Finish: 0852

Time	pH	DO	Conductivity	Temperature
0834	6.48	8.39	0.171	10.44
0839	6.20	8.39	0.171	10.54
0842	6.05	8.40	0.171	10.66
0845	5.89	8.45	0.171	10.85
0849	5.84	8.47	0.171	10.90

Volume Purged: 20 gallons
Equipment Utilized: YSi 600 MDS
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 3/11/14
Sampler: EC
Weather Conditions: partly cloudy, 0-5 mph wind
Temperature: 40°F

Location: 1825 Bridge Rd.
Property Owner: William Marsden
Property Contact:
Phone: 508-255-9514
Email:
Contact Log Attached: Yes: No:

Analysis Required: VOC (524.2) and 1,4-Dioxane (~~524.2, with RL of 0.2 ug/l~~)
Analytical Lab: ~~TestAmerica~~ Alpha
Sample Location: Basement pressure tank, pre-treatment
Describe water system including treatment:
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1010 Finish: 1035

Time	pH	DO	Conductivity	Temperature
1011	7.12	7.02	0.542	17.10
1015	7.23	7.36	0.510	13.51
1019	7.11	7.32	0.499	13.17
1025	7.07	7.54	0.492	12.39
1032	7.05	7.59	0.491	12.33

Volume Purged: 20 gallons
Equipment Utilized: YSI 600 MDS
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 3/11/14
Sampler: EC
Weather Conditions: mostly cloudy, 0-5 mph wind
Temperature: 45°F

Location: 60 Bishop Rd.
Property Owner: Arline Consiglio
Property Contact:
Phone: 508-240-0892
Email:
Contact Log Attached: Yes: No:

Analysis Required: VOC (524.2) and 1,4-Dioxane (~~522.1 with RL of 0.2 ug/l~~)
Analytical Lab: ~~TestAmerica~~ Alpha
Sample Location: Kitchen sink w/ conditioning tank bypassed
Describe water system including treatment: Pressure tank and conditioning tank
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1210 Finish: 1235

Time	pH	DO	Conductivity	Temperature
1212	7.40	11.23	0.076	10.84
1216	6.59	10.87	0.073	10.85
1220	6.36	10.82	0.076	10.89
1225	6.19	10.82	0.076	11.02
1230	6.15	10.82	0.075	11.01
1234	6.14	10.83	0.075	10.98

Volume Purged: 30 gallons
Equipment Utilized: YSI 600 MDS
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 3/11/14
Sampler: EC
Weather Conditions: partly cloudy, 0-5 mph wind
Temperature: 45° F

Location: 49 Salt Pond Rd.
Property Owner: Michael Kuchyt
Property Contact:
Phone: 508-237-9790
Email:
Contact Log Attached: Yes: No:

Analysis Required: VOC (524.2) and 1,4-Dioxane (522.1, with RL of 0.2 ug/l)
Analytical Lab: TestAmerica
Sample Location: Kitchen sink
Describe water system including treatment: Pressure tank, no treatment or filtration
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1435 Finish: 1455

Time	pH	DO	Conductivity	Temperature
1435	5.89	4.18	0.384	17.13
1438	5.74	4.22	0.383	25.15
1441	5.65	5.44	0.375	12.26
1445	5.59	5.49	0.375	11.92
1450	5.60	5.46	0.375	12.15

Volume Purged: 25 gallons
Equipment Utilized: YSI 600
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 3/11/14

Sampler: EC

Weather Conditions: clear, 0-5 mph wind

Temperature: 50°F

Location: 270 Glacier Hill Rd

Property Owner: Peter Higendorff

Property Contact:

Phone: 973-534-0390

Email:

Contact Log Attached: Yes: _____ No: _____

Analysis Required: ~~VOC (524.2)~~ and 1,4-Dioxane (522~~.1, with RL of 0.2 ug/l~~)

Analytical Lab: ~~TestAmerica~~ Alpha

Sample Location: Kitchen sink

Describe water system including treatment: Pressure tank, conditioning tank and small filter are present but appear permanently bypassed

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1350 Finish: 1420

Time	pH	DO	Conductivity	Temperature
1350	6.38	11.12	0.176	9.54
1355	6.16	10.26	0.164	10.14
1400	6.11	10.20	0.163	10.43
~~1405~~ 1408	6.10	10.19	0.162	10.51
1416				

Volume Purged: 25 gallons

Equipment Utilized: YSI 600

Attach Equipment Calibration Log: _____

Eastham Landfill
Private Well Sampling Log

Date: 3/12/14
Sampler: EC
Weather Conditions: cloudy, 0-5 mph wind
Temperature: 40°F

Location: 15 Glacier Hill Rd.
Property Owner: Donna Kemens
Property Contact:
Phone: [redacted]
Email:
Contact Log Attached: Yes: _____ No: _____

Analysis Required: VOC (524.2) and 1,4-Dioxane (~~522.1, with RL of 0.2 ug/l~~)
Analytical Lab: ~~TestAmerica~~
Sample Location: Kitchen sink
Describe water system including treatment: Pressure tank, no treatment or filtration
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 0815 Finish: 0835

Time	pH	DO	Conductivity	Temperature
0817	6.99	9.16	0.489	11.07
0822	6.43	5.91	0.485	11.19
0828	6.08	5.75	0.481	11.40
0833	6.02	5.73	0.477	11.25

Volume Purged: 30 gallons
Equipment Utilized: YSI 600
Attach Equipment Calibration Log: _____

Eastham Landfill
Private Well Sampling Log

Date: 3/12/14
Sampler: EC
Weather Conditions: cloudy, 0-5 mph wind
Temperature: 40°F

Location: 3315 State Highway
Property Owner: Briggs Foster-brooks
Property Contact:
Phone: 508-255-4413
Email:
Contact Log Attached: Yes: No:

Analysis Required: VOC (524.2) and 1,4-Dioxane ~~(528, Total Phenols, 6010, 7470)~~
Analytical Lab: ~~TestAmerica~~ Alpha
Sample Location: Kitchen sink
Describe water system including treatment: Pressure tank, no treatment or filtration
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1005 Finish: 1035

Time	pH	DO	Conductivity	Temperature
1010	5.94	8.19	0.363	12.12
1015	5.72	7.31	0.359	11.11
1020	5.81	8.57	0.359	11.38
1025	5.76	8.19	0.359	11.24
1035	5.71	7.72	0.358	11.24

Volume Purged: 20 gallons
Equipment Utilized: YSI 600
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 3/12/14

Sampler: EC

Weather Conditions: partly cloudy, 0-5 mph wind

Temperature: 50°F

Location: 115 Kingsbury Beach Rd.

Property Owner: Steven Cole

Property Contact:

Phone: 508-240-1355

Email:

Contact Log Attached: Yes: _____ No: _____

Analysis Required: VOC (524.2) and 1,4-Dioxane (~~522.1 with RL of 0.2 ug/l~~)

Analytical Lab: ~~TestAmerica~~ Alpha

Sample Location: Pressure tank in basement

Describe water system including treatment: Pressure tank and conditioning tank + filter

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1215 Finish: 1240

Time	pH	DO	Conductivity	Temperature
1217	6.88	9.89	0.171	8.60
1224	6.92	9.67	0.161	8.15
1230	6.78	9.69	0.149	8.43
1234	6.67	9.72	0.144	8.75
1238	6.64	9.75	0.140	8.79

Volume Purged: 20 gallons

Equipment Utilized: YSI 600

Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 3/12/14
Sampler: EC
Weather Conditions: cloudy, 0-5 mph wind
Temperature: 45° F

Location: 20 Jason Dr.
Property Owner: Terri Smith
Property Contact:
Phone: 774-316-4661
Email:
Contact Log Attached: Yes: _____ No: _____

Analysis Required: VOC (8260C) and 1,4-Dioxane (522 with RL of 0.2 ug/l)
Analytical Lab: ~~TestAmerica~~
Sample Location: Pressure tank in basement, pre-treatment
Describe water system including treatment: Pressure tank + conditioning
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1355 Finish: 1425

Time	pH	DO	Conductivity	Temperature
1355	7.02	8.36	0.647	11.89
1400	6.65	8.34	0.567	11.43
1405	6.52	8.56	0.557	10.79
1412	6.50	8.55	0.563	10.72
1418	6.51	8.65	0.563	10.71
1423	6.49	8.61	0.559	10.72

Volume Purged: 20 gallons
Equipment Utilized: YSI 600
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 3/13/14

Sampler: EC

Weather Conditions: light snow, 10-15 mph wind

Temperature: 25°F

Location: 265 N. Sunken Meadow Rd.

Property Owner: Frank Larson - 508-255-5448

Property Contact: Lisa Adams - 508-254-8001

Phone:

Email:

Contact Log Attached: Yes: No:

Analysis Required: ~~VOC (8021)~~) and 1,4-Dioxane (8270)

Analytical Lab: Alpha

Sample Location: Kitchen sink

Describe water system including treatment: Pressure tank, no treatment or filtration

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 0820 Finish: 0840

Time	pH	DO	Conductivity	Temperature
0823	6.95	9.25	0.174	10.32
0828	6.47	8.90	0.172	10.52
0833	6.39	8.84	0.172	10.33
0836	6.34	8.61	0.172	10.39
0840	6.38	8.49	0.172	11.26

Volume Purged: ~~@~~ 30 gallons

Equipment Utilized: YSI 600

Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 3/13/14
Sampler: EC
Weather Conditions: cloudy, 10-15 mph wind
Temperature: 25°F

Location: 165 Glacier Hills Rd.
Property Owner:
Property Contact: Cliff Ambrose
Phone: 508-294-5719
Email:
Contact Log Attached: Yes: No:

Analysis Required: ~~VOC (8260)~~ and 1,4-Dioxane (8270)
Analytical Lab: Alpha
Sample Location: Pressure tank, pre-treatment
Describe water system including treatment: Pressure tank + conditioning tank
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1010 Finish: 1040

Time	pH	DO	Conductivity	Temperature
1015	6.67	9.61	0.209	7.98
1020	6.97	9.42	0.261	7.41
1025	7.10	9.35	0.258	7.65
1030	7.13	9.29	0.258	7.92
1035	7.15	9.11	0.259	7.98

Volume Purged: 35 gallons
Equipment Utilized: YSI 600
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 3/13/14
Sampler: EC
Weather Conditions: snow, 10-15 mph wind
Temperature: 25°F

Location: 155 Meadow Dr.
Property Owner: Mary Shumway
Property Contact:
Phone: 508-255-5471
Email:
Contact Log Attached: Yes: No:

Analysis Required: VOC (524.2) and 1,4-Dioxane (8270)
Analytical Lab: Alpha
Sample Location: Kitchen sink
Describe water system including treatment: Pressure tank, no treatment on site
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1215 Finish: 1240

Time	pH	DO	Conductivity	Temperature
1220	6.46	10.98	0.151	11.08
1225	6.19	10.89	0.151	11.25
1230	6.04	10.98	0.151	10.98
1235	5.91	10.95	0.150	11.01
1240	5.88	10.89	0.150	11.47

Volume Purged: 20 gallons
Equipment Utilized: YSI 600
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 3/13/14

Sampler: EC

Weather Conditions: light snow, 10-15 mph wind

Temperature: 23°F

Location: 10 Ballvic Rd

Property Owner: Cape Cod Childrens Center

Property Contact: Cindy Hogan / Karen Burns

Phone: 508-240-3310

Email:

Contact Log Attached: Yes: _____ No: _____

Analysis Required: VOC (524.2) and 1,4-Dioxane (8270)

Analytical Lab: Alpha

Sample Location: Kitchen sink

Describe water system including treatment: Two large pressure tanks, conditioning tank and filter are currently bypassed

Water meter reading: 1046340 gal

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1405 Finish: 1430

Time	pH	DO	Conductivity	Temperature
1410	6.22	11.65	0.132	8.02
1415	6.18	10.30	0.132	6.91
1420	6.09	10.12	0.132	6.64
1423	6.06	10.05	0.132	6.53
1426	6.05	10.52	0.132	6.54
1430	6.03	10.64	0.132	6.60

Volume Purged: 3.5 gallons

Equipment Utilized: YSI 600

Attach Equipment Calibration Log: _____

Eastham Landfill
Private Well Sampling Log

Date: 3/13/14

Sampler: EC

Weather Conditions: light snow, 10-15 mph wind

Temperature: 20°F

Location: 3100 A State Highway

Property Owner: Matt Mayer

Property Contact:

Phone: 508-514-0163

Email:

Contact Log Attached: Yes: _____ No: _____

Analysis Required: [redacted] and 1,4-Dioxane (8270)

Analytical Lab: Alpha

Sample Location: Kitchen sink

Describe water system including treatment: No treatment or filtration

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: [redacted] 1525 Finish: 1555

Time	pH	DO	Conductivity	Temperature
1530	5.88	4.53	0.357	7.44
1535	5.80	2.67	0.355	9.97
1540	5.74	1.90	0.355	10.21
1545	5.73	1.76	0.356	10.18
1540	5.71	1.74	0.357	10.24

Volume Purged: 20 gallons

Equipment Utilized: YSI 600

Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 3/14/19
Sampler: EC
Weather Conditions: clear, 5-10 mph wind
Temperature: 35°F

Location: 180 Old Orchard Rd.
Property Owner: Mark Okane
Property Contact:
Phone: 508-240-2263
Email:
Contact Log Attached: Yes: No:

Analysis Required: VOC (524.2) and 1,4-Dioxane (8270), Arsenic
Analytical Lab: Alpha
Sample Location: Kitchen sink
Describe water system including treatment: Pressure tank, no filtration or treatment
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1310 Finish: 1335

Time	pH	DO	Conductivity	Temperature
1313	6.96	3.61	0.565	16.41
1318	6.71	2.94	0.562	12.31
1323	6.73	2.87	0.562	9.47
1328	6.73	2.81	0.562	9.43
1333	6.74	2.78	0.561	9.41

Volume Purged: 25 gallons
Equipment Utilized: YSI 600
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 3/14/14
Sampler: EC
Weather Conditions: clear, 5-10 mph wind
Temperature: 30° F

Location: 285 Alston Ave.
Property Owner: Mark + Mary Manuelson
Property Contact: Doug Wallace
Phone: 508-237-0716
Email:
Contact Log Attached: Yes: _____ No: _____

Analysis Required: VOC (524.2) and 1,4-Dioxane (8270), Arsenic
Analytical Lab: Alpha
Sample Location: Pressure tank in basement
Describe water system including treatment: Pressure tank, no treatment or filtration
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1010 Finish: 1040

Time	pH	DO	Conductivity	Temperature
1013	6.41	4.39	0.452	8.82
1018	6.33	2.67	0.449	8.41
1024	6.29	2.34	0.449	8.33
1030	6.27	2.37	0.449	8.11
1035	6.27	2.36	0.448	8.09

Volume Purged: 30 gallons
Equipment Utilized: YSI 600
Attach Equipment Calibration Log: _____

Eastham Landfill
Private Well Sampling Log

Date: 3/14/14
Sampler: EC
Weather Conditions: clear, 5-10 mph wind
Temperature: 35°F

Location: 100 Meetinghouse Rd.
Property Owner: Jeff Carlson
Property Contact:
Phone: 774-836-6021
Email:
Contact Log Attached: Yes: No:

Analysis Required: VOC (524.2) and 1,4-Dioxane (8270), Arsenic
Analytical Lab: Alpha
Sample Location: Kitchen sink
Describe water system including treatment: Pressure tank, no treatment or filtration
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1210 Finish: 1230

Time	pH	DO	Conductivity	Temperature
1215	6.13	1.61	0.224	12.36
1220	6.21	1.47	0.221	11.11
1225	6.24	1.41	0.221	11.03
1230	6.23	1.39	0.221	10.94

Volume Purged: 30 gallons
Equipment Utilized: YSI 600
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 3/14/14
Sampler: EC
Weather Conditions: clear, 5-10 mph wind
Temperature: 35° F

Location: 175 Glacier Hill Rd.
Property Owner: Sue Pellowe
Property Contact:
Phone: 508-255-3993
Email:
Contact Log Attached: Yes: ____ No: ____

Analysis Required: ~~VOC (8260)~~ 2) and 1,4-Dioxane (8270)
Analytical Lab: Alpha
Sample Location: Pressure tank, pre-treatment
Describe water system including treatment: Pressure tank w/ conditioning tank and small filter
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1340 Finish: 1400

Time	pH	DO	Conductivity	Temperature
1340	6.97	2.41	0.345	10.02
1345	6.86	2.22	0.344	9.87
1352	6.84	2.22	0.344	9.61
1358	6.85	2.18	0.343	9.54

Volume Purged: 25 gallons
Equipment Utilized: YSI 600
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 3/14/14
Sampler: EC
Weather Conditions: clear, 5-10 mph wind
Temperature: 35°F

Location: 205 Glacier Hill Rd.
Property Owner: Janet Cooper
Property Contact:
Phone: 716-688-6304
Email:
Contact Log Attached: Yes: ____ No: ____

Analysis Required: ~~VOC (524.2)~~ and 1,4-Dioxane ~~(522.1, with RL of 0.2 ug/l)~~
Analytical Lab: ~~TestAmerica~~ Alpha
Sample Location: Pressure tank, pre-treatment
Describe water system including treatment: Pressure tank w/ conditioning tank and small filter
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1410 Finish: 1430

Time	pH	DO	Conductivity	Temperature
1418	7.08	4.57	0.464	9.31
1423	6.93	3.66	0.461	8.56
1427	6.94	3.14	0.461	8.44
1430	6.91	3.11	0.461	8.58

Volume Purged: 35 gallons
Equipment Utilized: YSI 600
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 03/28/14
Sampler: M. Duclos
Weather Conditions: Sunny, Lt wind
Temperature: 40's

Location: Alston Ave 080
Property Owner: James Kenneway
Property Contact:
Phone: (508) 237-6716
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: kitchen sink
Describe water system including treatment: pump, pressure tank
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1355 Finish: 1410

Volume Purged: 25 gallons
Equipment Utilized:
Attach Equipment Calibration Log:

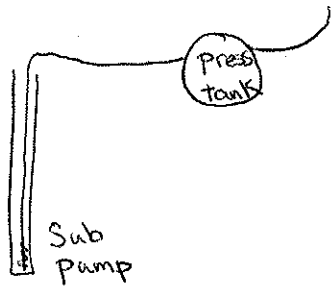
Alston Ave 080
03/28/14

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? taken in the past visit

Summary of Sampling and Monitoring Activities: purge & Sample

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:

Eastham Landfill
Private Well Sampling Log

Date: 03/28/14
Sampler: M. Duclos
Weather Conditions: Sunny, Lt wind
Temperature: 40's

Location: Deepwood Dr 065
Property Owner: Jane Pratt
Property Contact:
Phone: (508) 240-5207
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: at the pressure tank before treatment
Describe water system including treatment: ~~pump~~, pressure tank, carbon vessel, hardness tank
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1215 Finish: 1233

Volume Purged: 30 gallons
Equipment Utilized:
Attach Equipment Calibration Log:

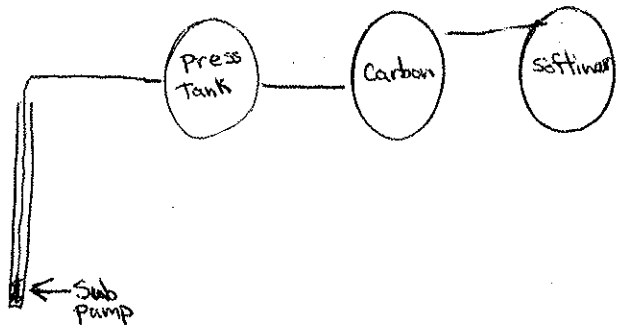
Deepwood Dr 065
3/28/14

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? CnL

Summary of Sampling and Monitoring Activities: purge & Sample

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:

Eastham Landfill
Private Well Sampling Log

Date: 03/28/14
Sampler: M. Duclos
Weather Conditions: Sunny, Lt breeze
Temperature: 40's

Location: Redberry Ln 045
Property Owner:
Property Contact: Bill Allen
Phone: (774) 722-3294
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Kitchen sink
Describe water system including treatment: Pump, pressure tank
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1005 Finish: 1018

Volume Purged: 25 gallons
Equipment Utilized:
Attach Equipment Calibration Log:

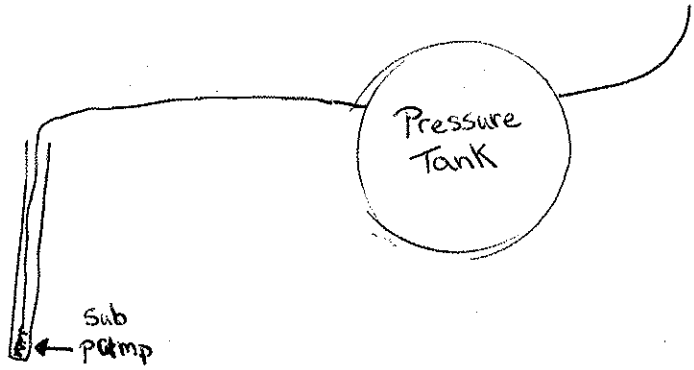
Redberry Ln 045

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? taken Last [redacted]

Summary of Sampling and Monitoring Activities: Purge & Sample

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:

Eastham Landfill
Private Well Sampling Log

Date: 3/28/14
Sampler: M. Duclos
Weather Conditions: Sunny, Lt wind
Temperature: 40's

Location: Alston Ave 265
Property Owner: Paul Underhill
Property Contact:
Phone: (508) 255-6235
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Outside spigot
Describe water system including treatment:
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 0850 Finish: 0903

Volume Purged: 25 gallons
Equipment Utilized:
Attach Equipment Calibration Log:

Alston Ave 265
3/28/14

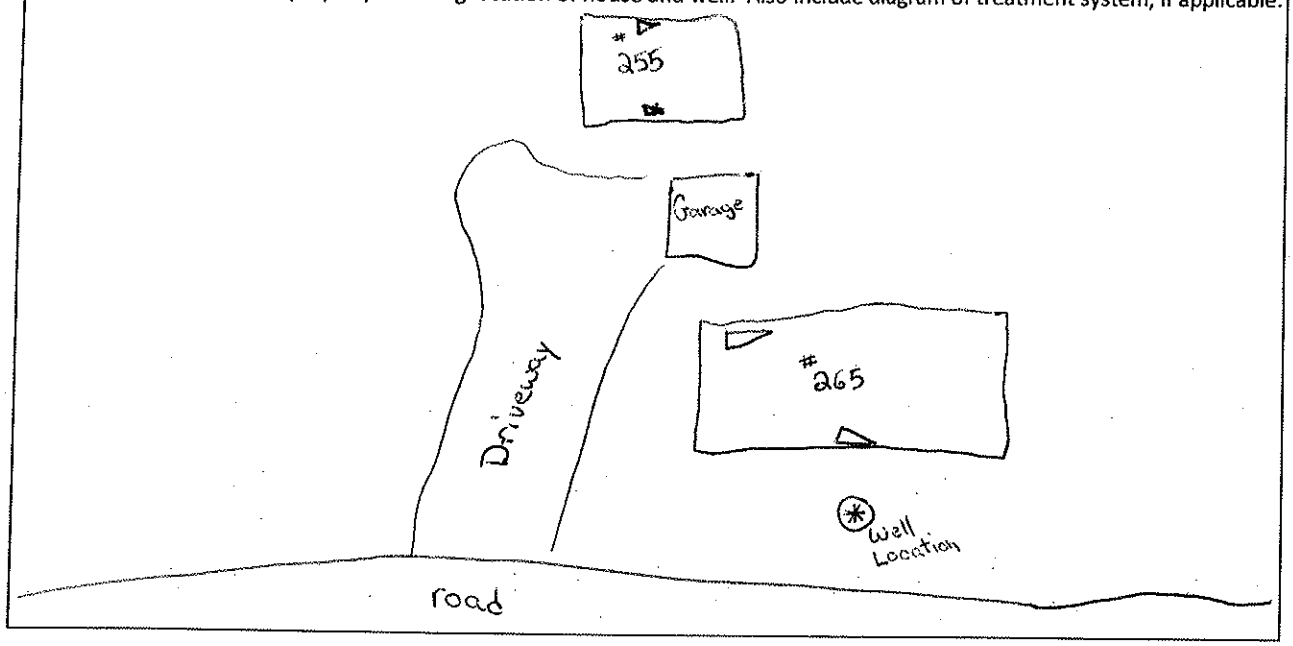
Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Provided : 80 feet

Summary of Sampling and Monitoring Activities: purge & Sample

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 3/28/14
Sampler: M. Duclos
Weather Conditions: Sunny, Lt wind
Temperature: 40's

Location: Alston Ave 255
Property Owner: Paul Underhill
Property Contact:
Phone: (508) 2556235
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: at carbon vessels inf, mid, eff
Describe water system including treatment: pump, pressure tank, 2 carbon vessels
Water meter reading: 17308

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 17308 Finish:
Volume Purged: gallons
Equipment Utilized:
Attach Equipment Calibration Log:

Sample Procedure Completed

255 Alston
03/28/14

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? CNL

Summary of Sampling and Monitoring Activities: Purge & Sample

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:

Eastham Landfill
Private Well Sampling Log

Date: 03/27/14
Sampler: M. Duclos
Weather Conditions: Sunny, Windy
Temperature: 40's

Location: Knowles St 065
Property Owner: Devon O'Rourke
Property Contact:
Phone: (774) 722-5995
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Kitchen sink
Describe water system including treatment: Pump, pressure tank
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1315 Finish: 1323

Volume Purged: 30 gallons
Equipment Utilized:
Attach Equipment Calibration Log:

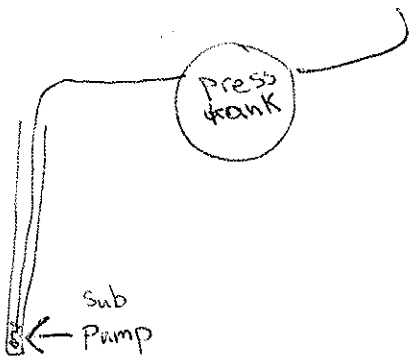
Knowles st 065
03/28/14

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? already taken

Summary of Sampling and Monitoring Activities: Purge & Sample

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:

Eastham Landfill
Private Well Sampling Log

Date: 03/27/14
Sampler: M. Duclos
Weather Conditions: Sunny, windy
Temperature: 40's

Location: Chipman st 030
Property Owner: Kevin Eastman
Property Contact:
Phone: (774) 216-9403
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Kitchen sink
Describe water system including treatment: pump, pressure tank
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1215 Finish: 1228

Volume Purged: 30 gallons
Equipment Utilized:
Attach Equipment Calibration Log:

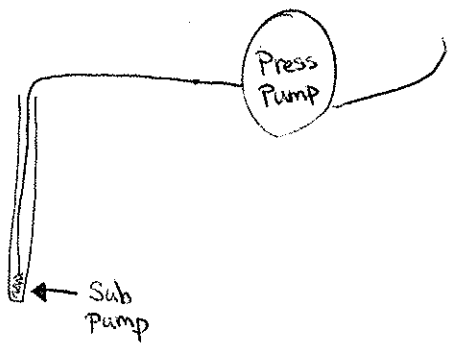
30 Chipman st
03/28/14

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Well depth already taken

Summary of Sampling and Monitoring Activities: purge & sample

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:

Eastham Landfill
Private Well Sampling Log

Date: 3/27/14
Sampler: M. Duclos
Weather Conditions: Sunny, 40's windy
Temperature:

Location: Meetinghouse Rd 185
Property Owner:
Property Contact: Russ Sandblom
Phone: (508)332-8454
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: at the pressure tank before treatment
Describe water system including treatment: pump, pressure tank,
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1015 Finish: 1028

Volume Purged: 30 gallons
Equipment Utilized:
Attach Equipment Calibration Log:

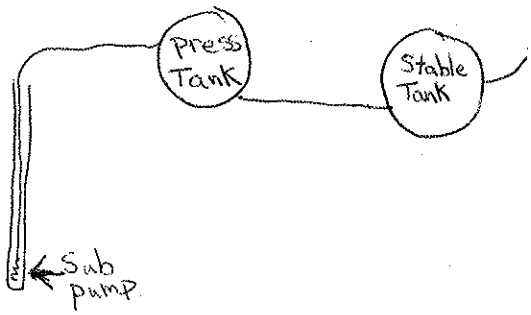
Meetinghause Rd 185

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Could not locate / Show

Summary of Sampling and Monitoring Activities: Purge & Sample

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:

Eastham Landfill
Private Well Sampling Log

Date: 3/27/14
Sampler: M. Duclos
Weather Conditions: Sunny, windy
Temperature: 40's

Location: Starlight 050
Property Owner:
Property Contact: Conway Realtor Jim O'Brien
Phone: (508) 534-5555
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: in crawlspace under property after pressure tank
Describe water system including treatment: pressure tank,
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 0330 Finish: 344

Volume Purged: 30 gallons
Equipment Utilized:
Attach Equipment Calibration Log:

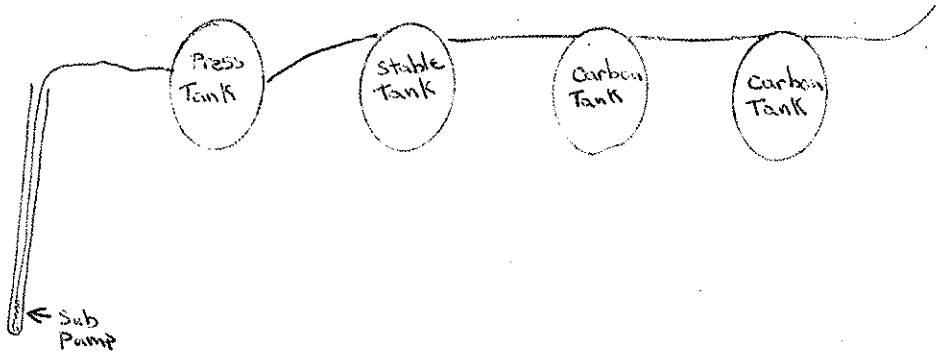
Starlight 050

Eastham Landfill
Private Well Sampling Log

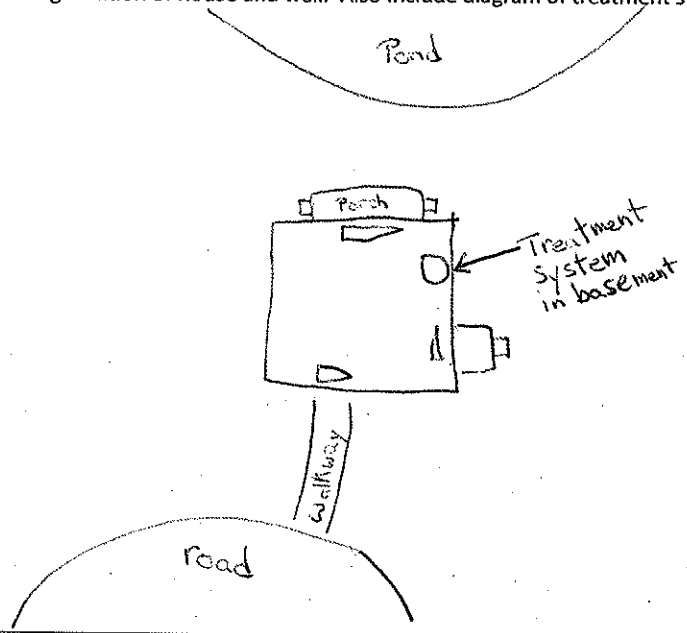
Well Depth: Measured or Provided? Could not locate

Summary of Sampling and Monitoring Activities: Purge & Sample

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 03/25/14
Sampler: M. Dudos
Weather Conditions: Sunny, calm
Temperature: 20's

Location: Cedar Ln 030
Property Owner: Milsky
Property Contact:
Phone:
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: at pressure tank before treatment
Describe water system including treatment: ~~pump~~, pressure tank, hardness tank
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1318 Finish: 1332

Volume Purged: 30 gallons
Equipment Utilized:
Attach Equipment Calibration Log:

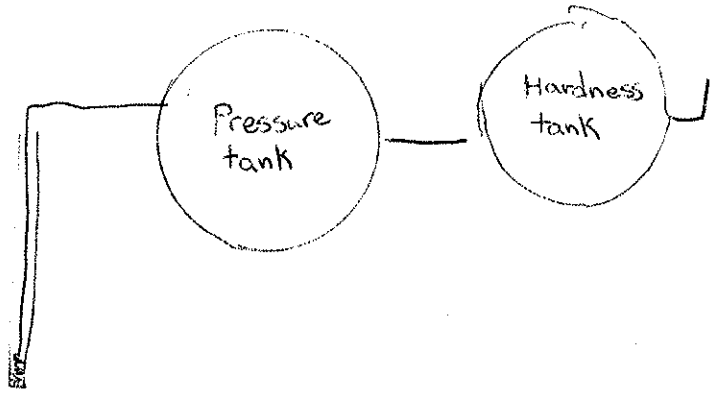
Cedar Ln 030

Eastham Landfill
Private Well Sampling Log

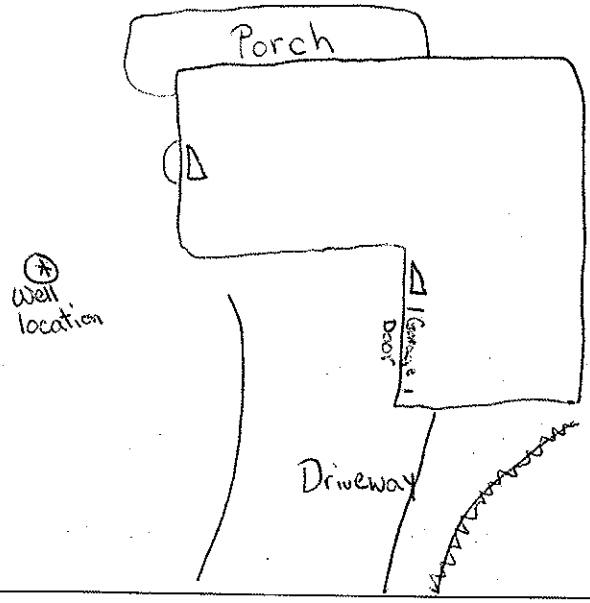
Well Depth: Measured or Provided? Measured 36 1/2

Summary of Sampling and Monitoring Activities: Purge & Sample

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 03/25/14
Sampler: M. Dwelos
Weather Conditions: Sunny, calm
Temperature: 20's

Location: Starlight Ln 030
Property Owner: Byron Higgins
Property Contact:
Phone: (508) 255-5611
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Spigot outside near driveway
Describe water system including treatment: pump, pressure tank
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1115 Finish: 1128

Volume Purged: 25 gallons
Equipment Utilized:
Attach Equipment Calibration Log:

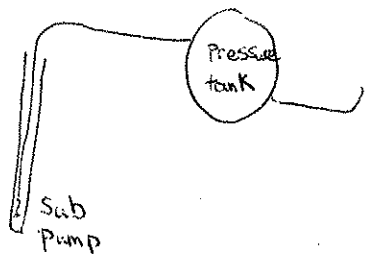
Starlight Ln 30

Eastham Landfill
Private Well Sampling Log

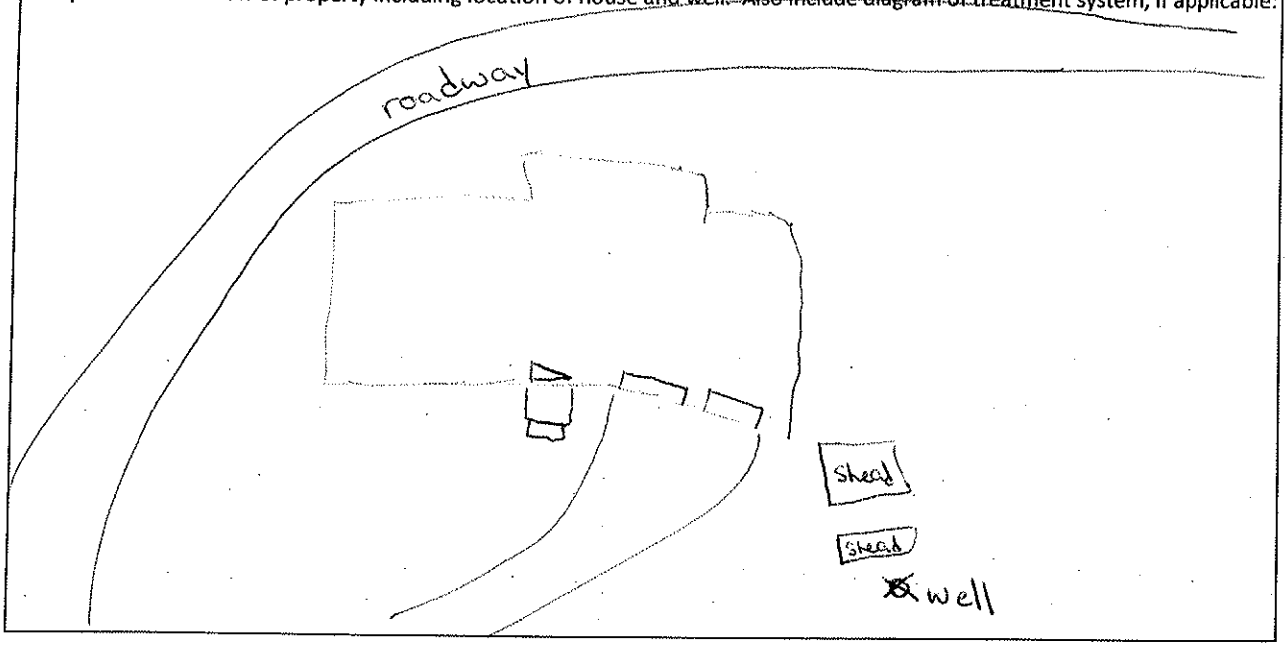
Well Depth: Measured or Provided? Provided : 75'

Summary of Sampling and Monitoring Activities: purge & sample

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. ~~Also include diagram of treatment system, if applicable:~~



Eastham Landfill
Private Well Sampling Log

Date: 03/25/14
Sampler: M. Duclos
Weather Conditions: Sunny, calm
Temperature: 20's

Location: Preservation way 004
Property Owner: Nancy Fuller
Property Contact:
Phone: (508) 240-7030
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Inside at pressure tank before the treatment
Describe water system including treatment: pump, pressure tank, hardness tank, carbon
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1003 Finish: 1014

Volume Purged: 25 gallons
Equipment Utilized:
Attach Equipment Calibration Log:

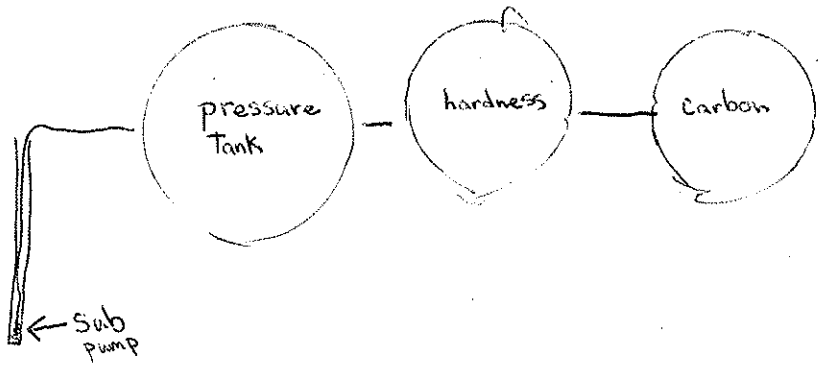
004 Preservation Way
03/28/14

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided?

Summary of Sampling and Monitoring Activities: purge & sample

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:

Eastham Landfill
Private Well Sampling Log

Date: 3/25/14
Sampler: M. Duclos
Weather Conditions: Sunny, Calm
Temperature: 20's

Location: State HWY 3172 BU
Property Owner: Frank Foley
Property Contact:
Phone: (508) 737-9976
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: at the well inside small shed
Describe water system including treatment: above ground pump, pressure tank
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 345 Finish: 357

Volume Purged: 35 gallons
Equipment Utilized: none
Attach Equipment Calibration Log:

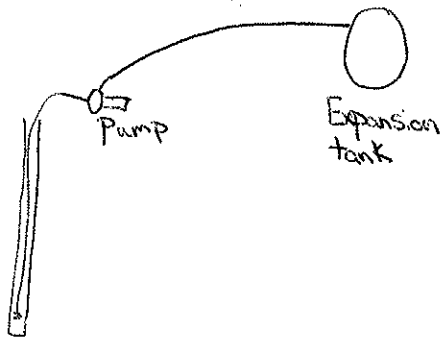
State HWY 3172 BU

Eastham Landfill
Private Well Sampling Log

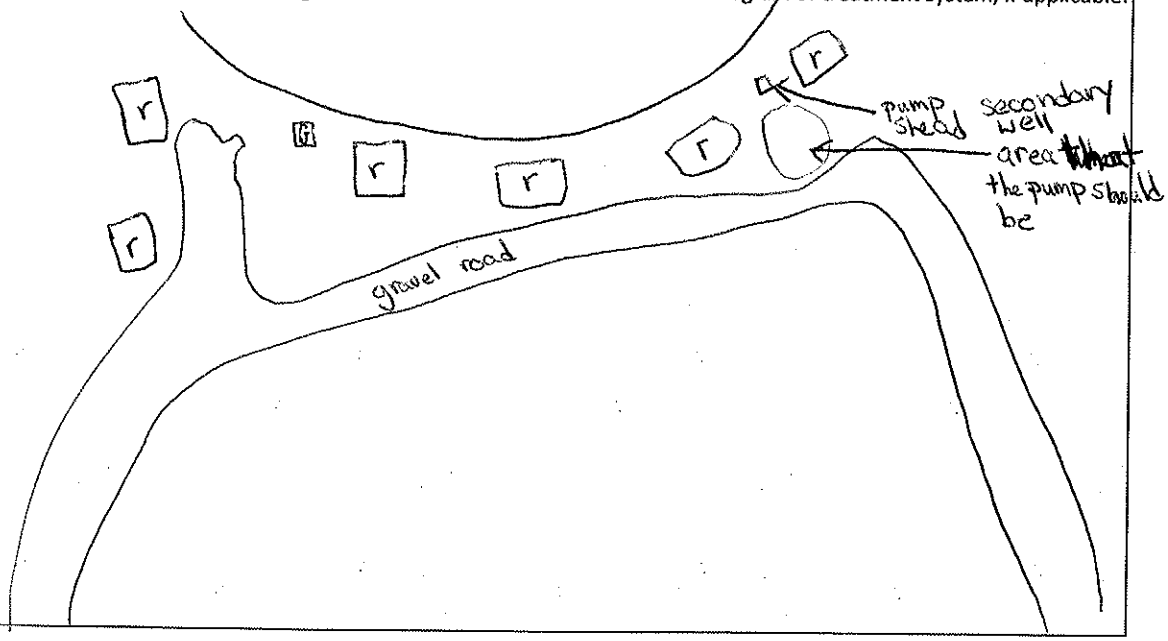
Well Depth: Measured or Provided? well covered with soil

Summary of Sampling and Monitoring Activities: purge & sample

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 3/25/14
Sampler: M. Duclos
Weather Conditions: Sunny, Calm
Temperature: 20's

Location: State Hwy 3172 PR
Property Owner: Frank Foley
Property Contact:
Phone: (508) 737-9976
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Kitchen sink with treatment system bypassed
Describe water system including treatment:
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 0325 Finish: 0337

Volume Purged: 25 gallons
Equipment Utilized: None
Attach Equipment Calibration Log:

State HWY 3172 PR

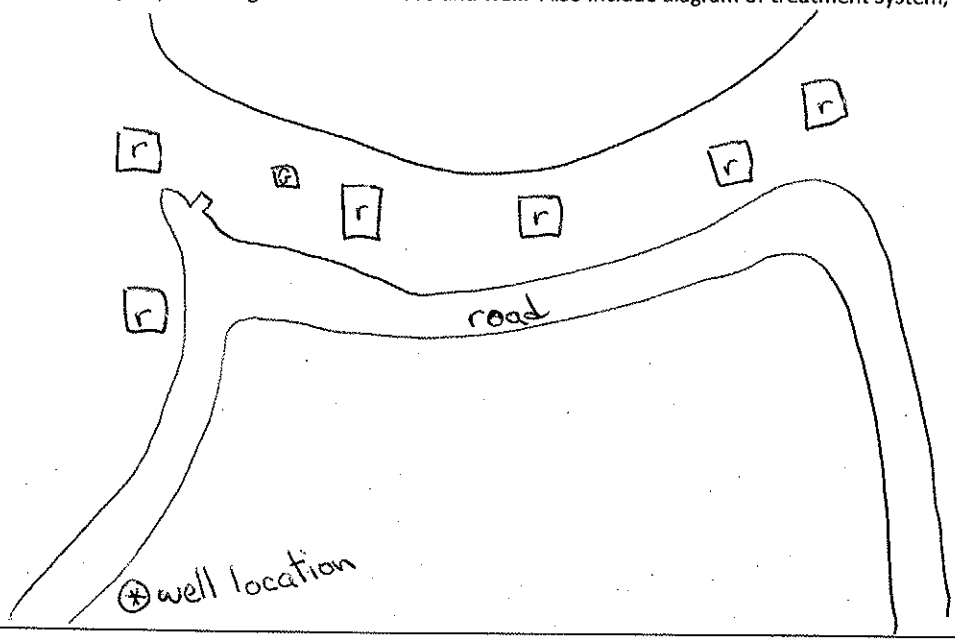
Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Well was measured Last

Summary of Sampling and Monitoring Activities: Purge & Sample

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 3/24/14
Sampler: M. Duclos
Weather Conditions:
Temperature:

Location: Meetinghouse Rd 375
Property Owner:
Property Contact:
Phone: (508) 255-2414
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: in the basement
Describe water system including treatment: pump, pressure tank, carbon vessel, particulate filter
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1508 Finish: 1523

Volume Purged: 30 gallons
Equipment Utilized: none
Attach Equipment Calibration Log:

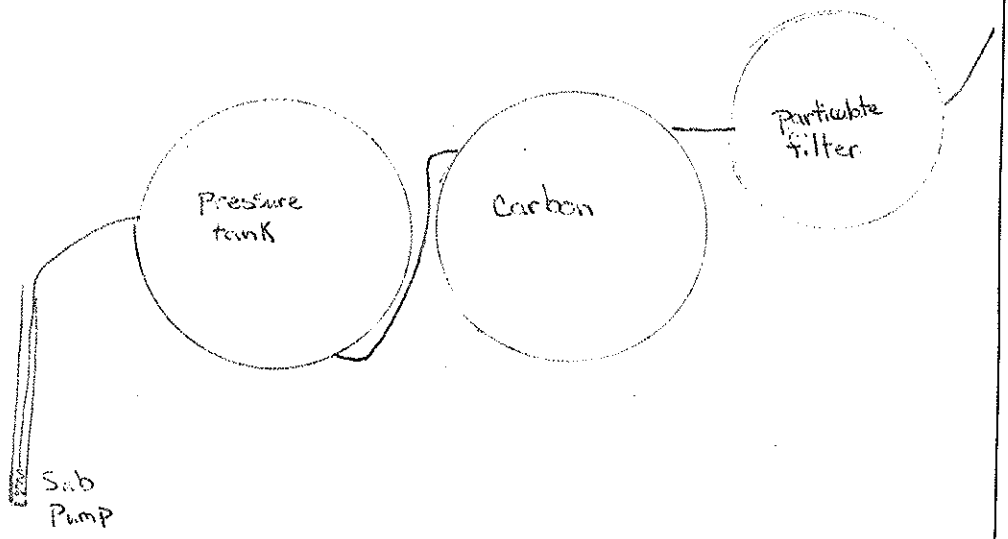
Meetinghouse Rd 375
3/24/14

Eastham Landfill
Private Well Sampling Log

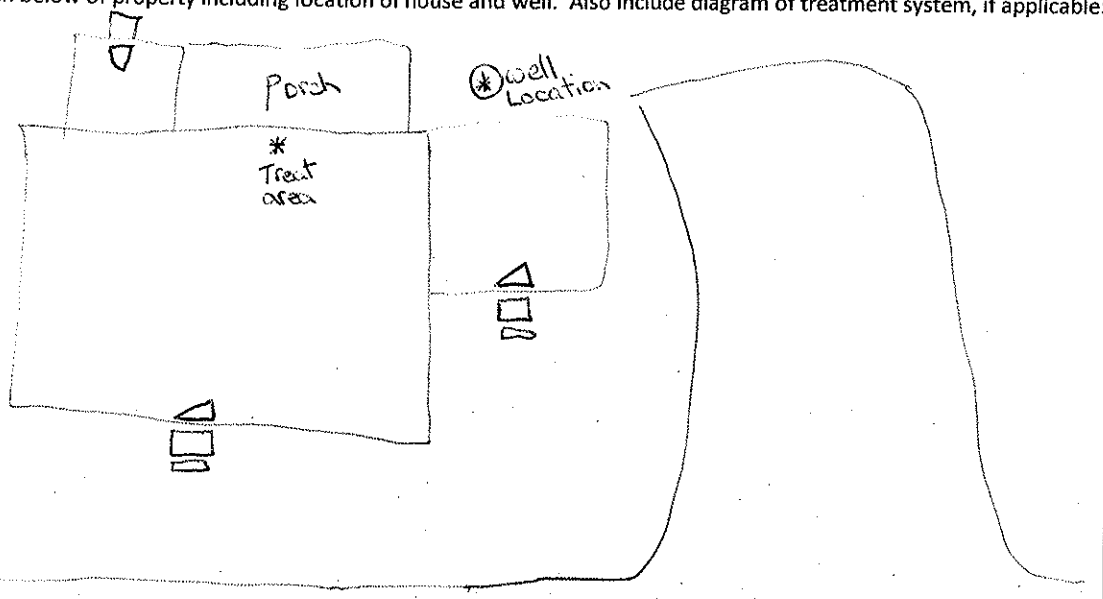
Well Depth: Measured or Provided? measured 80'

Summary of Sampling and Monitoring Activities: purge & sample

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 3/24/14
Sampler: M. Dudos
Weather Conditions: Sunny, windy
Temperature: 20's

Location: Elda Way 007
Property Owner: Robert Moss
Property Contact:
Phone: (774) 722-5071
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: at the drain before carbon treatment
Describe water system including treatment: pump, pressure tank, carbon vessel
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1335 Finish: 1337

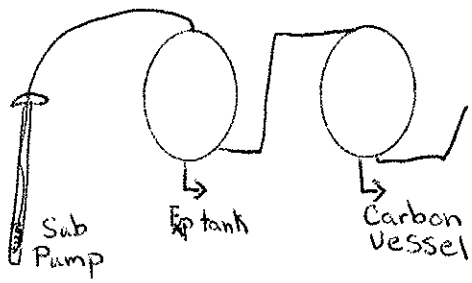
Volume Purged: 30 gallons
Equipment Utilized: none
Attach Equipment Calibration Log:

Elda Way 007
3/24/14

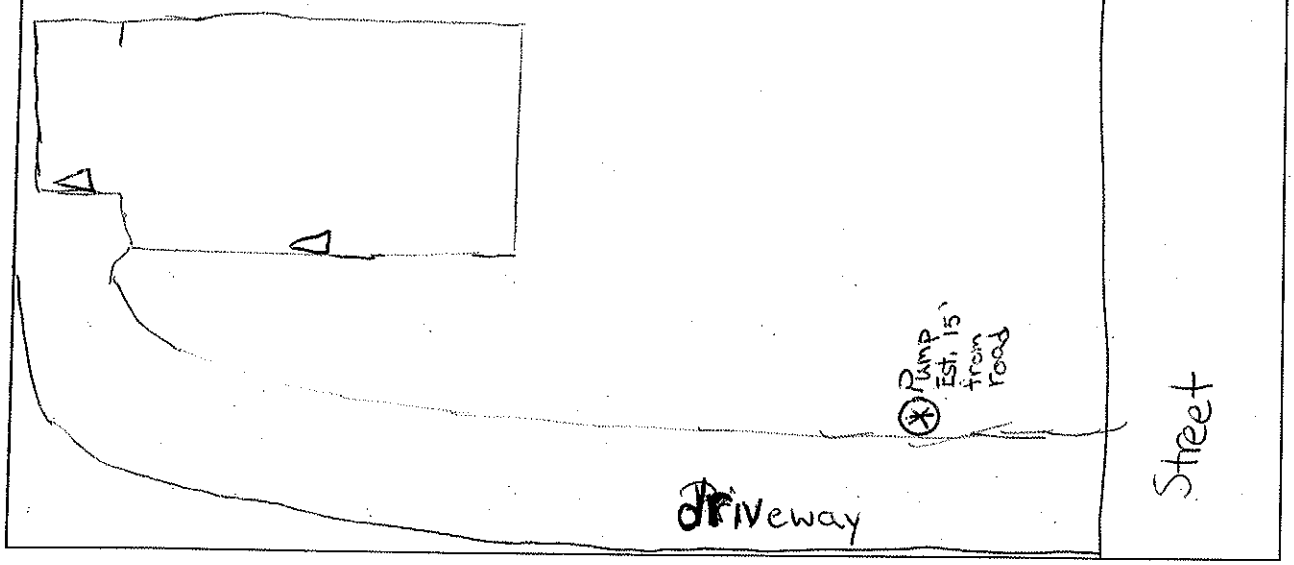
Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? measured 84' * casing broken
water + Soil on surface penetrate well
Summary of Sampling and Monitoring Activities: purge & sample

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 3/24/14
Sampler: M. Duclos
Weather Conditions: Sunny, windy
Temperature: 20's

Location: Alston Ave 065
Property Owner: Larry Ondovic
Property Contact:
Phone: (508) 719-0252
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Outside spigot
Describe water system including treatment: pump & pressure tank
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1030 Finish: 1043

Volume Purged: 30 gallons
Equipment Utilized: none
Attach Equipment Calibration Log:

Alston Ave 065 Eastham Landfill
3/24/14 Private Well Sampling Log

Well Depth: Measured or Provided? could not find well location

Summary of Sampling and Monitoring Activities: purge & Sample

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable: → no location

Eastham Landfill
Private Well Sampling Log

Date: 3/24/14
Sampler: M. Duclos
Weather Conditions: Sunny, Windy
Temperature: 20's

Location: Meetinghouse Rd 0140
Property Owner: Doug Wallace
Property Contact:
Phone: (508) 237-0716
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Kitchen Sink
Describe water system including treatment: pump, pressure tank
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 950 Finish: 1002

Volume Purged: 25 gallons
Equipment Utilized: None
Attach Equipment Calibration Log: —

Meetinghouse Rd 0140
3/24/14

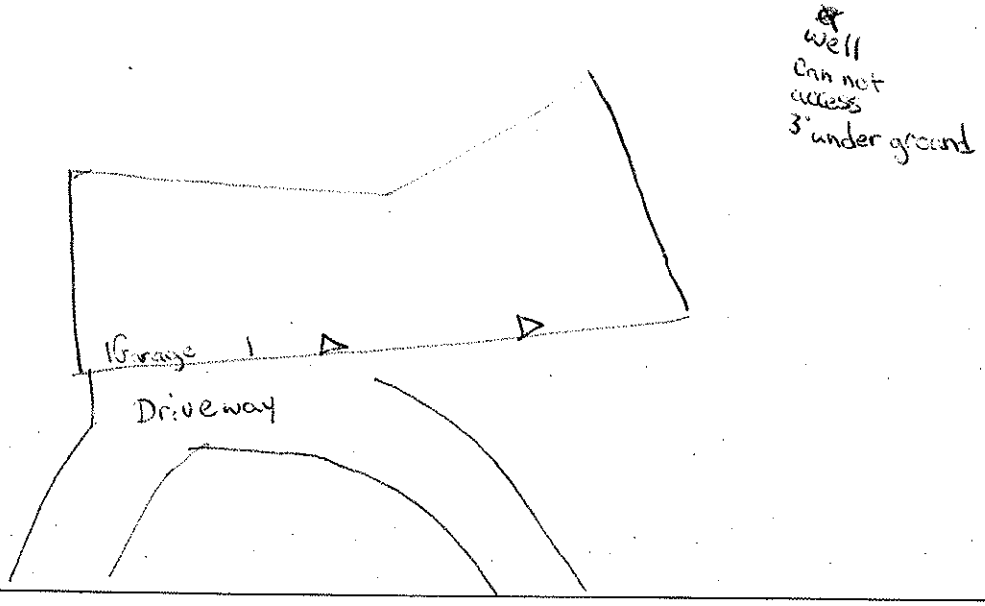
Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Can not access

Summary of Sampling and Monitoring Activities: purge & sample

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 3/24/14
Sampler: M. Duclos
Weather Conditions: Sunny, Windy
Temperature: 20's

Location: Sharon Circle 020
Property Owner: David Lord
Property Contact:
Phone: (508) 737-9381
Email:
Contact Log Attached: Yes: ✓ No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Kitchen Sink (not at spigot outside, frozen)
Describe water system including treatment: pump, pressure tank
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 0917 Finish: 0927

Volume Purged: 25 gallons
Equipment Utilized: none
Attach Equipment Calibration Log:

Sharon Circle 020
3/24/14

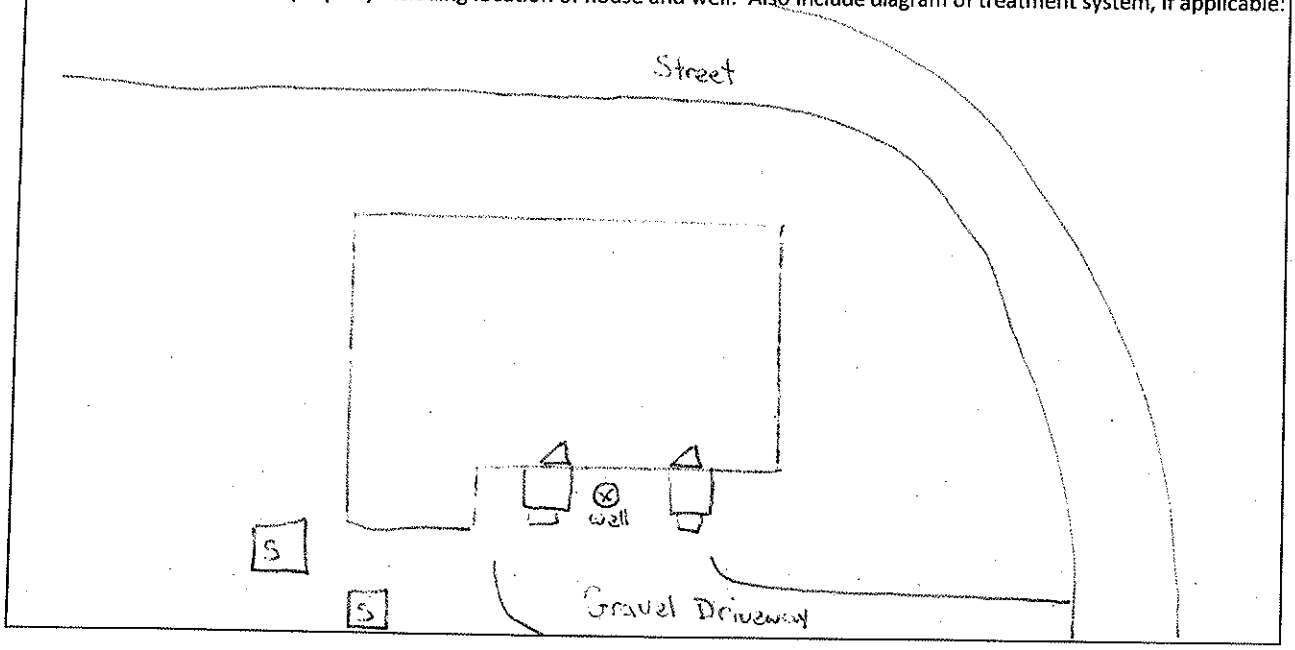
Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? measured 46 feet

Summary of Sampling and Monitoring Activities: purging only, then sampled

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 4/11/14

Sampler: EC

Weather Conditions: mostly cloudy, 5-10 mph wind

Temperature: 55°

Location: State Highway 3440

Property Owner: Christopher + Samantha Stone

Property Contact: [redacted] Ben Fletcher

Phone: 508-954-9853

Email: b.fletcher@verizon.net

Contact Log Attached: Yes: _____ No: _____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Bathroom sink

Describe water system including treatment: Pressure tank, conditioning tank is currently bypassed

Water meter reading: _____

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1110 Finish: 1130

Volume Purged: 22 gallons

Equipment Utilized: _____

Attach Equipment Calibration Log: _____

Eastham Landfill
Private Well Sampling Log

Date: 4/11/14
Sampler: EC
Weather Conditions: Mostly cloudy, 5-10 mph wind
Temperature: 55°

Location: 5 Walters Way
Property Owner: David Mills
Property Contact:
Phone: 508-285-9557
Email: d_mills00@msn.com
Contact Log Attached: Yes: _____ No: _____

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Kitchen sink
Describe water system including treatment: Pressure tank, no treatment or filtration
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 0910 Finish: 0925

Volume Purged: 25 gallons
Equipment Utilized:
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 4/11/14

Sampler: EC

Weather Conditions: mostly sunny, 5-10 mph wind

Temperature: 60°

Location: 60 Chokeberry Dr.

Property Owner: Thomas LeMountain

Property Contact:

Phone: 860-870-0250

Email: mtmass@sbcglobal.net

Contact Log Attached: Yes: _____ No: _____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Kitchen sink

Describe water system including treatment: Pressure tank, no treatment or filtration

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1220 Finish: 1245

Volume Purged: 20 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 4/14/14

Sampler: EC

Weather Conditions: mostly sunny, 10-15 mph wind

Temperature: 50°

Location: 25 Jason Drive

Property Owner: Kathy Kuhn

Property Contact:

Phone: 203-376-1297

Email:

Contact Log Attached: Yes: No:

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Pressure tank, pre-treatment

Describe water system including treatment: Aqua-Pure acid neutralizer w/ American Plumber Model W10 Filter

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1105 Finish: 1135

Volume Purged: 20 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 4/14/14

Sampler: EC

Weather Conditions: clear, 10-15 mph wind

Temperature: 65°

Location: 115 Glacier Hill Rd.

Property Owner: Marge Obremski

Property Contact:

Phone: 973-377-8705

Email: mobremski@aol.com

Contact Log Attached: Yes: _____ No: _____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Kitchen sink

Describe water system including treatment: Pressure tank, no treatment or filtration

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1345 Finish: 1330

Volume Purged: 20 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Date: 4/14/14

Sampler: EC

Weather Conditions: clear, 10-15 mph wind

Temperature: 65°

Location: 145 Glacier Hill Rd.

Property Owner: Jack Dillon 386-597-2642

Property Contact: neighbor Adam Bohannon 774-353-6477

Phone:

Email: dimer417@sbcglobal.net

Contact Log Attached: Yes: _____ No: _____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: outside spigot

Describe water system including treatment: Pressure tank, no treatment or filtration

Water meter reading: _____

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1410 Finish: 1425

Volume Purged: 30 gallons

Equipment Utilized: _____

Attach Equipment Calibration Log: _____

Eastham Landfill
Private Well Sampling Log

Date: 4/14/14
Sampler: DB
Weather Conditions: 50's, sun, 10-15 mph wind
Temperature: 40's A.M., 50's afternoon

Location: Mary Chase Rd - 155
Property Owner: LINDA TUCHIN
Property Contact:
Phone: 201-741-3680 (cell) 508 247 9802
Email: lindatuchin@yahoo.com
Contact Log Attached: Yes: ____ No: X

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Kitchen sink
Describe water system including treatment: Pressure tank with ion-exchange filter
Water meter reading: No meter

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1400 Finish: 1420

Volume Purged: ≈ 20 gallons
Equipment Utilized:
Attach Equipment Calibration Log:

Sample taken @ 1420
Duplicate taken @ 1425

Eastham Landfill
Private Well Sampling Log

Date: 4/14/14
Sampler: DB
Weather Conditions: 50's, Sun, 10-15 mph wind
Temperature: 40's A.M., 50's afternoon

Location: [redacted] KNOWLES ST_050
Property Owner: LESA MILAS
Property Contact: Same
Phone: 860-228-2524
Email: milas1e comcast.net
Contact Log Attached: Yes: _____ No: X

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Kitchen sink
Describe water system including treatment: Pressure tank with water softning system for iron. Softner being used is potassium chloride
Water meter reading: Not observed

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1300 Finish: 1320

Volume Purged: ~20 gallons
Equipment Utilized: _____
Attach Equipment Calibration Log: _____

Sample collected at 1320
Duplicat collected at 1325

Eastham Landfill
Private Well Sampling Log

Date: 4/14/14
Sampler: DB
Weather Conditions: 50's, SW, 10-15 mph wind
Temperature: 40's A.M., 50's afternoon

Location: Alston Ave_050
Property Owner: Deanna Ross
Property Contact: Same
Phone: (508) 360-7750
Email: dannamross@hotmail.com
Contact Log Attached: Yes: _____ No: X

Analysis Required: 1,4-Dioxane (8270 SIM), VOC's
Analytical Lab: Alpha
Sample Location: Outside spigot @ shed
Describe water system including treatment: Not Observed
Water meter reading: Not observed

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1050 Finish: 1045

Volume Purged: ≈ 20 gallons
Equipment Utilized: _____
Attach Equipment Calibration Log: _____

Sample for 1,4-Dioxane & VOC's collected @ 1045
Duplicate samples for 1,4-Dioxane & VOC's collected @ 1050

Eastham Landfill
Private Well Sampling Log

Date: 4/14/14
Sampler: DB
Weather Conditions: 50's, sun, 10-15 mph wind
Temperature: 40's A.M., 50's afternoon

Location: STATE HWY - 3280
Property Owner: Ed Steinbauer
Property Contact: Same
Phone: C: 267-736-3547, H: 215-661-9956
Email: ed@steinbauerweb.com
Contact Log Attached: Yes: _____ No: X

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: outside - spigot on left side of garage
Describe water system including treatment: Community well
Water system not observed
Water meter reading: Not observed

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1136 Finish: 1155

Volume Purged: ≈20 gal gallons
Equipment Utilized: _____
Attach Equipment Calibration Log: _____

Sample for 1,4-Dioxane collected @ 1155
Duplicate sample for 1,4-Dioxane collected @ 1200

Eastham Landfill
Private Well Sampling Log

Date: 5/5/14

Sampler: EC

Weather Conditions: mostly cloudy, 5-10 mph wind

Temperature: 50° F

Location: 3168 State Highway

Property Owner: Polley Foley

Property Contact:

Phone: 508-737-9976

Email:

Contact Log Attached: Yes: _____ No: _____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Kitchen sink

Describe water system including treatment: No treatment or filtration

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 0805 Finish: 0835

Volume Purged: 20 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Well head is buried and not accessible for gauging ✓

Summary of Sampling and Monitoring Activities: Let in to house by Polly Foley. Water system does not include any treatment or filtration. Purge and sample from kitchen sink.

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:

Eastham Landfill
Private Well Sampling Log

Date: 5/5/14

Sampler: EC

Weather Conditions: Cloudy, 5-10 mph wind

Temperature: 50° F

Location: 85 Alston Ave.

Property Owner: William Butt

Property Contact: 508-255-1385

Phone:

Email:

Contact Log Attached: Yes: _____ No: _____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Kitchen Sink

Describe water system including treatment: Pressure tank, no treatment or filtration

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 0905 Finish: 0930

Volume Purged: 20 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

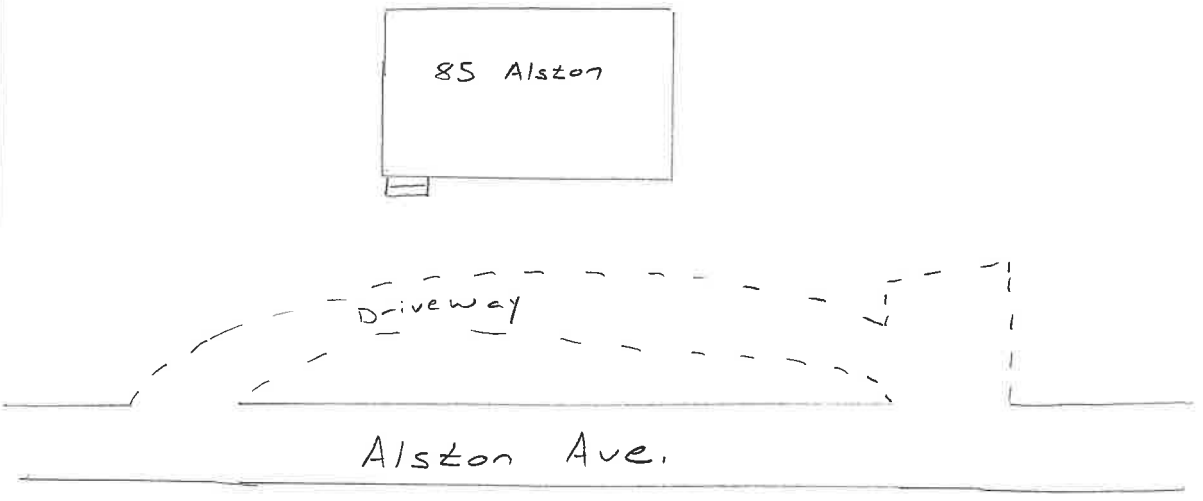
Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? 140', provided by home owner

Summary of Sampling and Monitoring Activities: Purge and sample from Kitchen sink.

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/5/14

Sampler: EC

Weather Conditions: partly cloudy, 5-10 mph wind

Temperature: 55° F

Location: 350 Meetinghouse Rd.

Property Owner: Daniel Griswold

Property Contact:

Phone: 413-687-1593

Email:

Contact Log Attached: Yes: No:

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Kitchen sink

Describe water system including treatment: Pressure tank, no treatment or filtration

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1110 Finish: 1135

Volume Purged: 20 gallons

Equipment Utilized:

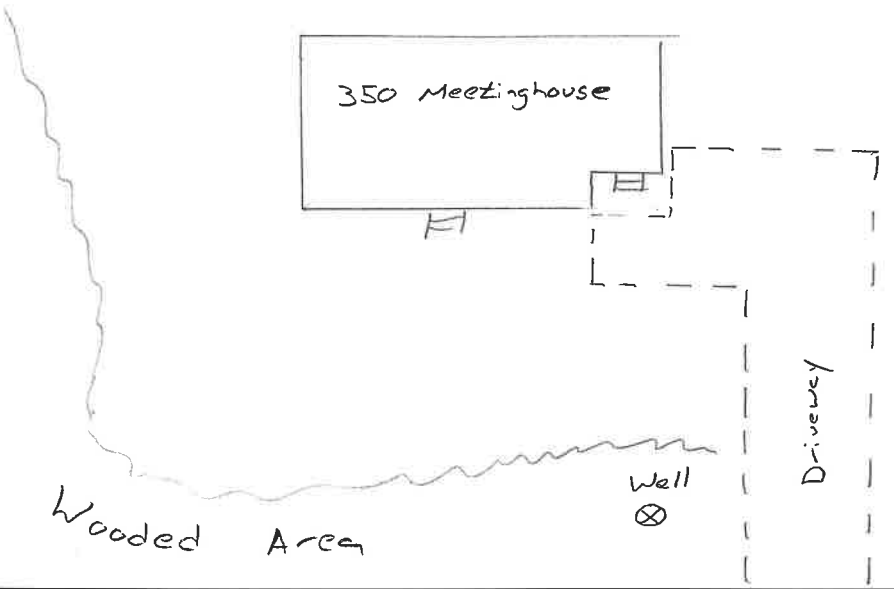
Attach Equipment Calibration Log:

Well Depth: Measured or Provided? Could not gauge. Well head has pressed PVC cap

Summary of Sampling and Monitoring Activities: Purge and sample from kitchen sink. System does not contain any treatment or filtration

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/5/14
Sampler: EC
Weather Conditions: Sunny, 5-10 mph wind
Temperature: 60°F

Location: 5 Starlight Lane
Property Owner: Matthew Muir
Property Contact:
Phone: 508-240-1449
Email:
Contact Log Attached: Yes: No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Kitchen sink
Describe water system including treatment: Pressure tank, no treatment or filtration
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1235 Finish: 1238

Volume Purged: 2* gallons
Equipment Utilized:
Attach Equipment Calibration Log:

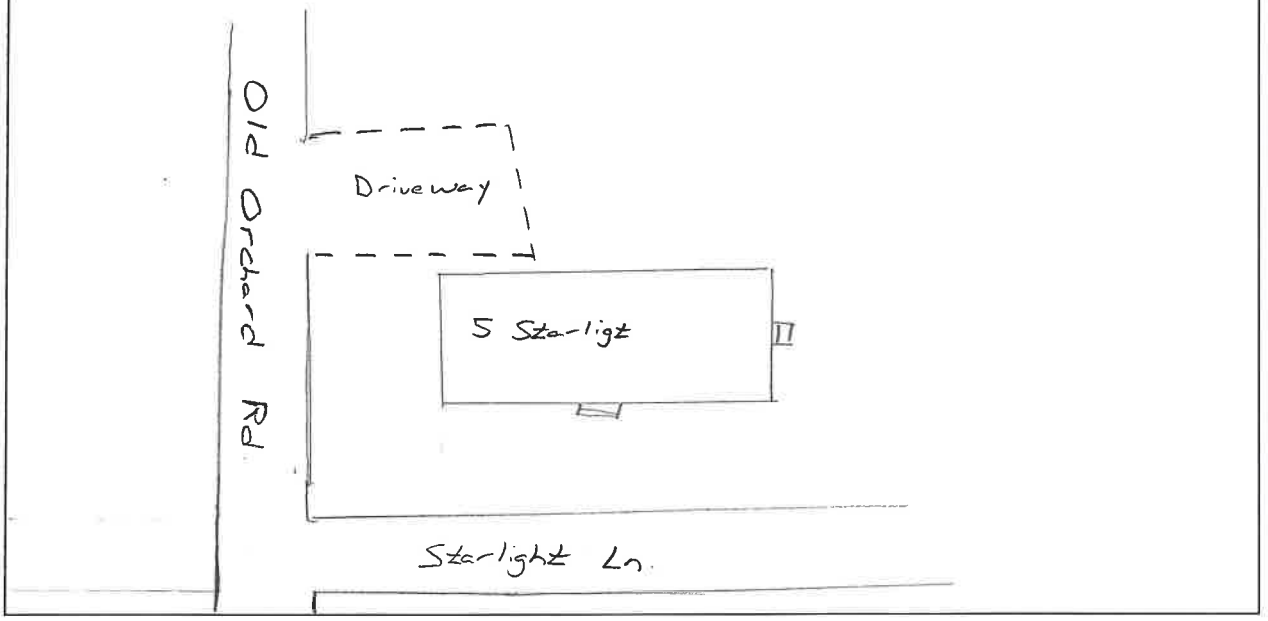
* Homeowner is having problems w/ his pump/well and asked that I do not purge more than a couple gallons before sampling.

Well Depth: Measured or Provided? Well head is buried, cannot gauge

Summary of Sampling and Monitoring Activities: Purge and sample from kitchen sink. Purged only two gallons prior to sampling by request of homeowner who is having problems w/ his pump/ well

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/5/14

Sampler: EC

Weather Conditions: mostly sunny, 5-10 mph wind

Temperature: 60°F

Location: 205 Meetinghouse Rd.

Property Owner: Robert + Nancy Nickerson

Property Contact:

Phone:

Email:

Contact Log Attached: Yes: No:

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Kitchen Sink

Describe water system including treatment: Pressure tank, no treatment or filtration

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1400 Finish: 1425

Volume Purged: 20 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Provided: 80'

Summary of Sampling and Monitoring Activities: Purge and sample from kitchen sink. Water system does not include any treatment or filtration.

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:

Eastham Landfill
Private Well Sampling Log

Date: 5/5/14

Sampler: EC

Weather Conditions: mostly cloudy, 5-10 mph wind

Temperature: 55°F

Location: 3 Whidah Ln.

Property Owner: James Chapin

Property Contact:

Phone: 617-947-2937

Email:

Contact Log Attached: Yes: _____ No: _____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Outside spigot, front of house

Describe water system including treatment:

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1010 Finish: 1025

Volume Purged: 25 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

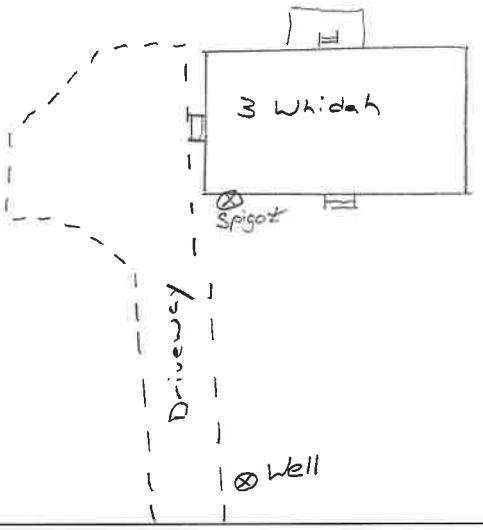
Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Measured: DTB: 77' DTW: 46'

Summary of Sampling and Monitoring Activities: Purge and sample from outside on front left of house. Could not enter home to confirm water system details.

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/6/14

Sampler: EC

Weather Conditions: sunny, 0-5 mph wind

Temperature: 50° F

Location: 180 Old Orchard Rd.

Property Owner: Douglas + Mark Okane

Property Contact:

Phone: 508-240-2263

Email:

Contact Log Attached: Yes: No:

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Outside spigot, left front of house

Describe water system including treatment: Pressure tank, no treatment or filtration

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 0820 Finish: 0835

Volume Purged: 35 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Well head has pressed PVC cap that cannot be removed for gauging.

Summary of Sampling and Monitoring Activities: Purge and sample from outside spigot on left front of house. Collect LMP samples for 1,4 Dioxane, VOC, + As

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:

Eastham Landfill
Private Well Sampling Log

Date: 5/6/14

Sampler: EC

Weather Conditions: Sunny, 0-5 mph wind

Temperature: 50°F

Location: 225 Alston Ave.

Property Owner: David + Jane Coutts

Property Contact:

Phone: 845-453-0897

Email:

Contact Log Attached: Yes: ____ No: ____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Outside spigot, front left of house

Describe water system including treatment: *No access indoors*

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 0905 Finish: 0920

Volume Purged: 25 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

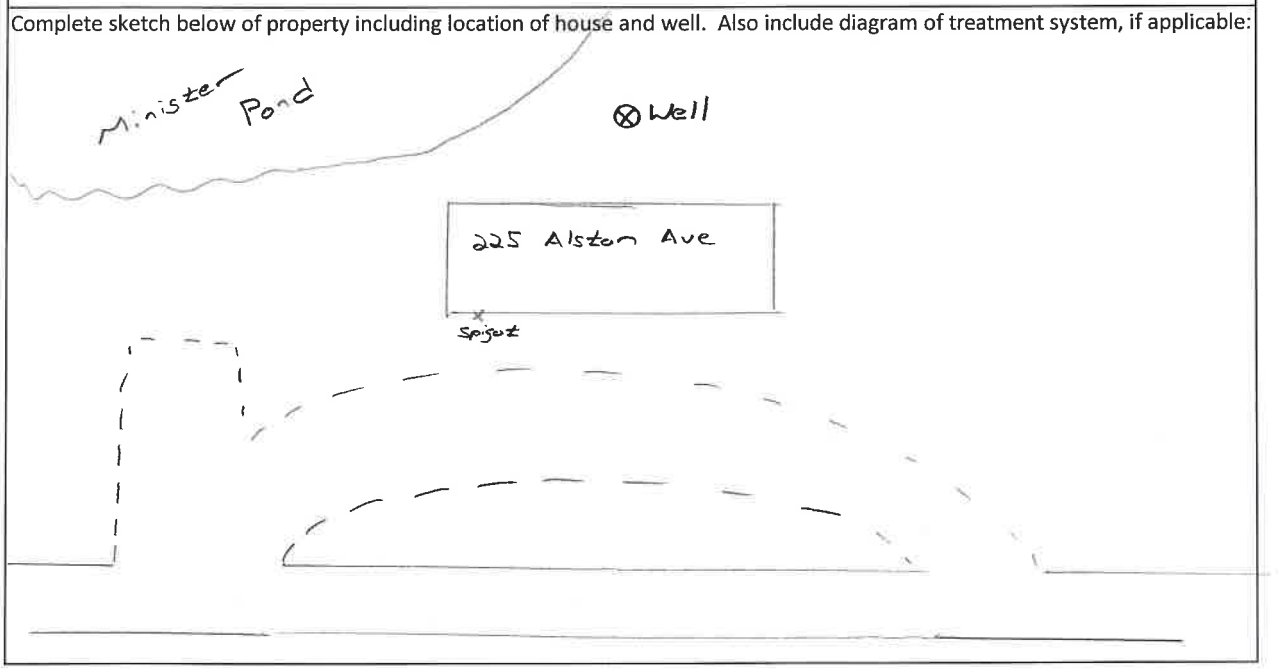
Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Measured : Depth: 31' DTW: 14.5'

Summary of Sampling and Monitoring Activities: Purge and sample from spigot on front of house. Nobody home, could not access inside to confirm water system details.

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/6/14
Sampler: EC
Weather Conditions: sunny, 0-5 mph wind
Temperature: 56°F

Location: 100 Meetinghouse Rd.
Property Owner: Jeffrey Carlson
Property Contact:
Phone: 774-836-6021
Email:
Contact Log Attached: Yes: No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Spigot, back of house next to shower
Describe water system including treatment: Pressure tank, no treatment or filtration
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1120 Finish: 1140

Volume Purged: 35 gallons
Equipment Utilized:
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided?

Summary of Sampling and Monitoring Activities: Purge and sample from spigot on back of house next to shower. Tenants were not told by owner that we would be sampling, but had no issue with us doing so.

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:

Eastham Landfill
Private Well Sampling Log

Date: 5/6/14

Sampler: EC

Weather Conditions: Sunny, 0-5 mph wind

Temperature: 60° F

Location: 200 Schoolhouse Rd. (Elementary School)

Property Owner:

Property Contact:

Phone:

Email:

Contact Log Attached: Yes: No:

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Basement, pre-filtration

Describe water system including treatment: Pressure tank, 2 pH neutralizer tanks, 2 sediment tanks, + a Trojan UV Max unit

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1235 Finish: 1300

Volume Purged: 30 gallons

Equipment Utilized:

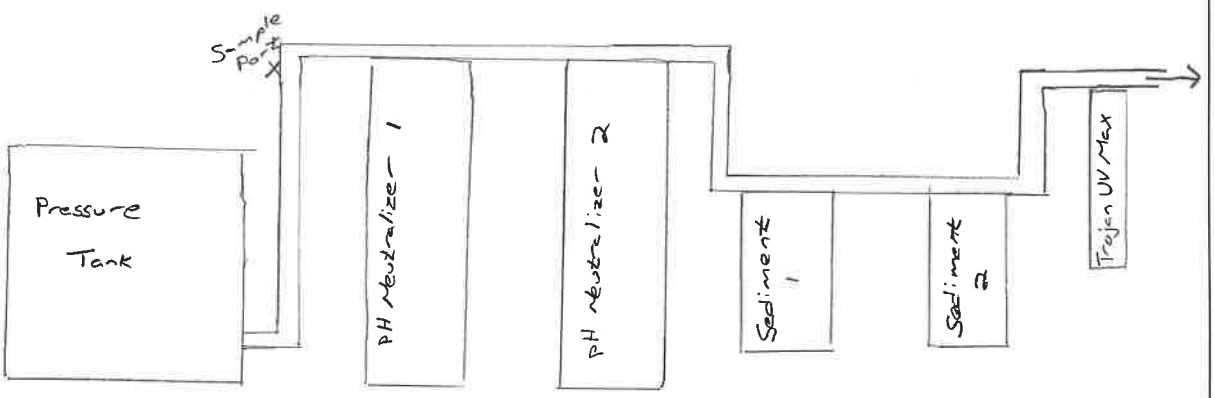
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided?

Summary of Sampling and Monitoring Activities: Sample in basement from value in system prior to treatment. Purged from nearby sink prior to sample collection

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:

Eastham Landfill
Private Well Sampling Log

Date: 5/6/14

Sampler: EC

Weather Conditions: Sunny, 0-5 mph wind

Temperature: 60° F

Location: 9 Eldia Way

Property Owner:

Property Contact:

Phone: 508-255-0114

Email:

Contact Log Attached: Yes: No:

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Pressure tank, pre-treatment

Describe water system including treatment:

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1400 Finish: 1415

Volume Purged: 25 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided?

Summary of Sampling and Monitoring Activities: Purge water from kitchen sink, collect sample from pressure tank prior to treatment.

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:

Eastham Landfill
Private Well Sampling Log

Date: 5/7/14

Sampler: EC

Weather Conditions: Sunny, 0-5 mph wind

Temperature: 55°F

Location: 300 Schoolhouse Rd.

Property Owner: Richard + Kathleen Leplant

Property Contact:

Phone: 774-207-0413

Email:

Contact Log Attached: Yes: _____ No: _____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Kitchen Sink

Describe water system including treatment: Pressure tank, no treatment or filtration

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 0810 Finish: 0830

Volume Purged: 35 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

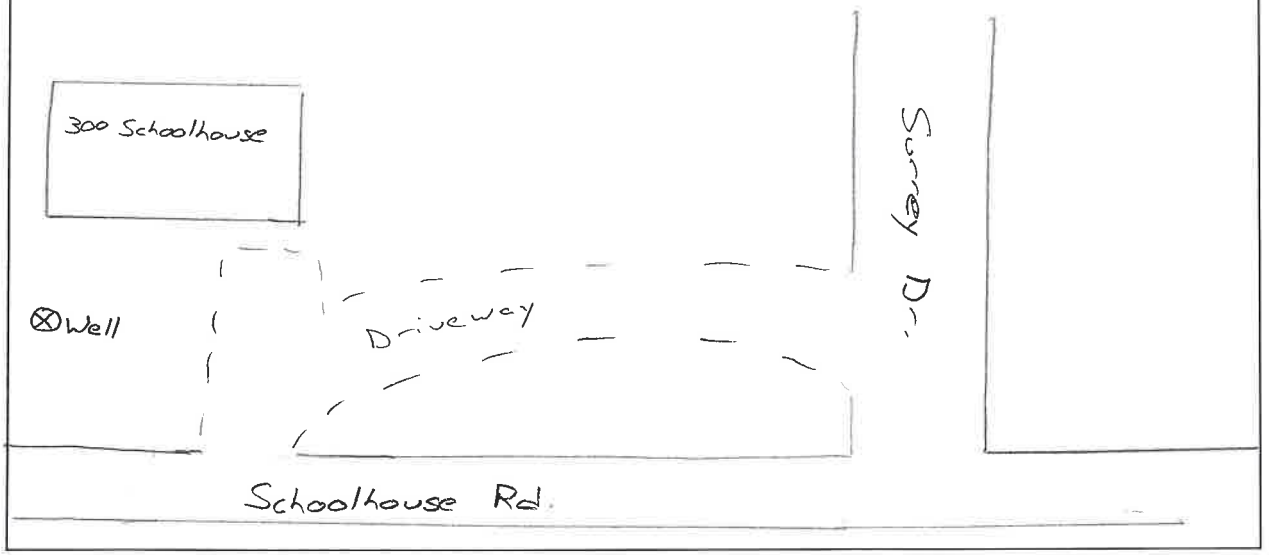
Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Previously submitted: 51'

Summary of Sampling and Monitoring Activities: Purge and sample from kitchen sink. System contains no treatment or filtration.

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/7/14

Sampler: EC

Weather Conditions: sunny, 0-5 mph wind

Temperature: 55°F

Location: 11 Eldia Way

Property Owner: Donna Holway

Property Contact:

Phone: 774-353-7290

Email:

Contact Log Attached: Yes: _____ No: _____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Spigot on side of house

Describe water system including treatment: Pressure tank, no treatment or filtration

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 0935 Finish: 0945

Volume Purged: 23 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

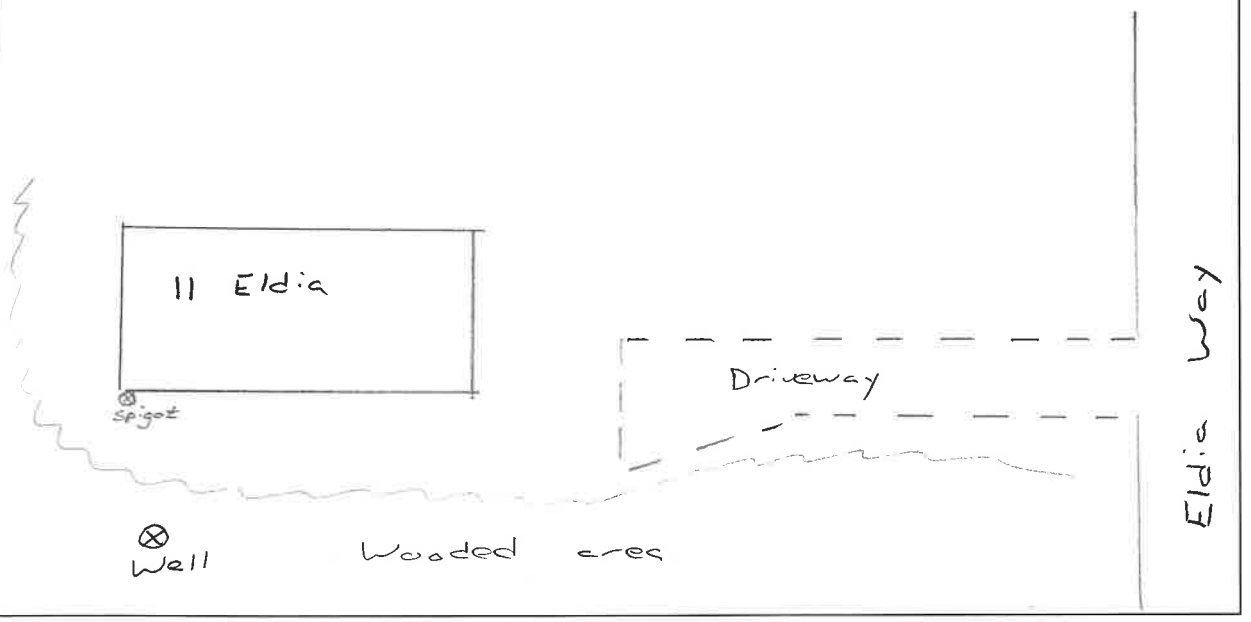
Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Measured Depth: 48' DTW: 38'

Summary of Sampling and Monitoring Activities: Purge and sample from spigot on left side of house. Gauge well; located in wooded area near front of house.

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/7/14

Sampler: EC

Weather Conditions: sunny, 0-5 mph wind

Temperature: 60°F

Location: 4 Eldia Way

Property Owner: Albert Hottelmann

Property Contact:

Phone: 508-237-9415

Email:

Contact Log Attached: Yes: _____ No: _____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Kitchen sink

Describe water system including treatment: Pressure tank, no treatment or filtration

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1145 Finish: 1200

Volume Purged: 24 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

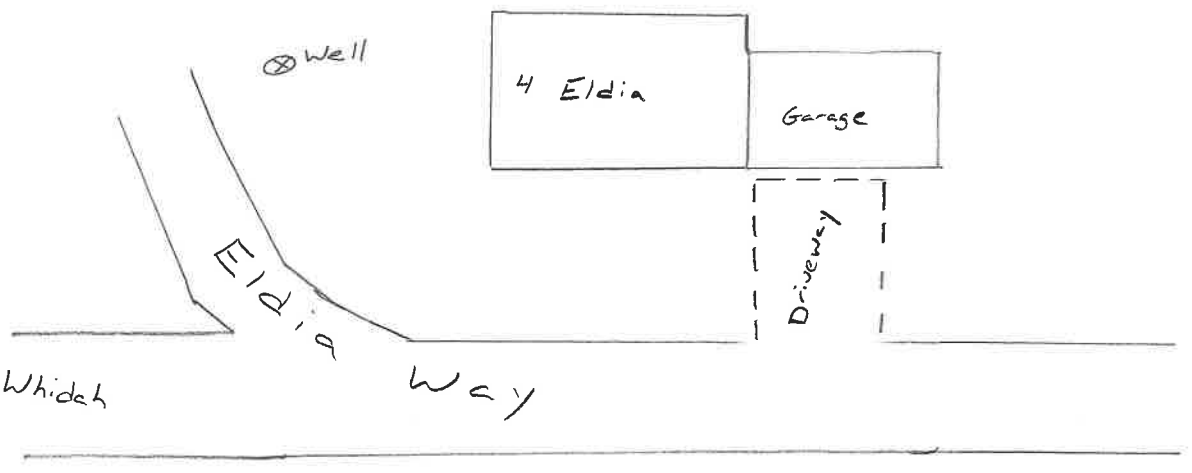
Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Previously submitted: 98'

Summary of Sampling and Monitoring Activities: Purge and sample from kitchen sink. System contains no treatment or filtration.

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/7/14

Sampler: EC

Weather Conditions: sunny, 0-5 mph wind

Temperature: 60°F

Location: 345 Schoolhouse Rd.

Property Owner: Cynthia Deslauriers

Property Contact:

Phone: 508-255-2696

Email:

Contact Log Attached: Yes: No:

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Kitchen sink

Describe water system including treatment: Pressure tank, no treatment or filtration

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1105 Finish: 1125

Volume Purged: 30 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Measured Depth: 46' DTW: 41'

Summary of Sampling and Monitoring Activities: Purge and collect sample from kitchen sink. Water system contains no treatment or filtration. Gauge well in front yard near corner of Schoolhouse Rd. and Alston Ave.

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/7/14

Sampler: EC

Weather Conditions: Sunny, 0-5 mph wind

Temperature: 60°F

Location: 25 Cedar Lane

Property Owner: Paul Bernard

Property Contact:

Phone:

Email:

Contact Log Attached: Yes: No:

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Pressure tank, pre-treatment

Describe water system including treatment: Pressure tank w/ pH neutralizer and small filter

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1330 Finish: 1345

Volume Purged: 28 gallons

Equipment Utilized:

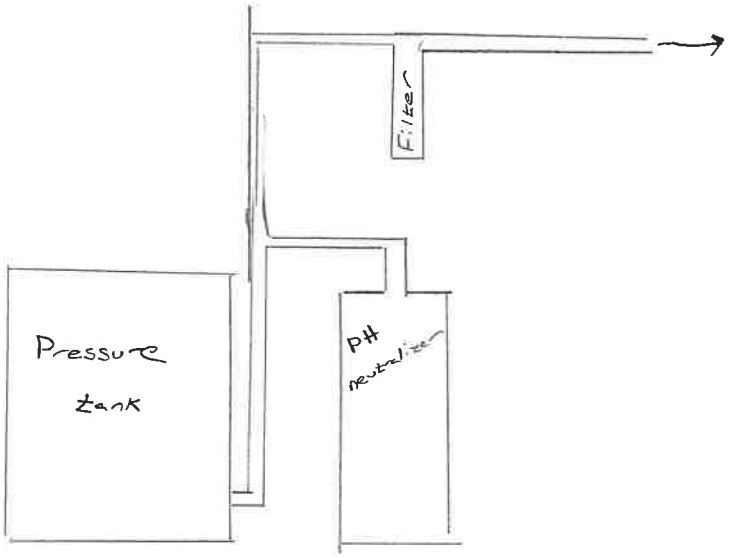
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

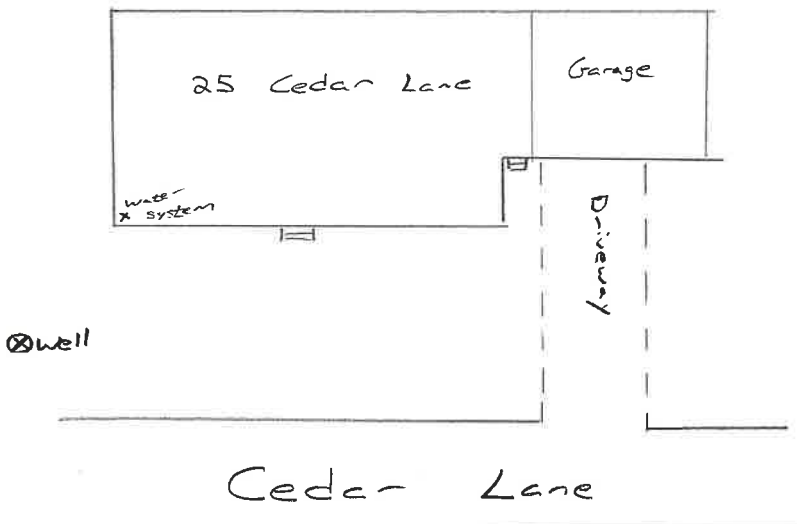
Well Depth: Measured or Provided? Previously submitted : 90'

Summary of Sampling and Monitoring Activities: Purge from kitchen sink, collect sample from value on pressure tank, pre-treatment. System contains pH neutralizer and small filter

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/7/14

Sampler: EC

Weather Conditions: Sunny, 0-5 mph wind

Temperature: 60° F

Location: 35 Cedar Lane

Property Owner: Bill Reilly

Property Contact: _____

Phone: _____

Email: _____

Contact Log Attached: Yes: _____ No: _____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Pressure tank, pre-treatment

Describe water system including treatment: Pressure tank and pH neutralizer

Water meter reading: _____

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1355 Finish: 1410

Volume Purged: 28 gallons

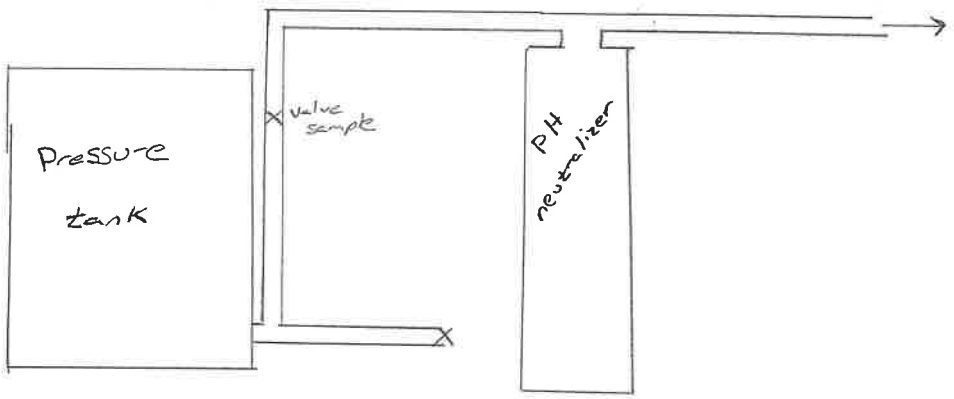
Equipment Utilized: _____

Attach Equipment Calibration Log: _____

Well Depth: Measured or Provided? Could not access well head for gauging.

Summary of Sampling and Monitoring Activities: Purge from kitchen sink, collect sample from valve off pressure tank, prior to pH neutralizer

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/7/14

Sampler: EC

Weather Conditions: Sunny, 0-5 mph Wind

Temperature: 60° F

Location: 20 Cedar Lane

Property Owner: Mel Valentine

Property Contact:

Phone:

Email:

Contact Log Attached: Yes: No:

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Pressure tank, pre-treatment

Describe water system including treatment: Pressure tank and pH neutralizer

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1430 Finish: 1450

Volume Purged: 23 gallons

Equipment Utilized:

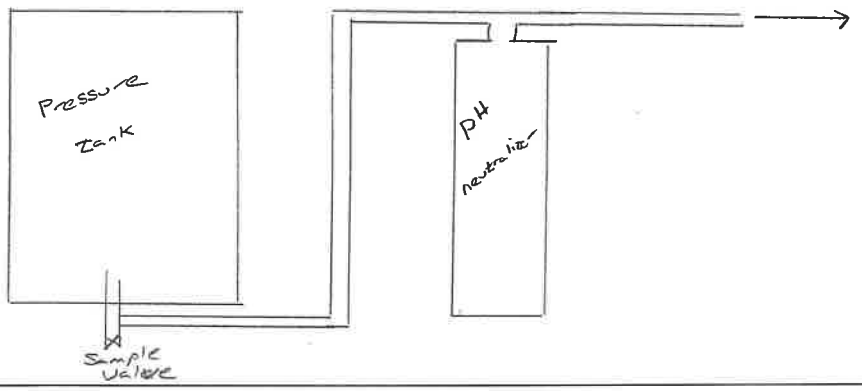
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Wellhead not accessible for gauging.

Summary of Sampling and Monitoring Activities: Purge from bathroom sink and collect sample in basement from pressure tank prior to pH neutralizer.

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/8/14

Sampler: EC

Weather Conditions: sunny, 0-5 mph wind

Temperature: 55° F

Location: 75 Knowles St.

Property Owner:

Property Contact:

Phone:

Email:

Contact Log Attached: Yes: No:

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Kitchen sink

Describe water system including treatment: Pressure tank, no treatment or filtration

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 0730 Finish: 0755

Volume Purged: 21 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

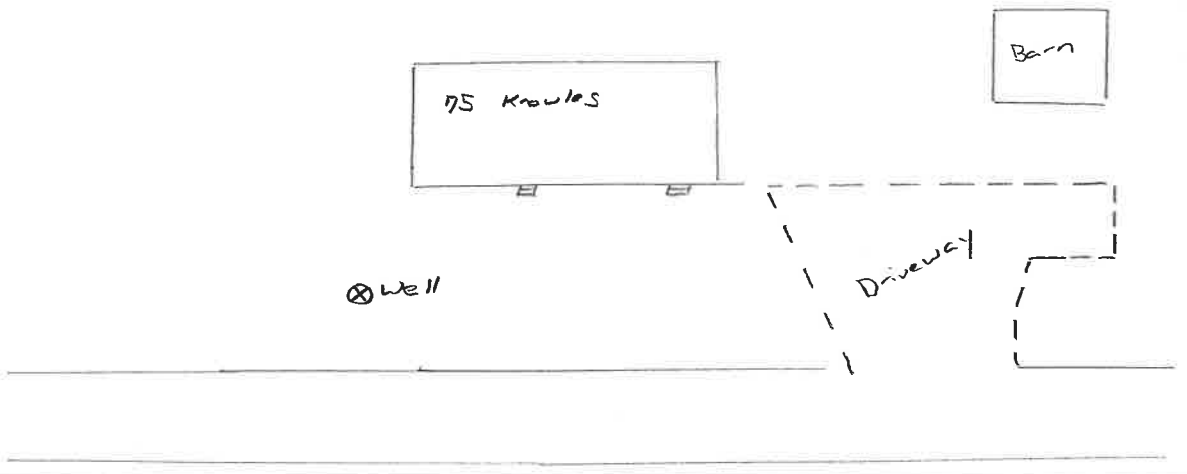
Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Measured Depth: 39' DTW: 31'

Summary of Sampling and Monitoring Activities: Purge and sample from kitchen sink. Water system contains no treatment or filtration. Measure well depth, located in front yard to left of house.

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/8/14

Sampler: EC

Weather Conditions: sunny, 0-5 mph wind

Temperature: 55°F

Location: 25 Knowles St.

Property Owner: Peter and Mary Martinelli

Property Contact:

Phone: 413-684-3828

Email:

Contact Log Attached: Yes: _____ No: _____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Kitchen sink

Describe water system including treatment: Pressure tank, no treatment or filtration

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 0820 Finish: 0835

Volume Purged: 23 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

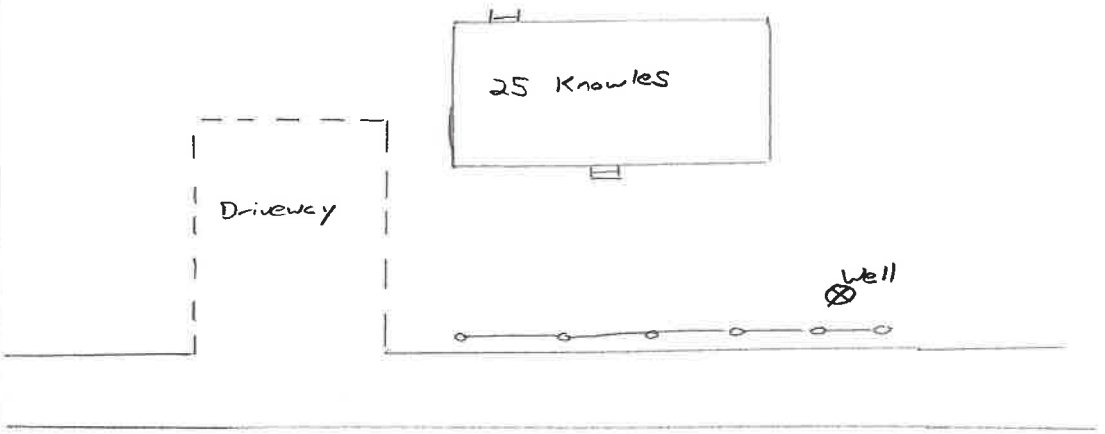
Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? ~~Measured~~ Could not measure, wellhead had pressed PVC cap. Homeowners believes well is ≈210'

Summary of Sampling and Monitoring Activities: Purge and sample from kitchen sink. Water system contains no treatment or filtration. Well is located in front yard on right side near road.

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/8/14

Sampler: EC

Weather Conditions: Sunny, 0-5 mph wind

Temperature: 55° F

Location: 60 Chipman St.

Property Owner: Ivan and Shirley Freed

Property Contact:

Phone: 857-241-9563

Email:

Contact Log Attached: Yes: _____ No: _____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Pressure tank, pre-treatment

Describe water system including treatment: Pressure tank and conditioning tank

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 0935 Finish: 1000

Volume Purged: 24 gallons

Equipment Utilized:

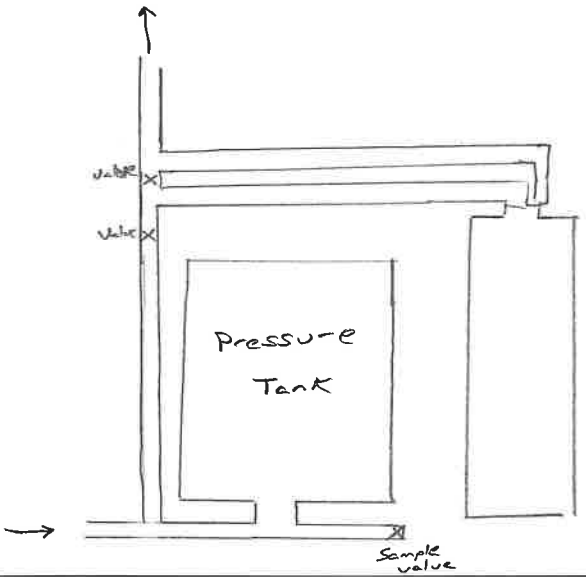
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

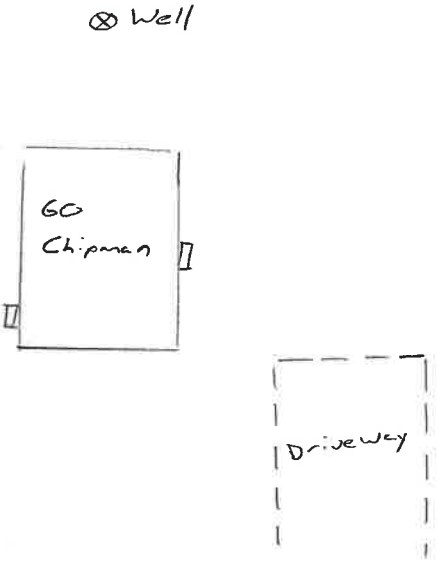
Well Depth: Measured or Provided? Depth: 203', provided by homeowner- from drilling records.

Summary of Sampling and Monitoring Activities: Purge from kitchen sink, collect sample in basement from pressure tank, pre-treatment. Well is located in wooded area in back of property.

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/8/14

Sampler: EC

Weather Conditions: partly cloudy, 0-5 mph wind

Temperature: 60°F

Location: 5 Fairview Ave

Property Owner: Robert + Susan Crockett

Property Contact:

Phone: 508-829-5844

Email:

Contact Log Attached: Yes: _____ No: _____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Pressure tank, pre-treatment

Describe water system including treatment: Pressure tank + pH neutralizer

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1105 Finish: 1130

Volume Purged: 22 gallons

Equipment Utilized:

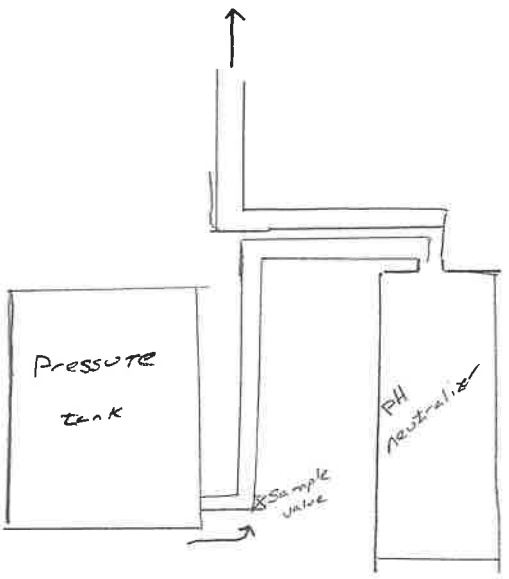
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

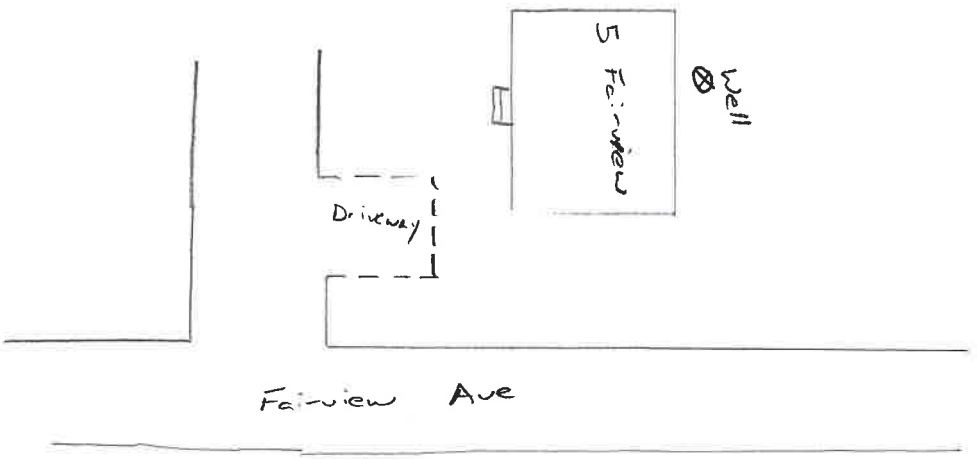
Well Depth: Measured or Provided? Measured Depth: 26' DTW: 15'

Summary of Sampling and Monitoring Activities: Purge from kitchen sink, collect sample from valve on pressure tank, pre-treatment. Well is in back of house and is contained in a shallow pit w/ large concrete cover.

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/8/14

Sampler: EC

Weather Conditions: mostly cloudy, 0-5 mph wind

Temperature: 60°F

Location: 3200 State Highway

Property Owner: Eastham United Methodist Church

Property Contact: Rhonda

Phone:

Email:

Contact Log Attached: Yes: No:

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Bathroom sink, main church building

Describe water system including treatment:

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1235 Finish: 1300

Volume Purged: 21 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided?

Summary of Sampling and Monitoring Activities: Purge and sample from bathroom sink, located in main church building.

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:

Eastham Landfill
Private Well Sampling Log

Date: 5/8/14

Sampler: EC

Weather Conditions: partly cloudy, 0-5 mph wind

Temperature: 60°F

Location: 370 Meetinghouse Rd.

Property Owner: Christine Schmidt

Property Contact:

Phone: 862-221-8142

Email:

Contact Log Attached: Yes: _____ No: _____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: outside spigot

Describe water system including treatment: Could not access house to confirm system details

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1145 Finish: 1155

Volume Purged: 28 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

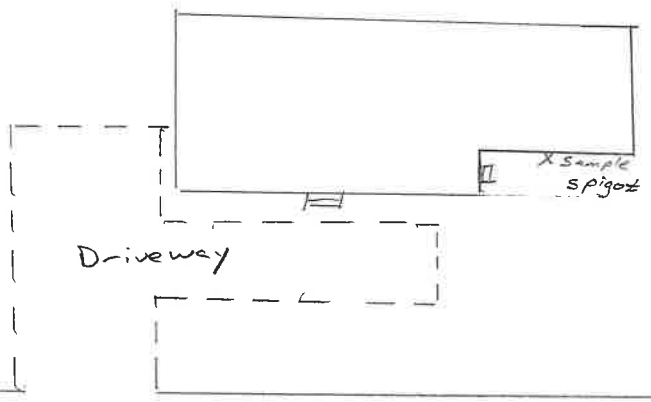
Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Could not locate well to gauge

Summary of Sampling and Monitoring Activities: Purge and sample from outdoor spigot on front of house. Could not access indoors to confirm system

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/9/14

Sampler: EC

Weather Conditions: cloudy, 0-5 mph wind

Temperature: 50°F

Location: 6 Eldia Way

Property Owner: Kathleen Mickle

Property Contact:

Phone:

Email:

Contact Log Attached: Yes: ____ No: ____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Kitchen sink

Describe water system including treatment: pH neutralizer and small filter are currently bypassed

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 0750 Finish: 0810

Volume Purged: 28 gallons

Equipment Utilized:

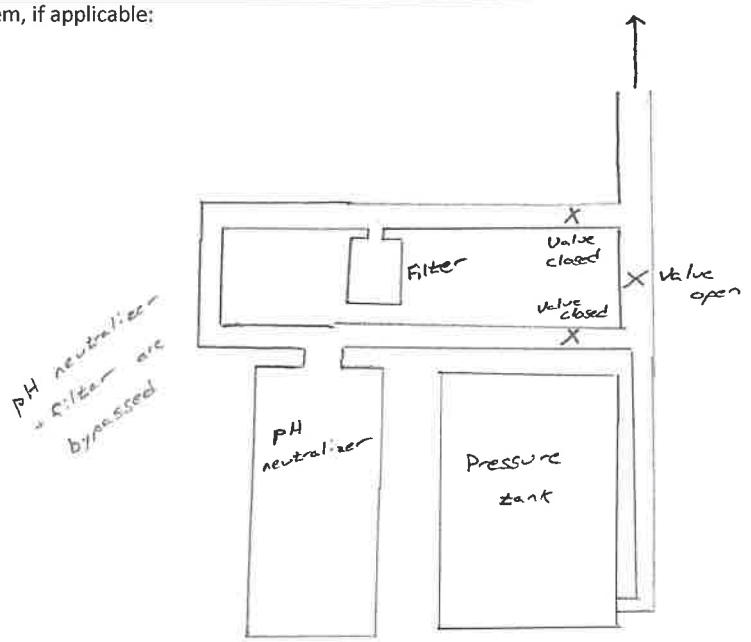
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

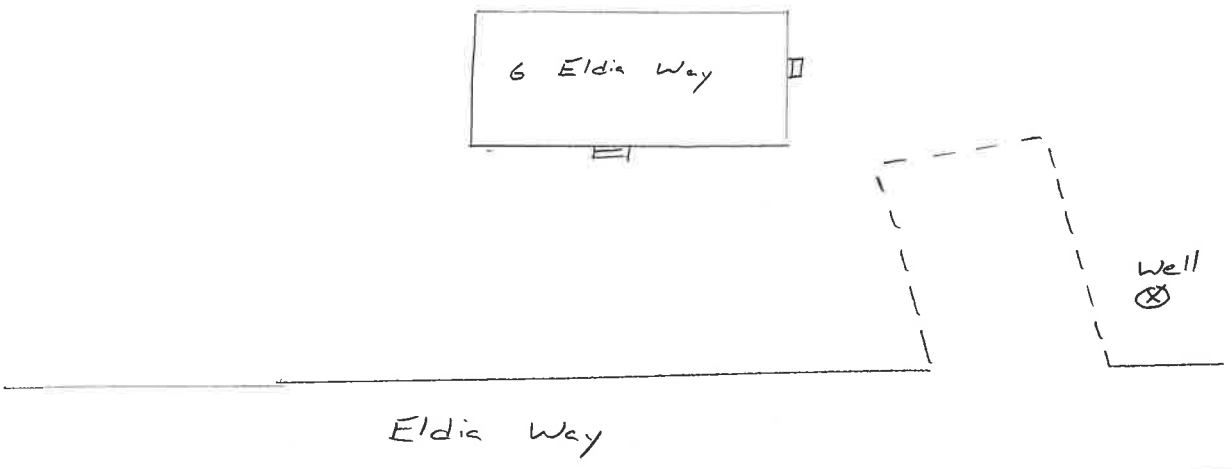
Well Depth: Measured or Provided? Measured Depth: 74' DTW: 44.5'

Summary of Sampling and Monitoring Activities: Purge and sample from kitchen sink. System contains pH neutralizer and small filter but are currently bypassed. Measured well depth, well is located in front of house to right side of driveway.

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/9/14

Sampler: EC

Weather Conditions: cloudy, 0-5 mph wind

Temperature: 50°F

Location: 225 Meetinghouse Rd.

Property Owner: Marina Laubert

Property Contact:

Phone: 508-237-6878

Email:

Contact Log Attached: Yes: _____ No: _____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Pressure tank, pre-treatment

Describe water system including treatment: pH neutralizer and two carbon filtration tanks

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 0935 Finish: 0955

Volume Purged: 33 gallons

Equipment Utilized:

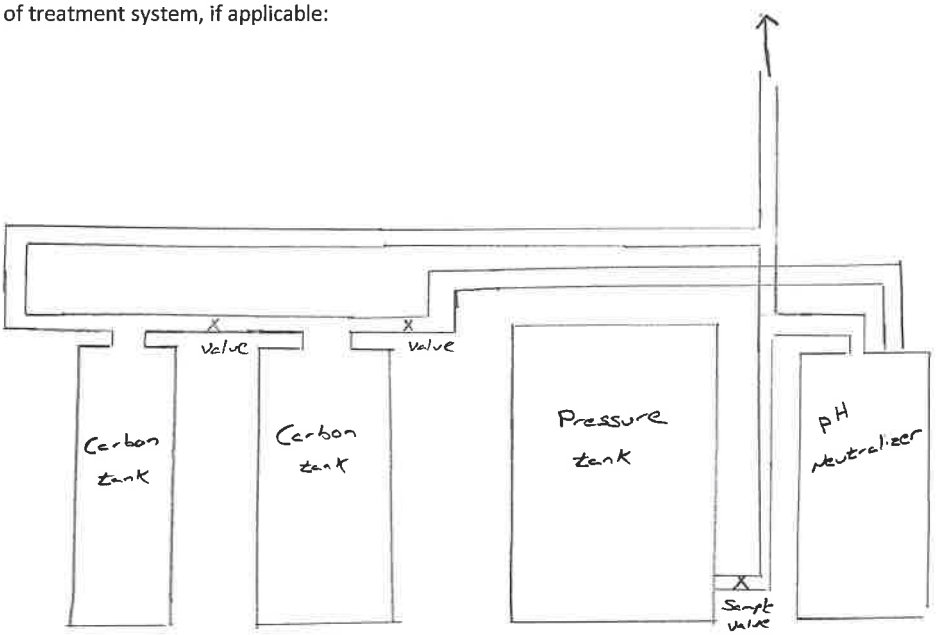
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

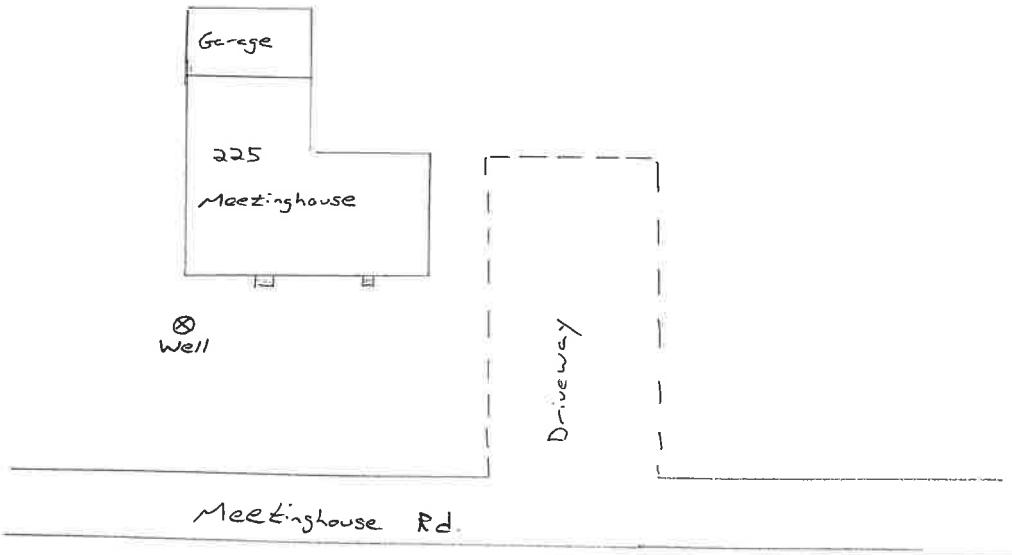
Well Depth: Measured or Provided? Previously submitted. 57'

Summary of Sampling and Monitoring Activities: Purge from outside spigot on back of house. Collect sample from pressure tank, prior to pH neutralizer and carbon filters. Well is located in front yard near house.

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/9/14

Sampler: EC

Weather Conditions: Cloudy, 0-5 mph wind

Temperature: 50°F

Location: 13 Eldia Way

Property Owner: John + Eileen Ahle

Property Contact:

Phone:

Email:

Contact Log Attached: Yes: ____ No: ____

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Pressure tank, pre-treatment.

Describe water system including treatment: Pressure tank w/ small filter and conditioning tanks.

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1105 Finish: 1135

Volume Purged: 21 gallons

Equipment Utilized:

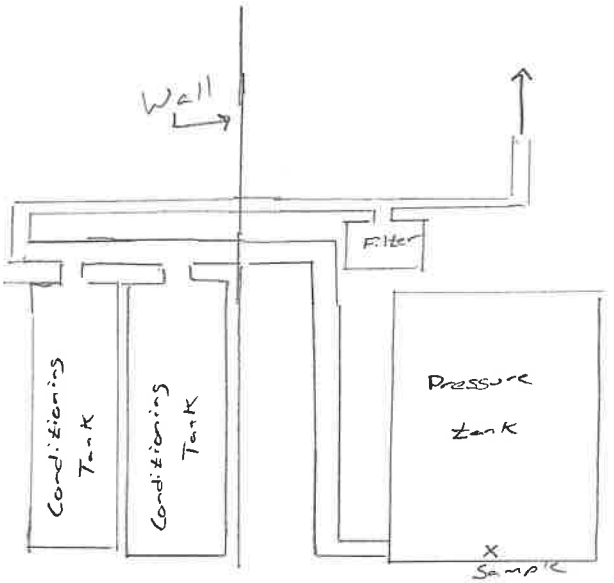
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

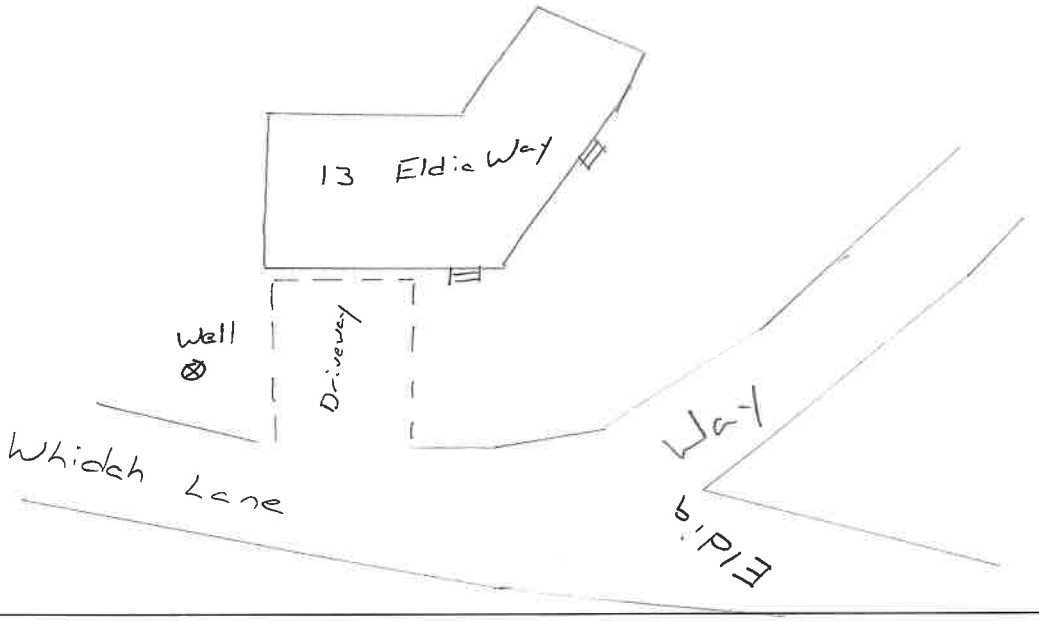
Well Depth: Measured or Provided? Measured Depth: 74' DTW: 44'

Summary of Sampling and Monitoring Activities: Purge from basement sink, collect sample from pressure tank, pre-treatment. Measure well depth. Well located to left side of driveway.

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/9/14

Sampler: EC

Weather Conditions: cloudy, 0-5 mph wind

Temperature: 50° F

Location: 165 Meetinghouse Rd.

Property Owner: Timothy Duket + Amy Martin

Property Contact:

Phone: 617-312-5009

Email:

Contact Log Attached: Yes: No:

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: outdoor spigot, backyard

Describe water system including treatment: Pressure tank, no treatment or filtration

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1225 Finish: 1245

Volume Purged: 32 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

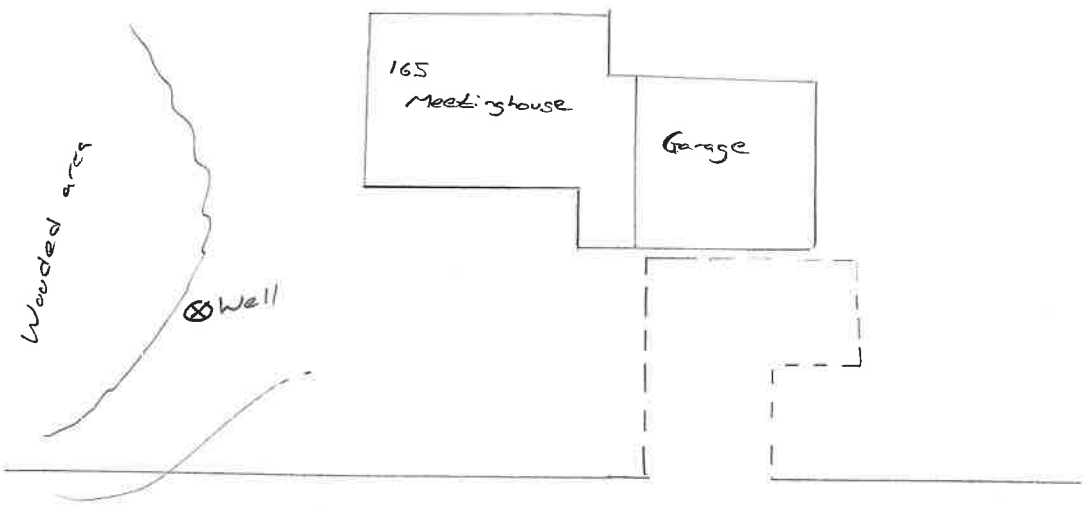
Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Provided by homeowner: 114' from drilling records

Summary of Sampling and Monitoring Activities: Purge and sample from outdoor spigot on back of house. Well is located on edge of wooded area on left side of front yard.

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/9/14

Sampler: EC

Weather Conditions: cloudy, 0-5 mph wind

Temperature: 50°F

Location: 190 Meetinghouse Rd. Rear

Property Owner: Nancy Stagg

Property Contact:

Phone:

Email:

Contact Log Attached: Yes: No:

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Outdoor spigot on front of 190 B

Describe water system including treatment:

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1350 Finish: 1410

Volume Purged: 26 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

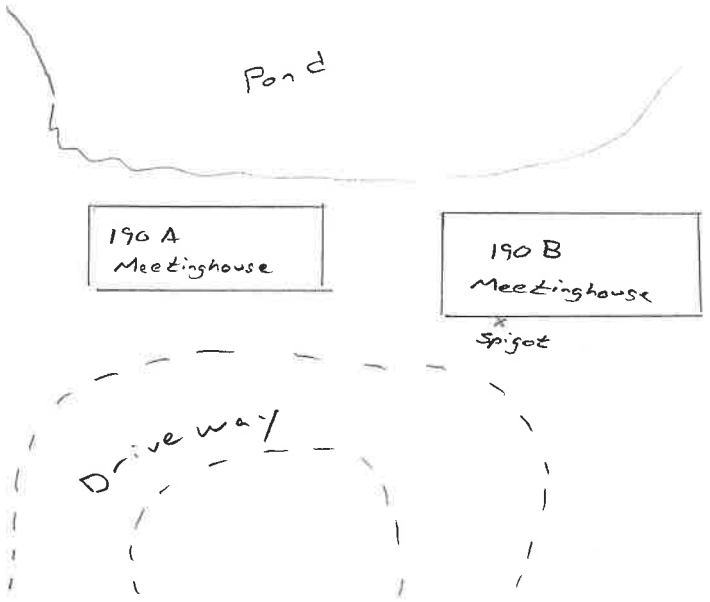
Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Could not locate well for gauging.

Summary of Sampling and Monitoring Activities: Called contact number for Nancy Stagg. She was unavailable but was told on phone that both units share same well and if nobody is home to collect sample from outdoor spigot. Contact does not belive there is any treatment or filtration.

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/9/14

Sampler: EC

Weather Conditions: cloudy, 5-10 mph wind

Temperature: 50°F

Location: 200 Alston Ave

Property Owner:

Property Contact:

Phone:

Email:

Contact Log Attached: Yes: No:

Analysis Required: 1,4-Dioxane (8270 SIM)

Analytical Lab: Alpha

Sample Location: Outside spigot

Describe water system including treatment: No treatment or filtration

Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters

Purge Time: Start: 1020 Finish: 1030

Volume Purged: 30 gallons

Equipment Utilized:

Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? Attempted to open well head but bolts are rusted and stripped.

Summary of Sampling and Monitoring Activities: Purge and sample from outside spigot. Collect samples for 1,4 Dioxane, As, and VOCs

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:

Eastham Landfill
Private Well Sampling Log

Date: 5/6/14
Sampler: DB
Weather Conditions: 50's, Sun, 0-5mph
Temperature: 50's

Location: KNOWLES ST - 045
Property Owner: Thomas [redacted] Linnehan
Property Contact:
Phone: (508) 361-1643
Email:
Contact Log Attached: Yes: ____ No: ____

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Outside spigot by front door
Describe water system including treatment:
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 0822 Finish: 0828

Volume Purged: 25 gallons
Equipment Utilized:
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

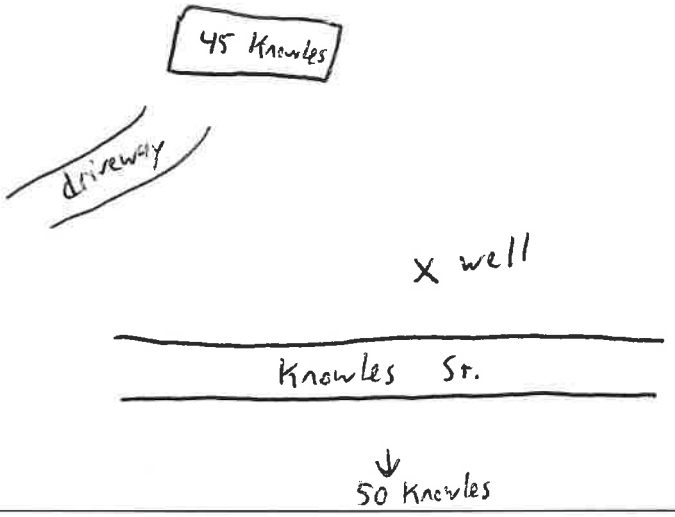
Well Depth: Measured or Provided? 189' provided by home owner. Unable to gauge well to confirm due to permanent cap.

Summary of Sampling and Monitoring Activities:

Bailed 25 gal of water from outside spigot. Measured w/ 5 gal bucket. Collected sample @ 0830 and dup @ 0835.

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/6/14
Sampler: DB
Weather Conditions: Sun, 0-5 mph wind
Temperature: 50's

Location: GLACIER HILLS RD - 020
Property Owner: Leonard and Katherin Dufresne
Property Contact: Mindy - rever
Phone: (508) 255 5668
Email:
Contact Log Attached: Yes: No:

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Kitchen sink - bypass reiters filter unit
Describe water system including treatment: Pressure tank in basement with cartridge style whole-house sediment filter
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 0859 Finish: 0914

Volume Purged: gallons
Equipment Utilized:
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

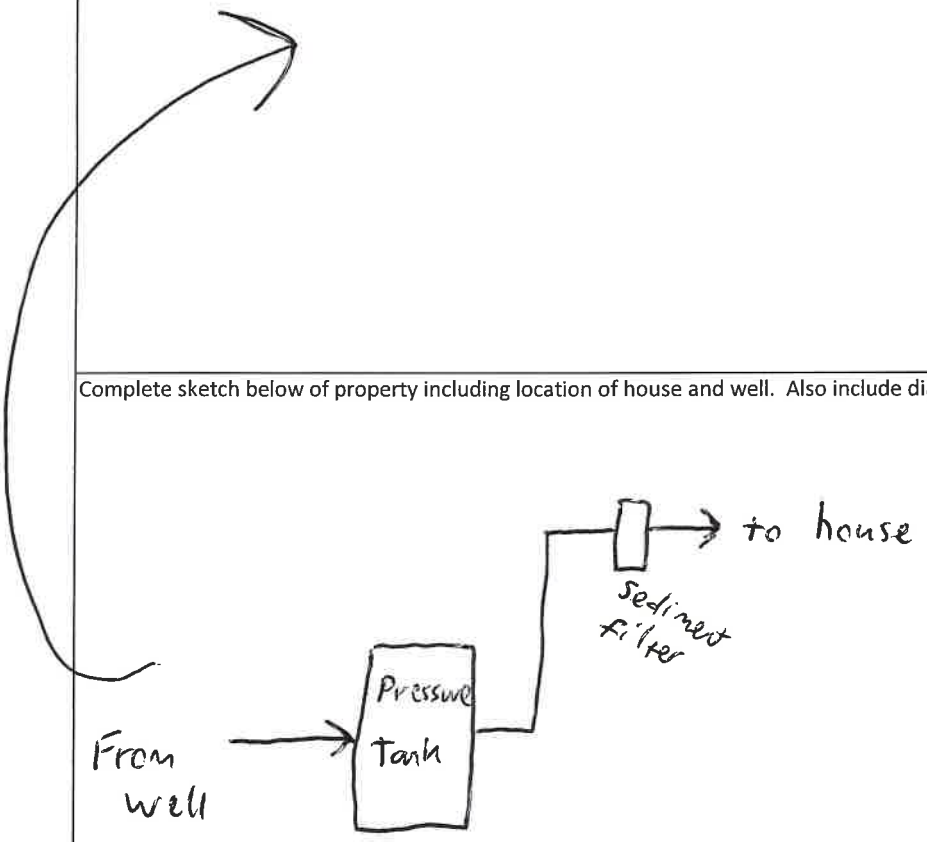
Well Depth: Measured or Provided?

Summary of Sampling and Monitoring Activities:

Arrive at house, meet with renter, Mindy. Given access to basement to view water system. Only treatment in use currently is a sediment filter. Renter has seperate treatment unit at kitchen sink. Easily bypassed by valve at faucet aerator. Water allowed to run on cold for 15 min. Sample collected @ 0920, dup collected @ 0925

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/6/14
Sampler: DB
Weather Conditions: Sun, 0-5 mph wind
Temperature: 50's

Location: KNOWLES ST_030
Property Owner: John Cunningham
Property Contact:
Phone: (508) 280 7356
Email:
Contact Log Attached: Yes: _____ No: _____

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Outside spigot - right side of house
Describe water system including treatment:
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 0931 Finish: 0946

Volume Purged: _____ gallons
Equipment Utilized:
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

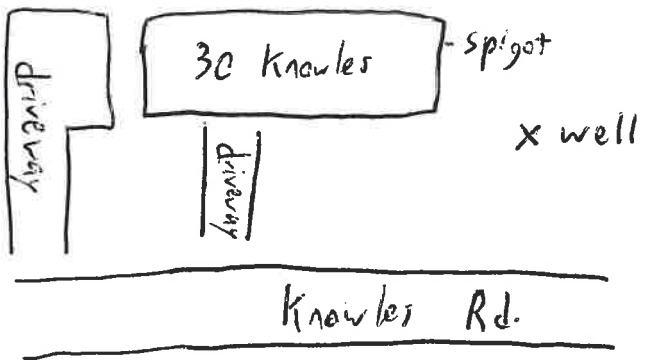
Well Depth: Measured or Provided?

Summary of Sampling and Monitoring Activities:

Allowed spigot to run for 15 minutes. Collected sample @ 0950 and dup @ 0955

Complete sketch of treatment system, if applicable:

Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/6/14
Sampler: DB
Weather Conditions: sun, 0-5 mph wind
Temperature: 60's

Location: SELAH CIRCLE 004
Property Owner: Donald & Melissa Reilly
Property Contact: ~~Mary~~ Jorie Fleming (realtor) (508) 246-3721
Phone: (860) 985-5727
Email:

Contact Log Attached: Yes: _____ No: _____

Phone conversation w/realtor. Given unsupervised access to house via hidden key under blue flower pot

Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Outside shower - water turned on in basement
Describe water system including treatment: Pressure tank with treatment vessel for hard water. Doesn't appear to be water softening salt system, maybe reverse osmosis? Small fiberglass vessel (~4ft tall) with timer at top w/ instructions for regeneration cycle. Attached to timer is a waste drain connected to household waste plumbing
~~Water meter reading:~~

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1240 Finish: 1300

Volume Purged: _____ gallons
Equipment Utilized: _____
Attach Equipment Calibration Log: _____

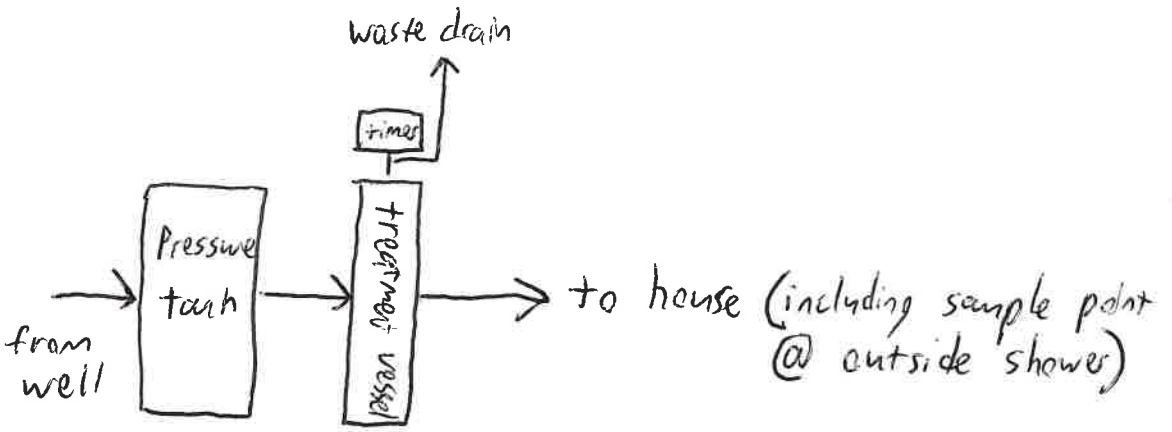
Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided? [redacted] DTW: 10', DTB: 29'

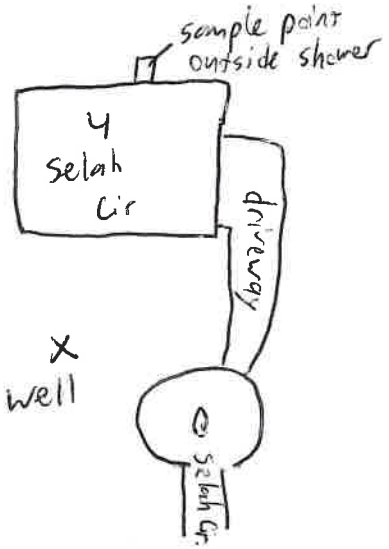
Summary of Sampling and Monitoring Activities:

Given access to house by realtor. Turned on water to outside shower. Water was allowed to run for 20 min. Collected sample @ 1300, dup @ 1305.

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:



Eastham Landfill
Private Well Sampling Log

Date: 5/6/14
Sampler: DB
Weather Conditions: Sun, 0-5 mph wind
Temperature: 60's.

Location: Old Orchard Rd. 310
Property Owner: Chris Rice and Amanda Martin
Property Contact: Chris Rice (508) 237-7635, Amanda (774) 722-3619
Phone:
Email:
Contact Log Attached: Yes: ____ No: ____
Spoke with Chris, was given verbal permission to enter house unattended
Analysis Required: 1,4-Dioxane (8270 SIM)
Analytical Lab: Alpha
Sample Location: Kitchen sink
Describe water system including treatment: No treatment. Simple pressure tank distributing to whole house
Water meter reading:

Purge Process - purge well minimum 20 gallons, then wait for stabilized parameters
Purge Time: Start: 1415 Finish: 1430

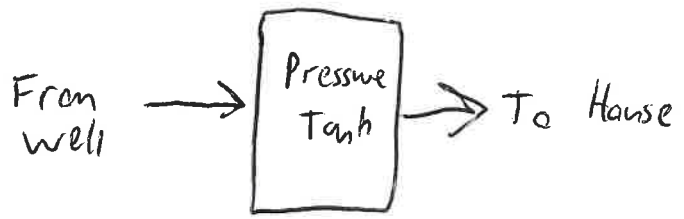
Volume Purged: ____ gallons
Equipment Utilized:
Attach Equipment Calibration Log:

Eastham Landfill
Private Well Sampling Log

Well Depth: Measured or Provided?

Summary of Sampling and Monitoring Activities:
Kitchen sink allowed to run for 15 min. Collected sample at 1430, dup at 1435.

Complete sketch of treatment system, if applicable:



Complete sketch below of property including location of house and well. Also include diagram of treatment system, if applicable:

BARNSTABLE COUNTY
DEPARTMENT OF HEALTH AND ENVIRONMENT

BARNSTABLE COUNTY COMPLEX
3195 MAIN STREET / PO BOX 427
BARNSTABLE, MASSACHUSETTS 02630

Phone: (508) 375-6613
FAX (508) 362-2603
TDD (508) 362-5885

WATER SAMPLING LOG: EASTHAM LANDFILL

WELL NUMBER: MW 3I DATE: 5/19/14
WEATHER: sunny 60 TIME: 1130

EVACUATION DATA

DESCRIPTION OF MEASURING POINT: Top of Casing
DEPTH TO BOTTOM OF WELL: 52.37 DIAMETER OF CASING: 2"
DEPTH TO WATER IN WELL: 18.72 MATERIAL OF WELL: PVC
FEET OF WATER IN WELL: 33.65 GALLONS PER FOOT: 0.16
GALLONS OF WATER IN WELL: 5.38 AMOUNT TO PURGE: 35gal

EVACUATION METHOD: DC Purgible Pump/dedicated bailer/dedicated watterra

SAMPLING DATA/FIELD PARAMETERS

COLOR: clear ODOR: - APPEARANCE: -
PH: 5.94 TEMP: 12.91 COND: 363 DO: 0.29
OTHER:

SAMPLING METHOD AND MATERIAL: dedicated bailer/dedicated waterra

CONSTITUENTS SAMPLED	CONTAINER DESCRIPTION	PRESERVATIVE
Nit/Alk 500	500 mL plastic	-
*All Metals 501	500 mL plastic	HNO3
COD 502	40 mL glass vial	H2SO4
VOC 503, 504, 505	40 mL glass vial	HCl
TCN 506	500 mL plastic	NaOH

REMARKS: * Field Filtered

SAMPLING PERSONNEL: Lynn K. Mulkeen-BCDHE

WELL CASING VOLUMES:
1 ¼"=0.06 1 ½"=0.09 2"=0.16 2 ½"=0.26 3"=0.37 3 ½"=0.50
4"=0.65 6"=1.47

BARNSTABLE COUNTY
DEPARTMENT OF HEALTH AND ENVIRONMENT

BARNSTABLE COUNTY COMPLEX
3195 MAIN STREET / PO BOX 427
BARNSTABLE, MASSACHUSETTS 02630

Phone: (508) 375-6613
FAX (508) 362-2603
TDD (508) 362-5885

WATER SAMPLING LOG: EASTHAM LANDFILL

WELL NUMBER: MW 3D (BCH#13) DATE: 5/19/14
WEATHER: sunny 60 TIME: 1130

EVACUATION DATA

DESCRIPTION OF MEASURING POINT: Top of Casing
DEPTH TO BOTTOM OF WELL: 73.42 DIAMETER OF CASING: 2"
DEPTH TO WATER IN WELL: 18.53 MATERIAL OF WELL: PVC
FEET OF WATER IN WELL: 54.89 GALLONS PER FOOT: 0.16
GALLONS OF WATER IN WELL: 8.78 AMOUNT TO PURGE: 55 gal

EVACUATION METHOD: DC Purgible Pump/dedicated bailer/dedicated watterra

SAMPLING DATA/FIELD PARAMETERS

COLOR: clear ODOR: leachate APPEARANCE: —
PH: 6.41 TEMP: 12.89 COND: 1468 DO: 0.41
OTHER:

SAMPLING METHOD AND MATERIAL: dedicated bailer/dedicated waterra

BCH#13

	CONSTITUENTS SAMPLED		CONTAINER DESCRIPTION	PRESERVATIVE
S14	Nit/Alk	507	500 mL plastic	-
S15	*All Metals	508	500 mL plastic	HNO3
S16	COD	509	40 mL glass vial	H2SO4
S17, S18, S19	VOC	S10, S11, S12	40 mL glass vial	HCl
S20	TCN	S13	500 mL plastic	NaOH

REMARKS: * Field Filtered

SAMPLING PERSONNEL: Lynn K. Mulkeen-BCDHE

WELL CASING VOLUMES:
1 ¼"=0.06 1 ½"=0.09 2"–0.16 2 ½"=0.26 3"=0.37 3 ½"=0.50
4"=0.65 6"=1.47

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1405109	3/11/2014	drinking water	Yes	No	Yes	Yes	No	Usable

Sample ID	Date	Lab ID	Matrix	Analysis
Bishop Rd_060	3/11/2014	L1405109-01	DW	8270, 524.2
Bridge Rd_1825	3/11/2014	L1405109-02	DW	8270, 524.2
Trip Blank		L1405109-03		524.2

Lab presumptive certainty was not achieved because the proper field QC was not delivered (Duplicate analytical sample) and the analytical method specified in the CAM protocol was not followed for volatile organics (524.2 is a non-CAM method). Drinking water methodology was used instead.

All QAQC data, including surrogate, trip blank, method blank, Laboratory Control Sample (LCS), LCS duplicate, matrix spike and duplicate results were reviewed.

The matrix spike recovered low for chloromethane and styrene. These compounds were not detected in the analytical samples.

This report was deemed usable by Angela Boyd on 4/3/14.

ANALYTICAL REPORT

Lab Number:	L1405109
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	Not Specified
Report Date:	03/28/14

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

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

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

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405109
Report Date: 03/28/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1405109-01	BISHOP RD_060	EASTHAM, MA	03/11/14 12:40
L1405109-02	BRIDGE RD_1825	EASTHAM, MA	03/11/14 10:40
L1405109-03	TRIPBLANK	EASTHAM, MA	03/11/14 00:00

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405109
Report Date: 03/28/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	NO
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405109
Report Date: 03/28/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name:	EASTHAM DW	**Lab Number:**	L1405109
Project Number:	Not Specified	**Report Date:**	03/28/14

Case Narrative (continued)

Report Submission

This report replaces the report issued March 24, 2014. The answer to Question B has been changed and a Volatile Organics narrative has been added.

A previously-issued report replaced the report issued March 17, 2014. The 1,4-Dioxane by SIM units and reporting limits were corrected on all samples. In addition, the TICs were removed from all Volatile Organics results.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Volatile Organics

In reference to question B:

At the client's request, the analytical method specified in the CAM protocol was not followed.

In reference to question I:

All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

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: 03/28/14

ORGANICS

VOLATILES

Project Name: EASTHAM DW
Lab Number: L1405109
Project Number: Not Specified
Report Date: 03/28/14

SAMPLE RESULTS

Lab ID: L1405109-01
Client ID: BISHOP RD_060
Sample Location: EASTHAM, MA
Matrix: Drinking Water
Analytical Method: 16,524.2
Analytical Date: 03/13/14 15:52
Analyst: GT

Date Collected: 03/11/14 12:40
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	ND		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1405109

Project Number: Not Specified **Report Date:** 03/28/14

SAMPLE RESULTS

Lab ID: L1405109-01 Date Collected: 03/11/14 12:40

Client ID: BISHOP RD_060 Date Received: 03/11/14

Sample Location: EASTHAM, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	100		80-120
4-Bromofluorobenzene	93		80-120

Project Name: EASTHAM DW
Lab Number: L1405109
Project Number: Not Specified
Report Date: 03/28/14

SAMPLE RESULTS

Lab ID: L1405109-02
Client ID: BRIDGE RD_1825
Sample Location: EASTHAM, MA
Matrix: Drinking Water
Analytical Method: 16,524.2
Analytical Date: 03/13/14 16:25
Analyst: GT

Date Collected: 03/11/14 10:40
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	ND		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1405109

Project Number: Not Specified **Report Date:** 03/28/14

SAMPLE RESULTS

Lab ID: L1405109-02 Date Collected: 03/11/14 10:40

Client ID: BRIDGE RD_1825 Date Received: 03/11/14

Sample Location: EASTHAM, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	111		80-120
4-Bromofluorobenzene	96		80-120

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405109
Report Date: 03/28/14

SAMPLE RESULTS

Lab ID: L1405109-03
Client ID: TRIPBLANK
Sample Location: EASTHAM, MA
Matrix: Drinking Water
Analytical Method: 16,524.2
Analytical Date: 03/13/14 11:55
Analyst: GT

Date Collected: 03/11/14 00:00
Date Received: 03/11/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	ND		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1405109

Project Number: Not Specified **Report Date:** 03/28/14

SAMPLE RESULTS

Lab ID: L1405109-03 Date Collected: 03/11/14 00:00

Client ID: TRIPBLANK Date Received: 03/11/14

Sample Location: EASTHAM, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	100		80-120
4-Bromofluorobenzene	99		80-120

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405109
Report Date: 03/28/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/13/14 11:23
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG674525-10					
Methylene chloride	ND		ug/l	0.50	0.15
1,1-Dichloroethane	ND		ug/l	0.50	0.09
Chloroform	ND		ug/l	0.50	0.05
Carbon tetrachloride	ND		ug/l	0.50	0.10
1,2-Dichloropropane	ND		ug/l	0.50	0.09
Dibromochloromethane	ND		ug/l	0.50	0.08
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12
Tetrachloroethene	ND		ug/l	0.50	0.09
Chlorobenzene	ND		ug/l	0.50	0.08
Trichlorofluoromethane	ND		ug/l	0.50	0.11
1,2-Dichloroethane	ND		ug/l	0.50	0.08
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08
Bromodichloromethane	ND		ug/l	0.50	0.05
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10
Bromoform	ND		ug/l	0.50	0.09
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09
Benzene	ND		ug/l	0.50	0.09
Toluene	ND		ug/l	0.50	0.12
Ethylbenzene	ND		ug/l	0.50	0.06
p/m-Xylene	ND		ug/l	0.50	0.12
Chloromethane	ND		ug/l	0.50	0.15
Bromomethane	ND		ug/l	0.50	0.13
Vinyl chloride	ND		ug/l	0.50	0.08
Chloroethane	ND		ug/l	0.50	0.12
1,1-Dichloroethene	ND		ug/l	0.50	0.06
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11
Trichloroethene	ND		ug/l	0.50	0.09
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405109
Report Date: 03/28/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/13/14 11:23
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG674525-10					
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05
Styrene	ND		ug/l	0.50	0.06
o-Xylene	ND		ug/l	0.50	0.09
1,1-Dichloropropene	ND		ug/l	0.50	0.11
2,2-Dichloropropane	ND		ug/l	0.50	0.11
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11
Bromochloromethane	ND		ug/l	0.50	0.10
n-Butylbenzene	ND		ug/l	0.50	0.06
Dichlorodifluoromethane	ND		ug/l	0.50	0.10
Hexachlorobutadiene	ND		ug/l	0.50	0.11
Isopropylbenzene	ND		ug/l	0.50	0.08
p-Isopropyltoluene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.50	0.06
n-Propylbenzene	ND		ug/l	0.50	0.08
sec-Butylbenzene	ND		ug/l	0.50	0.06
tert-Butylbenzene	ND		ug/l	0.50	0.09
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10
Bromobenzene	ND		ug/l	0.50	0.09
o-Chlorotoluene	ND		ug/l	0.50	0.10
p-Chlorotoluene	ND		ug/l	0.50	0.08
Dibromomethane	ND		ug/l	0.50	0.09
1,2-Dibromoethane	ND		ug/l	0.50	0.06
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16
1,3-Dichloropropane	ND		ug/l	0.50	0.11
Methyl tert butyl ether	ND		ug/l	0.50	0.06
Xylenes, Total[1]	ND		ug/l	0.50	0.09

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405109
Report Date: 03/28/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/13/14 11:23
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG674525-10					
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/l		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	95		80-120
4-Bromofluorobenzene	83		80-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405109
Report Date: 03/28/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG674525-9								
Methylene chloride	110		-		70-130	-		20
1,1-Dichloroethane	106		-		70-130	-		20
Chloroform	110		-		70-130	-		20
Carbon tetrachloride	108		-		70-130	-		20
1,2-Dichloropropane	101		-		70-130	-		20
Dibromochloromethane	105		-		70-130	-		20
1,1,2-Trichloroethane	99		-		70-130	-		20
Tetrachloroethene	97		-		70-130	-		20
Chlorobenzene	99		-		70-130	-		20
Trichlorofluoromethane	113		-		70-130	-		20
1,2-Dichloroethane	113		-		70-130	-		20
1,1,1-Trichloroethane	110		-		70-130	-		20
Bromodichloromethane	105		-		70-130	-		20
trans-1,3-Dichloropropene	102		-		70-130	-		20
cis-1,3-Dichloropropene	99		-		70-130	-		20
Bromoform	100		-		70-130	-		20
1,1,2,2-Tetrachloroethane	98		-		70-130	-		20
Benzene	96		-		70-130	-		20
Toluene	96		-		70-130	-		20
Ethylbenzene	96		-		70-130	-		20
p/m-Xylene	96		-		70-130	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405109

Report Date: 03/28/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG674525-9								
Chloromethane	99		-		70-130	-		20
Bromomethane	90		-		70-130	-		20
Vinyl chloride	100		-		70-130	-		20
Chloroethane	110		-		70-130	-		20
1,1-Dichloroethene	94		-		70-130	-		20
trans-1,2-Dichloroethene	100		-		70-130	-		20
cis-1,2-Dichloroethene	103		-		70-130	-		20
Trichloroethene	90		-		70-130	-		20
1,2-Dichlorobenzene	98		-		70-130	-		20
1,3-Dichlorobenzene	96		-		70-130	-		20
1,4-Dichlorobenzene	98		-		70-130	-		20
Styrene	94		-		70-130	-		20
o-Xylene	98		-		70-130	-		20
1,1-Dichloropropene	88		-		70-130	-		20
2,2-Dichloropropane	103		-		70-130	-		20
1,1,1,2-Tetrachloroethane	110		-		70-130	-		20
1,2,3-Trichloropropane	107		-		70-130	-		20
Bromochloromethane	106		-		70-130	-		20
n-Butylbenzene	90		-		70-130	-		20
Dichlorodifluoromethane	114		-		70-130	-		20
Hexachlorobutadiene	105		-		70-130	-		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405109
Report Date: 03/28/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG674525-9								
Isopropylbenzene	96		-		70-130	-		20
p-Isopropyltoluene	97		-		70-130	-		20
Naphthalene	83		-		70-130	-		20
n-Propylbenzene	92		-		70-130	-		20
sec-Butylbenzene	93		-		70-130	-		20
tert-Butylbenzene	95		-		70-130	-		20
1,2,3-Trichlorobenzene	87		-		70-130	-		20
1,2,4-Trichlorobenzene	84		-		70-130	-		20
1,2,4-Trimethylbenzene	97		-		70-130	-		20
1,3,5-Trimethylbenzene	93		-		70-130	-		20
Bromobenzene	102		-		70-130	-		20
o-Chlorotoluene	92		-		70-130	-		20
p-Chlorotoluene	101		-		70-130	-		20
Dibromomethane	108		-		70-130	-		20
1,2-Dibromoethane	100		-		70-130	-		20
1,2-Dibromo-3-chloropropane	100		-		70-130	-		20
1,3-Dichloropropane	100		-		70-130	-		20
Methyl tert butyl ether	107		-		70-130	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405109

Report Date: 03/28/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG674525-9								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichlorobenzene-d4	103				80-120
4-Bromofluorobenzene	117				80-120

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405109
Report Date: 03/28/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG674525-4 QC Sample: L1404520-02 Client ID: MS Sample												
Methylene chloride	ND	4	3.5	88		-	-		70-130	-		20
1,1-Dichloroethane	ND	4	3.8	96		-	-		70-130	-		20
Chloroform	ND	4	4.4	110		-	-		70-130	-		20
Carbon tetrachloride	ND	4	4.5	112		-	-		70-130	-		20
1,2-Dichloropropane	ND	4	4.5	112		-	-		70-130	-		20
Dibromochloromethane	ND	4	4.5	112		-	-		70-130	-		20
1,1,2-Trichloroethane	ND	4	4.4	111		-	-		70-130	-		20
Tetrachloroethene	ND	4	3.9	98		-	-		70-130	-		20
Chlorobenzene	ND	4	4.2	105		-	-		70-130	-		20
Trichlorofluoromethane	ND	4	4.4	110		-	-		70-130	-		20
1,2-Dichloroethane	ND	4	4.8	119		-	-		70-130	-		20
1,1,1-Trichloroethane	ND	4	4.3	107		-	-		70-130	-		20
Bromodichloromethane	ND	4	4.5	112		-	-		70-130	-		20
trans-1,3-Dichloropropene	ND	4	4.3	109		-	-		70-130	-		20
cis-1,3-Dichloropropene	ND	4	4.5	112		-	-		70-130	-		20
Bromoform	ND	4	4.2	105		-	-		70-130	-		20
1,1,2,2-Tetrachloroethane	ND	4	4.7	119		-	-		70-130	-		20
Benzene	ND	4	4.5	112		-	-		70-130	-		20
Toluene	ND	4	4.3	107		-	-		70-130	-		20
Ethylbenzene	ND	4	4.2	104		-	-		70-130	-		20
p/m-Xylene	ND	8	8.4	105		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405109
Report Date: 03/28/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG674525-4 QC Sample: L1404520-02 Client ID: MS Sample												
Chloromethane	ND	4	2.7	**68**	Q	-	-		70-130	-		20
Bromomethane	ND	4	2.9	74		-	-		70-130	-		20
Vinyl chloride	ND	4	3.6	90		-	-		70-130	-		20
Chloroethane	ND	4	4.0	101		-	-		70-130	-		20
1,1-Dichloroethene	ND	4	3.7	93		-	-		70-130	-		20
trans-1,2-Dichloroethene	ND	4	3.6	91		-	-		70-130	-		20
cis-1,2-Dichloroethene	ND	4	4.3	108		-	-		70-130	-		20
Trichloroethene	3.6	4	8.0	111		-	-		70-130	-		20
1,2-Dichlorobenzene	ND	4	4.4	110		-	-		70-130	-		20
1,3-Dichlorobenzene	ND	4	4.3	109		-	-		70-130	-		20
1,4-Dichlorobenzene	ND	4	3.8	95		-	-		70-130	-		20
Styrene	ND	4	2.3	**57**	Q	-	-		70-130	-		20
o-Xylene	ND	4	4.0	101		-	-		70-130	-		20
1,1-Dichloropropene	ND	4	4.2	106		-	-		70-130	-		20
2,2-Dichloropropane	ND	4	3.8	94		-	-		70-130	-		20
1,1,1,2-Tetrachloroethane	ND	4	4.1	103		-	-		70-130	-		20
1,2,3-Trichloropropane	ND	4	4.0	100		-	-		70-130	-		20
Bromochloromethane	ND	4	4.5	112		-	-		70-130	-		20
n-Butylbenzene	ND	4	4.1	102		-	-		70-130	-		20
Dichlorodifluoromethane	ND	4	4.1	103		-	-		70-130	-		20
Hexachlorobutadiene	ND	4	4.2	106		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405109
Report Date: 03/28/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG674525-4 QC Sample: L1404520-02 Client ID: MS Sample												
Isopropylbenzene	ND	4	4.2	105		-	-		70-130	-		20
p-Isopropyltoluene	ND	4	3.8	95		-	-		70-130	-		20
Naphthalene	ND	4	2.9	73		-	-		70-130	-		20
n-Propylbenzene	ND	4	3.5	88		-	-		70-130	-		20
sec-Butylbenzene	ND	4	4.0	99		-	-		70-130	-		20
tert-Butylbenzene	ND	4	3.4	86		-	-		70-130	-		20
1,2,3-Trichlorobenzene	ND	4	3.0	74		-	-		70-130	-		20
1,2,4-Trichlorobenzene	ND	4	2.9	72		-	-		70-130	-		20
1,2,4-Trimethylbenzene	ND	4	3.4	84		-	-		70-130	-		20
1,3,5-Trimethylbenzene	ND	4	3.5	87		-	-		70-130	-		20
Bromobenzene	ND	4	3.6	90		-	-		70-130	-		20
o-Chlorotoluene	ND	4	3.3	84		-	-		70-130	-		20
p-Chlorotoluene	ND	4	3.7	93		-	-		70-130	-		20
Dibromomethane	ND	4	4.4	109		-	-		70-130	-		20
1,2-Dibromoethane	ND	4	4.4	110		-	-		70-130	-		20
1,2-Dibromo-3-chloropropane	ND	4	4.2	105		-	-		70-130	-		20
1,3-Dichloropropane	ND	4	4.5	112		-	-		70-130	-		20
Methyl tert butyl ether	ND	4	4.1	103		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405109
Report Date: 03/28/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG674525-4 QC Sample: L1404520-02 Client ID: MS Sample												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	107				80-120
4-Bromofluorobenzene	98				80-120

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405109
Report Date: 03/28/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG674525-3 QC Sample: L1404520-01 Client ID: DUP Sample						
Methylene chloride	ND	ND	ug/l	NC		20
1,1-Dichloroethane	ND	ND	ug/l	NC		20
Chloroform	ND	ND	ug/l	NC		20
Carbon tetrachloride	ND	ND	ug/l	NC		20
1,2-Dichloropropane	ND	ND	ug/l	NC		20
Dibromochloromethane	ND	ND	ug/l	NC		20
1,1,2-Trichloroethane	ND	ND	ug/l	NC		20
Tetrachloroethene	ND	ND	ug/l	NC		20
Chlorobenzene	ND	ND	ug/l	NC		20
Trichlorofluoromethane	ND	ND	ug/l	NC		20
1,2-Dichloroethane	ND	ND	ug/l	NC		20
1,1,1-Trichloroethane	ND	ND	ug/l	NC		20
Bromodichloromethane	ND	ND	ug/l	NC		20
trans-1,3-Dichloropropene	ND	ND	ug/l	NC		20
cis-1,3-Dichloropropene	ND	ND	ug/l	NC		20
Bromoform	ND	ND	ug/l	NC		20
1,1,2,2-Tetrachloroethane	ND	ND	ug/l	NC		20
Benzene	ND	ND	ug/l	NC		20
Toluene	ND	ND	ug/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405109
Report Date: 03/28/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG674525-3 QC Sample: L1404520-01 Client ID: DUP Sample					
Ethylbenzene	ND	ND	ug/l	NC	20
p/m-Xylene	ND	ND	ug/l	NC	20
Chloromethane	ND	ND	ug/l	NC	20
Bromomethane	ND	ND	ug/l	NC	20
Vinyl chloride	ND	ND	ug/l	NC	20
Chloroethane	ND	ND	ug/l	NC	20
1,1-Dichloroethene	ND	ND	ug/l	NC	20
trans-1,2-Dichloroethene	ND	ND	ug/l	NC	20
cis-1,2-Dichloroethene	ND	ND	ug/l	NC	20
Trichloroethene	0.47J	0.54	ug/l	NC	20
1,2-Dichlorobenzene	ND	ND	ug/l	NC	20
1,3-Dichlorobenzene	ND	ND	ug/l	NC	20
1,4-Dichlorobenzene	ND	ND	ug/l	NC	20
Styrene	ND	ND	ug/l	NC	20
o-Xylene	ND	ND	ug/l	NC	20
1,1-Dichloropropene	ND	ND	ug/l	NC	20
2,2-Dichloropropane	ND	ND	ug/l	NC	20
1,1,1,2-Tetrachloroethane	ND	ND	ug/l	NC	20
1,2,3-Trichloropropane	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405109
Report Date: 03/28/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG674525-3 QC Sample: L1404520-01 Client ID: DUP Sample					
Bromochloromethane	ND	ND	ug/l	NC	20
n-Butylbenzene	ND	ND	ug/l	NC	20
Dichlorodifluoromethane	ND	ND	ug/l	NC	20
Hexachlorobutadiene	ND	ND	ug/l	NC	20
Isopropylbenzene	ND	ND	ug/l	NC	20
p-Isopropyltoluene	ND	ND	ug/l	NC	20
Naphthalene	ND	ND	ug/l	NC	20
n-Propylbenzene	ND	ND	ug/l	NC	20
sec-Butylbenzene	ND	ND	ug/l	NC	20
tert-Butylbenzene	ND	ND	ug/l	NC	20
1,2,3-Trichlorobenzene	ND	ND	ug/l	NC	20
1,2,4-Trichlorobenzene	ND	ND	ug/l	NC	20
1,2,4-Trimethylbenzene	ND	ND	ug/l	NC	20
1,3,5-Trimethylbenzene	ND	ND	ug/l	NC	20
Bromobenzene	ND	ND	ug/l	NC	20
o-Chlorotoluene	ND	ND	ug/l	NC	20
p-Chlorotoluene	ND	ND	ug/l	NC	20
Dibromomethane	ND	ND	ug/l	NC	20
1,2-Dibromoethane	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405109
Report Date: 03/28/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG674525-3 QC Sample: L1404520-01 Client ID: DUP Sample					
1,2-Dibromo-3-chloropropane	ND	ND	ug/l	NC	20
1,3-Dichloropropane	ND	ND	ug/l	NC	20
Methyl tert butyl ether	ND	ND	ug/l	NC	20
Xylene (Total)[1]	ND	ND	ug/l	NC	20

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	95		100		80-120
4-Bromofluorobenzene	93		90		80-120

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1405109
Project Number: Not Specified
Report Date: 03/28/14

SAMPLE RESULTS

Lab ID:	L1405109-01	Date Collected:	03/11/14 12:40
Client ID:	BISHOP RD_060	Date Received:	03/11/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/13/14 20:48
Analytical Date:	03/18/14 18:05		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.147	0.0735	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	41		15-110

Project Name: EASTHAM DW
Lab Number: L1405109
Project Number: Not Specified
Report Date: 03/28/14

SAMPLE RESULTS

Lab ID:	L1405109-02	Date Collected:	03/11/14 10:40
Client ID:	BRIDGE RD_1825	Date Received:	03/11/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/13/14 20:48
Analytical Date:	03/18/14 18:50		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	38		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405109
Report Date: 03/28/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 03/18/14 15:50
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 03/13/14 20:48

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01-02 Batch: WG676172-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	52		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405109

Report Date: 03/28/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 01-02		Batch: WG676172-2		WG676172-3			
1,4-Dioxane	100		100		40-140	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	40		38		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405109
Report Date: 03/28/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405109-01A	Vial Ascorbic Acid/HCl preserved	A	N/A	5.8	Y	Absent	524.2(14)
L1405109-01B	Vial Ascorbic Acid/HCl preserved	A	N/A	5.8	Y	Absent	524.2(14)
L1405109-01C	Amber 500ml unpreserved	A	7	5.8	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405109-01D	Amber 500ml unpreserved	A	7	5.8	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405109-02A	Vial Ascorbic Acid/HCl preserved	A	N/A	5.8	Y	Absent	524.2(14)
L1405109-02B	Vial Ascorbic Acid/HCl preserved	A	N/A	5.8	Y	Absent	524.2(14)
L1405109-02C	Amber 500ml unpreserved	A	7	5.8	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405109-02D	Amber 500ml unpreserved	A	7	5.8	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405109-03A	Vial Ascorbic Acid/HCl preserved	A	N/A	5.8	Y	Absent	524.2(14)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1405109
Project Number:	Not Specified	**Report Date:**	03/28/14

GLOSSARY

Acronyms

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

Footnotes

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

Terms

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.
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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405109
Project Number:	Not Specified	**Report Date:**	03/28/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405109
Project Number:	Not Specified	**Report Date:**	03/28/14

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

16 Methods for the Determination of Organic Compounds in Drinking Water - Supplement II. EPA/600/R-92/129, August 1992.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised December 11, 2013

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — World Class Chemistry

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: 3/11/14

ALPHA Job #: L1405109

Project Information

Project Name: Eastham DW

Project Location: Eastham, MA

Project #:

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt.

Address: 273 West Main Street

Norton, MA 02766

Phone: 508-226-1800

Fax:

Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: 3-18-14 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:

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	1,4 DIOXANE by 8270	524.2	. .										Sample Specific Comments	TOTAL # BOTTLES
05109 - 01	BISHOP RD_060	3/11/14	1240	DW	EC	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		4
02	BRIDGE RD_1825	3/11/14	1040	DW	EC	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		4
03	TRIPBLANK					☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		4
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
Container Type						A	V	-	-	-	-	-	-	-	-	-	-		
Preservative						A	I	-	-	-	-	-	-	-	-	-	-		

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
	3/11/14 1840		3/11/14 1840
	3/11/14 2015		3/11/14 2015

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.

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — World Class Chemistry

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: 3/11/14

ALPHA Job #: L1405109

Project Information

Project Name: Eastham DW

Project Location: Eastham, MA

Project #:

Project Manager: Lisa Flynn

ALPHA Quote #:

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

Client Information

Client: Environmental Strategies & Mgmt.

Address: 273 West Main Street

Norton, MA 02766

Phone: 508-226-1800

Fax:

Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: 3-18-14 Time:

Other Project Specific Requirements/Comments/Detection Limits:

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?

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

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE by 8270												TOTAL # BOTTLES
05109 - 01	BISHOP RD_060	3/11/14	1240	DW	EC	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	4
02	BRIDGE RD_1825	3/11/14	1040	DW	EC	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	4
[redacted]						☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	4
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1405135	3/10/2014	drinking water	Yes	Yes	Yes	Yes	Yes	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
Jason Dr_030	3/10/2014	L1405135-01	DW	8270
Jason Dr_030 DUP	3/10/2014	L1405135-02	DW	8270
Belmont EES Water #1	3/10/2014	L1405135-03	DW	8270
Belmont EES Water #1 DUP	3/10/2014	L1405135-04	DW	8270
Belmont EES Water #2	3/10/2014	L1405135-05	DW	8270
Belmont EES Water #2 DUP	3/10/2014	L1405135-06	DW	8270
State Highway_3265	3/10/2014	L1405135-07	DW	8270
State Highway_3265 DUP	3/10/2014	L1405135-08	DW	8270
Trip Blank		L1405135-09	DW	8270

All QAQC data, including surrogate, method blank, Laboratory Control Sample (LCS) and LCS duplicate results were reviewed
This report was deemed usable by Angela Boyd on 3/25/14.

ANALYTICAL REPORT

Lab Number:	L1405135
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	Not Specified
Report Date:	03/24/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405135
Report Date: 03/24/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1405135-01	JASON DR_030	EASTHAM, MA	03/10/14 08:35
L1405135-02	JASON DR_030 DUP	EASTHAM, MA	03/10/14 08:40
L1405135-03	BELMONT EES WATER #1	EASTHAM, MA	03/10/14 13:10
L1405135-04	BELMONT EES WATER #1 DUP	EASTHAM, MA	03/10/14 13:10
L1405135-05	BELMONT EES WATER #2	EASTHAM, MA	03/10/14 13:15
L1405135-06	BELMONT EES WATER #2 DUP	EASTHAM, MA	03/10/14 13:15
L1405135-07	STATE HIGHWAY_3265	EASTHAM, MA	03/10/14 14:30
L1405135-08	STATE HIGHWAY_3265 DUP	EASTHAM, MA	03/10/14 14:30
L1405135-09	TRIPBLANK	EASTHAM, MA	03/10/14 00:00

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405135
Report Date: 03/24/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405135
Report Date: 03/24/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name:	EASTHAM DW	**Lab Number:**	L1405135
Project Number:	Not Specified	**Report Date:**	03/24/14

Case Narrative (continued)

Report Submission

This report replaces the report issued March 17, 2014. The 1,4-Dioxane by SIM units and reporting limits were corrected on all samples.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Report Submission

All MCP required questions were answered with affirmative responses; therefore, there are no relevant protocol-specific QC and/or performance standard non-conformances to report.

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: 03/24/14

ORGANICS

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1405135
Project Number: Not Specified
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID:	L1405135-01	Date Collected:	03/10/14 08:35
Client ID:	JASON DR_030	Date Received:	03/10/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/13/14 20:48
Analytical Date:	03/18/14 19:35		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.147	0.0735	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	35		15-110

Project Name: EASTHAM DW
Lab Number: L1405135
Project Number: Not Specified
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID:	L1405135-03	Date Collected:	03/10/14 13:10
Client ID:	BELMONT EES WATER #1	Date Received:	03/10/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/13/14 20:48
Analytical Date:	03/18/14 20:20		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.153	0.0765	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	33		15-110

Project Name: EASTHAM DW
Lab Number: L1405135
Project Number: Not Specified
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID:	L1405135-05	Date Collected:	03/10/14 13:15
Client ID:	BELMONT EES WATER #2	Date Received:	03/10/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/13/14 20:48
Analytical Date:	03/18/14 21:05		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.156	0.0781	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	36		15-110

Project Name: EASTHAM DW
Lab Number: L1405135
Project Number: Not Specified
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID:	L1405135-07	Date Collected:	03/10/14 14:30
Client ID:	STATE HIGHWAY_3265	Date Received:	03/10/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/13/14 20:48
Analytical Date:	03/18/14 21:50		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.147	0.0735	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	31		15-110

Project Name: EASTHAM DW
Lab Number: L1405135
Project Number: Not Specified
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID:	L1405135-09	Date Collected:	03/10/14 00:00
Client ID:	TRIPBLANK	Date Received:	03/10/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/13/14 20:48
Analytical Date:	03/18/14 22:35		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.147	0.0735	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	32		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405135
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 03/18/14 15:50
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 03/13/14 20:48

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01,03,05,07,09 Batch: WG676172-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	52		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405135

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 01,03,05,07,09		Batch: WG676172-2 WG676172-3					
1,4-Dioxane	100		100		40-140	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	40		38		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405135
Report Date: 03/24/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405135-01A	Amber 1000ml unpreserved	A	7	2.8	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405135-01B	Amber 1000ml unpreserved	A	7	2.8	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405135-02A	Amber 1000ml unpreserved	A	7	2.8	Y	Absent	HOLD(14)
L1405135-02B	Amber 1000ml unpreserved	A	7	2.8	Y	Absent	HOLD(14)
L1405135-03A	Amber 1000ml unpreserved	A	7	2.8	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405135-03B	Amber 1000ml unpreserved	A	7	2.8	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405135-04A	Amber 1000ml unpreserved	A	7	2.8	Y	Absent	HOLD(14)
L1405135-04B	Amber 1000ml unpreserved	A	7	2.8	Y	Absent	HOLD(14)
L1405135-05A	Amber 1000ml unpreserved	A	7	2.8	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405135-05B	Amber 1000ml unpreserved	A	7	2.8	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405135-06A	Amber 1000ml unpreserved	A	7	2.8	Y	Absent	HOLD(14)
L1405135-06B	Amber 1000ml unpreserved	A	7	2.8	Y	Absent	HOLD(14)
L1405135-07A	Amber 1000ml unpreserved	A	7	2.8	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405135-07B	Amber 1000ml unpreserved	A	7	2.8	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405135-08A	Amber 1000ml unpreserved	A	7	2.8	Y	Absent	HOLD(14)
L1405135-08B	Amber 1000ml unpreserved	A	7	2.8	Y	Absent	HOLD(14)
L1405135-09A	Amber 500ml unpreserved	A	N/A	2.8	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405135-09B	Amber 500ml unpreserved	A	N/A	2.8	Y	Absent	A2-14-DIOXANESIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1405135
Project Number:	Not Specified	**Report Date:**	03/24/14

GLOSSARY

Acronyms

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

Footnotes

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

Terms

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.
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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405135
Project Number:	Not Specified	**Report Date:**	03/24/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405135
Project Number:	Not Specified	**Report Date:**	03/24/14

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised December 11, 2013

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab:

ALPHA Job #: L1405135

ALPHA ANALYTICAL
Moving at the Speed of Chemistry

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

Project Information

Project Name: Eastham DW

Project Location: Eastham, MA

Project #:

Project Manager: Angela Boyd

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt.

Address: 273 West Main Street

Norton, MA 02766

Phone: 508-226-1800

Fax:

Email: aboyd@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:
Also report to lflynn@esm-inc.com

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?

ANALYSIS

1,4 Dioxane by 8270

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

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 Dioxane by 8270												TOTAL # BOTTLES
05135 01	Jason Dr_030	3/10/14	0835	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
02	Jason Dr_030 DUP	3/10/14	0840	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
03	Belmont EES Water #1	3/10/14	1310	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
04	Belmont EES Water #1 DUP	3/10/14	1310	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
05	Belmont EES Water #2	3/10/14	1315	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
06	Belmont EES Water #2 DUP	3/10/14	1315	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
07	State Highway_3265	3/10/14	1430	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
08	State Highway_3265 DUP	3/10/14	1430	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
09	Tripblank					☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
	Container Type					A	-	-	-	-	-	-	-	-	-	-	-	
	Preservative					A	-	-	-	-	-	-	-	-	-	-	-	

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	3/10/14 1730		31014 1730

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

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — Moving At the Speed of Chemistry

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:

ALPHA Job #: L1405135

Client Information

Client: Environmental Strategies & Mgmt.

Address: 273 West Main Street

Norton, MA 02766

Phone: 508-226-1800

Fax:

Email: aboyd@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Eastham DW

Project Location: Eastham, MA

Project #:

Project Manager: Angela Boyd

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:

Also report to lflynn@esm-inc.com

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?

ANALYSIS

1,4 Dioxane by 8270

SAMPLE HANDLING

Filtration
☐ Done
☐ Not Needed
☐ Lab to do

Preservation
☐ Lab to do

(Please specify below)

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 Dioxane by 8270												TOTAL # BOTTLES
05135 01	Jason Dr_030	3/10/14	0835	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
02	Jason Dr_030 DUP	3/10/14	0840	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
03	Belmont EES Water #1	3/10/14	1310	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
04	Belmont EES Water #1 DUP	3/10/14	1310	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
05	Belmont EES Water #2	3/10/14	1315	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
06	Belmont EES Water #2 DUP	3/10/14	1315	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
07	State Highway_3265	3/10/14	1430	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
08	State Highway_3265 DUP	3/10/14	1430	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
09	Tripblank					☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	

Container Type	A	-	-	-	-	-	-	-	-	-	-	-
Preservative	A	-	-	-	-	-	-	-	-	-	-	-

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	3/10/14 1730		31014 1730

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

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

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1405140	3/10/2014	drinking water	Yes	No	Yes	Yes	No	Usable

Sample ID	Date	Lab ID	Matrix	Analysis
Schoolhouse Rd_025	3/10/2014	05140-01	DW	8270, 524.2
Nauset Rd_1525	3/10/2014	05140-02	DW	8270, 524.2
Massasoit Rd_0295	3/10/2014	05140-03	DW	8270, 524.2
Trip Blank		05140-04		8270, 524.2

Lab presumptive certainty was not achieved because the proper field QC was not delivered (Duplicate analytical sample) and the analytical method specified in the CAM protocol was not followed for volatile organics (524.2 is a non-CAM method). Drinking water methodology was used instead.

All QAQC data, including surrogate, trip blank, method blank, Laboratory Control Sample, laboratory duplicate and laboratory matrix spike results were reviewed.

The matrix spike recovered low for chloromethane, styrene and bromomethane. Results were flagged with a Q qualifier. These compounds were not detected in the associated samples.

This report was deemed usable by Angela Boyd on 4/3/14.

ANALYTICAL REPORT

Lab Number:	L1405140
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	Not Specified
Report Date:	03/28/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1405140-01	SCHOOLHOUSE RD_025	EASTHAM, MA	03/10/14 10:30
L1405140-02	NAUSET RD_1525	EASTHAM, MA	03/10/14 12:30
L1405140-03	MASSASOIT RD_295	EASTHAM, MA	03/10/14 15:30
L1405140-04	TRIP BLANK	EASTHAM, MA	03/10/14 00:00

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405140
Report Date: 03/28/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	NO
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name:	EASTHAM DW	**Lab Number:**	L1405140
Project Number:	Not Specified	**Report Date:**	03/28/14

Case Narrative (continued)

Report Submission

This report replaces the report issued March 24, 2014. The answer to Question B has been changed and a Volatile Organics narrative has been added.

A previously-issued report replaced the report issued March 17, 2014. The 1,4-Dioxane by SIM units and reporting limits were corrected on all samples. In addition, the TICs were removed from all Volatile Organics results.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Volatile Organics

In reference to question B:

At the client's request, the analytical method specified in the CAM protocol was not followed.

In reference to question I:

All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

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: 03/28/14

ORGANICS

VOLATILES

Project Name: EASTHAM DW **Lab Number:** L1405140

Project Number: Not Specified **Report Date:** 03/28/14

SAMPLE RESULTS

Lab ID: L1405140-01
Client ID: SCHOOLHOUSE RD_025
Sample Location: EASTHAM, MA
Matrix: Water
Analytical Method: 16,524.2
Analytical Date: 03/13/14 14:14
Analyst: GT

Date Collected: 03/10/14 10:30
Date Received: 03/10/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	ND		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1405140

Project Number: Not Specified **Report Date:** 03/28/14

SAMPLE RESULTS

Lab ID: L1405140-01 Date Collected: 03/10/14 10:30

Client ID: SCHOOLHOUSE RD_025 Date Received: 03/10/14

Sample Location: EASTHAM, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	107		80-120
4-Bromofluorobenzene	85		80-120

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405140
Report Date: 03/28/14

SAMPLE RESULTS

Lab ID: L1405140-02
Client ID: NAUSET RD_1525
Sample Location: EASTHAM, MA
Matrix: Water
Analytical Method: 16,524.2
Analytical Date: 03/13/14 14:47
Analyst: GT

Date Collected: 03/10/14 12:30
Date Received: 03/10/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	1.6		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1405140

Project Number: Not Specified **Report Date:** 03/28/14

SAMPLE RESULTS

Lab ID: L1405140-02 Date Collected: 03/10/14 12:30

Client ID: NAUSET RD_1525 Date Received: 03/10/14

Sample Location: EASTHAM, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	106		80-120
4-Bromofluorobenzene	97		80-120

Project Name: EASTHAM DW **Lab Number:** L1405140

Project Number: Not Specified **Report Date:** 03/28/14

SAMPLE RESULTS

Lab ID: L1405140-03
Client ID: MASSASOIT RD_295
Sample Location: EASTHAM, MA
Matrix: Water
Analytical Method: 16,524.2
Analytical Date: 03/13/14 15:20
Analyst: GT

Date Collected: 03/10/14 15:30
Date Received: 03/10/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	ND		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1405140

Project Number: Not Specified **Report Date:** 03/28/14

SAMPLE RESULTS

Lab ID: L1405140-03 Date Collected: 03/10/14 15:30

Client ID: MASSASOIT RD_295 Date Received: 03/10/14

Sample Location: EASTHAM, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	90		80-120
4-Bromofluorobenzene	101		80-120

Project Name: EASTHAM DW
Lab Number: L1405140
Project Number: Not Specified
Report Date: 03/28/14

SAMPLE RESULTS

Lab ID: L1405140-04
Client ID: TRIP BLANK
Sample Location: EASTHAM, MA
Matrix: Water
Analytical Method: 16,524.2
Analytical Date: 03/14/14 15:29
Analyst: GT

Date Collected: 03/10/14 00:00
Date Received: 03/10/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	ND		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1405140

Project Number: Not Specified **Report Date:** 03/28/14

SAMPLE RESULTS

Lab ID: L1405140-04 Date Collected: 03/10/14 00:00

Client ID: TRIP BLANK Date Received: 03/10/14

Sample Location: EASTHAM, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	95		80-120
4-Bromofluorobenzene	87		80-120

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/13/14 11:23
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG674525-10					
Methylene chloride	ND		ug/l	0.50	0.15
1,1-Dichloroethane	ND		ug/l	0.50	0.09
Chloroform	ND		ug/l	0.50	0.05
Carbon tetrachloride	ND		ug/l	0.50	0.10
1,2-Dichloropropane	ND		ug/l	0.50	0.09
Dibromochloromethane	ND		ug/l	0.50	0.08
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12
Tetrachloroethene	ND		ug/l	0.50	0.09
Chlorobenzene	ND		ug/l	0.50	0.08
Trichlorofluoromethane	ND		ug/l	0.50	0.11
1,2-Dichloroethane	ND		ug/l	0.50	0.08
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08
Bromodichloromethane	ND		ug/l	0.50	0.05
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10
Bromoform	ND		ug/l	0.50	0.09
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09
Benzene	ND		ug/l	0.50	0.09
Toluene	ND		ug/l	0.50	0.12
Ethylbenzene	ND		ug/l	0.50	0.06
p/m-Xylene	ND		ug/l	0.50	0.12
Chloromethane	ND		ug/l	0.50	0.15
Bromomethane	ND		ug/l	0.50	0.13
Vinyl chloride	ND		ug/l	0.50	0.08
Chloroethane	ND		ug/l	0.50	0.12
1,1-Dichloroethene	ND		ug/l	0.50	0.06
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11
Trichloroethene	ND		ug/l	0.50	0.09
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/13/14 11:23
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG674525-10					
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05
Styrene	ND		ug/l	0.50	0.06
o-Xylene	ND		ug/l	0.50	0.09
1,1-Dichloropropene	ND		ug/l	0.50	0.11
2,2-Dichloropropane	ND		ug/l	0.50	0.11
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11
Bromochloromethane	ND		ug/l	0.50	0.10
n-Butylbenzene	ND		ug/l	0.50	0.06
Dichlorodifluoromethane	ND		ug/l	0.50	0.10
Hexachlorobutadiene	ND		ug/l	0.50	0.11
Isopropylbenzene	ND		ug/l	0.50	0.08
p-Isopropyltoluene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.50	0.06
n-Propylbenzene	ND		ug/l	0.50	0.08
sec-Butylbenzene	ND		ug/l	0.50	0.06
tert-Butylbenzene	ND		ug/l	0.50	0.09
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10
Bromobenzene	ND		ug/l	0.50	0.09
o-Chlorotoluene	ND		ug/l	0.50	0.10
p-Chlorotoluene	ND		ug/l	0.50	0.08
Dibromomethane	ND		ug/l	0.50	0.09
1,2-Dibromoethane	ND		ug/l	0.50	0.06
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16
1,3-Dichloropropane	ND		ug/l	0.50	0.11
Methyl tert butyl ether	ND		ug/l	0.50	0.06
Xylenes, Total[1]	ND		ug/l	0.50	0.09

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/13/14 11:23
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03 Batch: WG674525-10					
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/l		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	95		80-120
4-Bromofluorobenzene	83		80-120

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405140
Report Date: 03/28/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/14/14 14:01
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG674829-10					
Methylene chloride	ND		ug/l	0.50	0.15
1,1-Dichloroethane	ND		ug/l	0.50	0.09
Chloroform	ND		ug/l	0.50	0.05
Carbon tetrachloride	ND		ug/l	0.50	0.10
1,2-Dichloropropane	ND		ug/l	0.50	0.09
Dibromochloromethane	ND		ug/l	0.50	0.08
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12
Tetrachloroethene	ND		ug/l	0.50	0.09
Chlorobenzene	ND		ug/l	0.50	0.08
Trichlorofluoromethane	ND		ug/l	0.50	0.11
1,2-Dichloroethane	ND		ug/l	0.50	0.08
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08
Bromodichloromethane	ND		ug/l	0.50	0.05
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10
Bromoform	ND		ug/l	0.50	0.09
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09
Benzene	ND		ug/l	0.50	0.09
Toluene	ND		ug/l	0.50	0.12
Ethylbenzene	ND		ug/l	0.50	0.06
p/m-Xylene	ND		ug/l	0.50	0.12
Chloromethane	ND		ug/l	0.50	0.15
Bromomethane	ND		ug/l	0.50	0.13
Vinyl chloride	ND		ug/l	0.50	0.08
Chloroethane	ND		ug/l	0.50	0.12
1,1-Dichloroethene	ND		ug/l	0.50	0.06
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11
Trichloroethene	ND		ug/l	0.50	0.09
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/14/14 14:01
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG674829-10					
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05
Styrene	ND		ug/l	0.50	0.06
o-Xylene	ND		ug/l	0.50	0.09
1,1-Dichloropropene	ND		ug/l	0.50	0.11
2,2-Dichloropropane	ND		ug/l	0.50	0.11
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11
Bromochloromethane	ND		ug/l	0.50	0.10
n-Butylbenzene	ND		ug/l	0.50	0.06
Dichlorodifluoromethane	ND		ug/l	0.50	0.10
Hexachlorobutadiene	ND		ug/l	0.50	0.11
Isopropylbenzene	ND		ug/l	0.50	0.08
p-Isopropyltoluene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.50	0.06
n-Propylbenzene	ND		ug/l	0.50	0.08
sec-Butylbenzene	ND		ug/l	0.50	0.06
tert-Butylbenzene	ND		ug/l	0.50	0.09
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10
Bromobenzene	ND		ug/l	0.50	0.09
o-Chlorotoluene	ND		ug/l	0.50	0.10
p-Chlorotoluene	ND		ug/l	0.50	0.08
Dibromomethane	ND		ug/l	0.50	0.09
1,2-Dibromoethane	ND		ug/l	0.50	0.06
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16
1,3-Dichloropropane	ND		ug/l	0.50	0.11
Methyl tert butyl ether	ND		ug/l	0.50	0.06
Xylenes, Total[1]	ND		ug/l	0.50	0.09

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/14/14 14:01
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 04 Batch: WG674829-10					
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/l		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	100		80-120
4-Bromofluorobenzene	86		80-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG674525-9								
Methylene chloride	110		-		70-130	-		20
1,1-Dichloroethane	106		-		70-130	-		20
Chloroform	110		-		70-130	-		20
Carbon tetrachloride	108		-		70-130	-		20
1,2-Dichloropropane	101		-		70-130	-		20
Dibromochloromethane	105		-		70-130	-		20
1,1,2-Trichloroethane	99		-		70-130	-		20
Tetrachloroethene	97		-		70-130	-		20
Chlorobenzene	99		-		70-130	-		20
Trichlorofluoromethane	113		-		70-130	-		20
1,2-Dichloroethane	113		-		70-130	-		20
1,1,1-Trichloroethane	110		-		70-130	-		20
Bromodichloromethane	105		-		70-130	-		20
trans-1,3-Dichloropropene	102		-		70-130	-		20
cis-1,3-Dichloropropene	99		-		70-130	-		20
Bromoform	100		-		70-130	-		20
1,1,2,2-Tetrachloroethane	98		-		70-130	-		20
Benzene	96		-		70-130	-		20
Toluene	96		-		70-130	-		20
Ethylbenzene	96		-		70-130	-		20
p/m-Xylene	96		-		70-130	-		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG674525-9								
Chloromethane	99		-		70-130	-		20
Bromomethane	90		-		70-130	-		20
Vinyl chloride	100		-		70-130	-		20
Chloroethane	110		-		70-130	-		20
1,1-Dichloroethene	94		-		70-130	-		20
trans-1,2-Dichloroethene	100		-		70-130	-		20
cis-1,2-Dichloroethene	103		-		70-130	-		20
Trichloroethene	90		-		70-130	-		20
1,2-Dichlorobenzene	98		-		70-130	-		20
1,3-Dichlorobenzene	96		-		70-130	-		20
1,4-Dichlorobenzene	98		-		70-130	-		20
Styrene	94		-		70-130	-		20
o-Xylene	98		-		70-130	-		20
1,1-Dichloropropene	88		-		70-130	-		20
2,2-Dichloropropane	103		-		70-130	-		20
1,1,1,2-Tetrachloroethane	110		-		70-130	-		20
1,2,3-Trichloropropane	107		-		70-130	-		20
Bromochloromethane	106		-		70-130	-		20
n-Butylbenzene	90		-		70-130	-		20
Dichlorodifluoromethane	114		-		70-130	-		20
Hexachlorobutadiene	105		-		70-130	-		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG674525-9								
Isopropylbenzene	96		-		70-130	-		20
p-Isopropyltoluene	97		-		70-130	-		20
Naphthalene	83		-		70-130	-		20
n-Propylbenzene	92		-		70-130	-		20
sec-Butylbenzene	93		-		70-130	-		20
tert-Butylbenzene	95		-		70-130	-		20
1,2,3-Trichlorobenzene	87		-		70-130	-		20
1,2,4-Trichlorobenzene	84		-		70-130	-		20
1,2,4-Trimethylbenzene	97		-		70-130	-		20
1,3,5-Trimethylbenzene	93		-		70-130	-		20
Bromobenzene	102		-		70-130	-		20
o-Chlorotoluene	92		-		70-130	-		20
p-Chlorotoluene	101		-		70-130	-		20
Dibromomethane	108		-		70-130	-		20
1,2-Dibromoethane	100		-		70-130	-		20
1,2-Dibromo-3-chloropropane	100		-		70-130	-		20
1,3-Dichloropropane	100		-		70-130	-		20
Methyl tert butyl ether	107		-		70-130	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405140

Report Date: 03/28/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 Batch: WG674525-9								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichlorobenzene-d4	103				80-120
4-Bromofluorobenzene	117				80-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405140

Report Date: 03/28/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG674829-9								
Methylene chloride	114		-		70-130	-		20
1,1-Dichloroethane	121		-		70-130	-		20
Chloroform	106		-		70-130	-		20
Carbon tetrachloride	122		-		70-130	-		20
1,2-Dichloropropane	105		-		70-130	-		20
Dibromochloromethane	112		-		70-130	-		20
1,1,2-Trichloroethane	100		-		70-130	-		20
Tetrachloroethene	107		-		70-130	-		20
Chlorobenzene	90		-		70-130	-		20
Trichlorofluoromethane	115		-		70-130	-		20
1,2-Dichloroethane	128		-		70-130	-		20
1,1,1-Trichloroethane	112		-		70-130	-		20
Bromodichloromethane	105		-		70-130	-		20
trans-1,3-Dichloropropene	99		-		70-130	-		20
cis-1,3-Dichloropropene	101		-		70-130	-		20
Bromoform	97		-		70-130	-		20
1,1,2,2-Tetrachloroethane	91		-		70-130	-		20
Benzene	104		-		70-130	-		20
Toluene	97		-		70-130	-		20
Ethylbenzene	92		-		70-130	-		20
p/m-Xylene	90		-		70-130	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405140

Report Date: 03/28/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG674829-9								
Chloromethane	104		-		70-130	-		20
Bromomethane	117		-		70-130	-		20
Vinyl chloride	104		-		70-130	-		20
Chloroethane	130		-		70-130	-		20
1,1-Dichloroethene	109		-		70-130	-		20
trans-1,2-Dichloroethene	100		-		70-130	-		20
cis-1,2-Dichloroethene	102		-		70-130	-		20
Trichloroethene	97		-		70-130	-		20
1,2-Dichlorobenzene	101		-		70-130	-		20
1,3-Dichlorobenzene	96		-		70-130	-		20
1,4-Dichlorobenzene	93		-		70-130	-		20
Styrene	88		-		70-130	-		20
o-Xylene	90		-		70-130	-		20
1,1-Dichloropropene	95		-		70-130	-		20
2,2-Dichloropropane	100		-		70-130	-		20
1,1,1,2-Tetrachloroethane	102		-		70-130	-		20
1,2,3-Trichloropropane	96		-		70-130	-		20
Bromochloromethane	126		-		70-130	-		20
n-Butylbenzene	92		-		70-130	-		20
Dichlorodifluoromethane	117		-		70-130	-		20
Hexachlorobutadiene	101		-		70-130	-		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG674829-9								
Isopropylbenzene	91		-		70-130	-		20
p-Isopropyltoluene	89		-		70-130	-		20
Naphthalene	75		-		70-130	-		20
n-Propylbenzene	90		-		70-130	-		20
sec-Butylbenzene	93		-		70-130	-		20
tert-Butylbenzene	94		-		70-130	-		20
1,2,3-Trichlorobenzene	86		-		70-130	-		20
1,2,4-Trichlorobenzene	85		-		70-130	-		20
1,2,4-Trimethylbenzene	95		-		70-130	-		20
1,3,5-Trimethylbenzene	92		-		70-130	-		20
Bromobenzene	103		-		70-130	-		20
o-Chlorotoluene	88		-		70-130	-		20
p-Chlorotoluene	89		-		70-130	-		20
Dibromomethane	105		-		70-130	-		20
1,2-Dibromoethane	94		-		70-130	-		20
1,2-Dibromo-3-chloropropane	89		-		70-130	-		20
1,3-Dichloropropane	107		-		70-130	-		20
Methyl tert butyl ether	118		-		70-130	-		20
tert-Butyl Alcohol	130		-		70-130	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405140

Report Date: 03/28/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 Batch: WG674829-9								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichlorobenzene-d4	106				80-120
4-Bromofluorobenzene	94				80-120

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG674525-4 QC Sample: L1404520-02 Client ID: MS Sample												
Methylene chloride	ND	4	3.5	88		-	-		70-130	-		20
1,1-Dichloroethane	ND	4	3.8	96		-	-		70-130	-		20
Chloroform	ND	4	4.4	110		-	-		70-130	-		20
Carbon tetrachloride	ND	4	4.5	112		-	-		70-130	-		20
1,2-Dichloropropane	ND	4	4.5	112		-	-		70-130	-		20
Dibromochloromethane	ND	4	4.5	112		-	-		70-130	-		20
1,1,2-Trichloroethane	ND	4	4.4	111		-	-		70-130	-		20
Tetrachloroethene	ND	4	3.9	98		-	-		70-130	-		20
Chlorobenzene	ND	4	4.2	105		-	-		70-130	-		20
Trichlorofluoromethane	ND	4	4.4	110		-	-		70-130	-		20
1,2-Dichloroethane	ND	4	4.8	119		-	-		70-130	-		20
1,1,1-Trichloroethane	ND	4	4.3	107		-	-		70-130	-		20
Bromodichloromethane	ND	4	4.5	112		-	-		70-130	-		20
trans-1,3-Dichloropropene	ND	4	4.3	109		-	-		70-130	-		20
cis-1,3-Dichloropropene	ND	4	4.5	112		-	-		70-130	-		20
Bromoform	ND	4	4.2	105		-	-		70-130	-		20
1,1,2,2-Tetrachloroethane	ND	4	4.7	119		-	-		70-130	-		20
Benzene	ND	4	4.5	112		-	-		70-130	-		20
Toluene	ND	4	4.3	107		-	-		70-130	-		20
Ethylbenzene	ND	4	4.2	104		-	-		70-130	-		20
p/m-Xylene	ND	8	8.4	105		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG674525-4 QC Sample: L1404520-02 Client ID: MS Sample												
Chloromethane	ND	4	2.7	**68**	Q	-	-		70-130	-		20
Bromomethane	ND	4	2.9	74		-	-		70-130	-		20
Vinyl chloride	ND	4	3.6	90		-	-		70-130	-		20
Chloroethane	ND	4	4.0	101		-	-		70-130	-		20
1,1-Dichloroethene	ND	4	3.7	93		-	-		70-130	-		20
trans-1,2-Dichloroethene	ND	4	3.6	91		-	-		70-130	-		20
cis-1,2-Dichloroethene	ND	4	4.3	108		-	-		70-130	-		20
Trichloroethene	3.6	4	8.0	111		-	-		70-130	-		20
1,2-Dichlorobenzene	ND	4	4.4	110		-	-		70-130	-		20
1,3-Dichlorobenzene	ND	4	4.3	109		-	-		70-130	-		20
1,4-Dichlorobenzene	ND	4	3.8	95		-	-		70-130	-		20
Styrene	ND	4	2.3	**57**	Q	-	-		70-130	-		20
o-Xylene	ND	4	4.0	101		-	-		70-130	-		20
1,1-Dichloropropene	ND	4	4.2	106		-	-		70-130	-		20
2,2-Dichloropropane	ND	4	3.8	94		-	-		70-130	-		20
1,1,1,2-Tetrachloroethane	ND	4	4.1	103		-	-		70-130	-		20
1,2,3-Trichloropropane	ND	4	4.0	100		-	-		70-130	-		20
Bromochloromethane	ND	4	4.5	112		-	-		70-130	-		20
n-Butylbenzene	ND	4	4.1	102		-	-		70-130	-		20
Dichlorodifluoromethane	ND	4	4.1	103		-	-		70-130	-		20
Hexachlorobutadiene	ND	4	4.2	106		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG674525-4 QC Sample: L1404520-02 Client ID: MS Sample												
Isopropylbenzene	ND	4	4.2	105		-	-		70-130	-		20
p-Isopropyltoluene	ND	4	3.8	95		-	-		70-130	-		20
Naphthalene	ND	4	2.9	73		-	-		70-130	-		20
n-Propylbenzene	ND	4	3.5	88		-	-		70-130	-		20
sec-Butylbenzene	ND	4	4.0	99		-	-		70-130	-		20
tert-Butylbenzene	ND	4	3.4	86		-	-		70-130	-		20
1,2,3-Trichlorobenzene	ND	4	3.0	74		-	-		70-130	-		20
1,2,4-Trichlorobenzene	ND	4	2.9	72		-	-		70-130	-		20
1,2,4-Trimethylbenzene	ND	4	3.4	84		-	-		70-130	-		20
1,3,5-Trimethylbenzene	ND	4	3.5	87		-	-		70-130	-		20
Bromobenzene	ND	4	3.6	90		-	-		70-130	-		20
o-Chlorotoluene	ND	4	3.3	84		-	-		70-130	-		20
p-Chlorotoluene	ND	4	3.7	93		-	-		70-130	-		20
Dibromomethane	ND	4	4.4	109		-	-		70-130	-		20
1,2-Dibromoethane	ND	4	4.4	110		-	-		70-130	-		20
1,2-Dibromo-3-chloropropane	ND	4	4.2	105		-	-		70-130	-		20
1,3-Dichloropropane	ND	4	4.5	112		-	-		70-130	-		20
Methyl tert butyl ether	ND	4	4.1	103		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG674525-4 QC Sample: L1404520-02 Client ID: MS Sample												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	107				80-120
4-Bromofluorobenzene	98				80-120

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 QC Batch ID: WG674829-4 QC Sample: L1404498-02 Client ID: MS Sample												
Methylene chloride	ND	4	2.9	72		-	-		70-130	-		20
1,1-Dichloroethane	ND	4	3.1	77		-	-		70-130	-		20
Chloroform	0.58	4	3.6	76		-	-		70-130	-		20
Carbon tetrachloride	ND	4	4.1	103		-	-		70-130	-		20
1,2-Dichloropropane	ND	4	5.1	127		-	-		70-130	-		20
Dibromochloromethane	ND	4	4.0	100		-	-		70-130	-		20
1,1,2-Trichloroethane	ND	4	4.4	110		-	-		70-130	-		20
Tetrachloroethene	4.4	4	7.5	78		-	-		70-130	-		20
Chlorobenzene	ND	4	4.3	109		-	-		70-130	-		20
Trichlorofluoromethane	ND	4	3.5	88		-	-		70-130	-		20
1,2-Dichloroethane	ND	4	4.2	106		-	-		70-130	-		20
1,1,1-Trichloroethane	ND	4	4.1	103		-	-		70-130	-		20
Bromodichloromethane	ND	4	4.1	102		-	-		70-130	-		20
trans-1,3-Dichloropropene	ND	4	3.9	98		-	-		70-130	-		20
cis-1,3-Dichloropropene	ND	4	4.1	102		-	-		70-130	-		20
Bromoform	ND	4	3.9	98		-	-		70-130	-		20
1,1,2,2-Tetrachloroethane	ND	4	4.8	119		-	-		70-130	-		20
Benzene	ND	4	4.5	113		-	-		70-130	-		20
Toluene	ND	4	4.2	105		-	-		70-130	-		20
Ethylbenzene	ND	4	4.2	106		-	-		70-130	-		20
p/m-Xylene	ND	8	8.2	102		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 QC Batch ID: WG674829-4 QC Sample: L1404498-02 Client ID: MS Sample												
Chloromethane	ND	4	3.0	75		-	-		70-130	-		20
Bromomethane	ND	4	2.5	**62**	Q	-	-		70-130	-		20
Vinyl chloride	ND	4	2.8	70		-	-		70-130	-		20
Chloroethane	ND	4	3.0	76		-	-		70-130	-		20
1,1-Dichloroethene	ND	4	3.2	80		-	-		70-130	-		20
trans-1,2-Dichloroethene	ND	4	3.1	77		-	-		70-130	-		20
cis-1,2-Dichloroethene	ND	4	3.1	78		-	-		70-130	-		20
Trichloroethene	ND	4	3.9	98		-	-		70-130	-		20
1,2-Dichlorobenzene	ND	4	4.1	102		-	-		70-130	-		20
1,3-Dichlorobenzene	ND	4	4.0	99		-	-		70-130	-		20
1,4-Dichlorobenzene	ND	4	3.8	95		-	-		70-130	-		20
Styrene	ND	4	4.0	99		-	-		70-130	-		20
o-Xylene	ND	4	4.2	105		-	-		70-130	-		20
1,1-Dichloropropene	ND	4	4.0	101		-	-		70-130	-		20
2,2-Dichloropropane	ND	4	3.0	76		-	-		70-130	-		20
1,1,1,2-Tetrachloroethane	ND	4	4.4	109		-	-		70-130	-		20
1,2,3-Trichloropropane	ND	4	3.9	97		-	-		70-130	-		20
Bromochloromethane	ND	4	3.4	84		-	-		70-130	-		20
n-Butylbenzene	ND	4	3.9	97		-	-		70-130	-		20
Dichlorodifluoromethane	ND	4	3.9	97		-	-		70-130	-		20
Hexachlorobutadiene	ND	4	4.6	114		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 QC Batch ID: WG674829-4 QC Sample: L1404498-02 Client ID: MS Sample												
Isopropylbenzene	ND	4	4.2	105		-	-		70-130	-		20
p-Isopropyltoluene	ND	4	3.0	75		-	-		70-130	-		20
Naphthalene	ND	4	3.8	96		-	-		70-130	-		20
n-Propylbenzene	ND	4	4.1	104		-	-		70-130	-		20
sec-Butylbenzene	ND	4	2.8	71		-	-		70-130	-		20
tert-Butylbenzene	ND	4	3.4	86		-	-		70-130	-		20
1,2,3-Trichlorobenzene	ND	4	3.9	99		-	-		70-130	-		20
1,2,4-Trichlorobenzene	ND	4	3.5	88		-	-		70-130	-		20
1,2,4-Trimethylbenzene	ND	4	3.6	89		-	-		70-130	-		20
1,3,5-Trimethylbenzene	ND	4	4.0	101		-	-		70-130	-		20
Bromobenzene	ND	4	4.3	107		-	-		70-130	-		20
o-Chlorotoluene	ND	4	4.1	102		-	-		70-130	-		20
p-Chlorotoluene	ND	4	3.7	93		-	-		70-130	-		20
Dibromomethane	ND	4	4.5	113		-	-		70-130	-		20
1,2-Dibromoethane	ND	4	4.3	108		-	-		70-130	-		20
1,2-Dibromo-3-chloropropane	ND	4	4.4	109		-	-		70-130	-		20
1,3-Dichloropropane	ND	4	4.3	109		-	-		70-130	-		20
Methyl tert butyl ether	ND	4	3.2	81		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 QC Batch ID: WG674829-4 QC Sample: L1404498-02 Client ID: MS Sample												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	94				80-120
4-Bromofluorobenzene	98				80-120

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG674525-3 QC Sample: L1404520-01 Client ID: DUP Sample						
Methylene chloride	ND	ND	ug/l	NC		20
1,1-Dichloroethane	ND	ND	ug/l	NC		20
Chloroform	ND	ND	ug/l	NC		20
Carbon tetrachloride	ND	ND	ug/l	NC		20
1,2-Dichloropropane	ND	ND	ug/l	NC		20
Dibromochloromethane	ND	ND	ug/l	NC		20
1,1,2-Trichloroethane	ND	ND	ug/l	NC		20
Tetrachloroethene	ND	ND	ug/l	NC		20
Chlorobenzene	ND	ND	ug/l	NC		20
Trichlorofluoromethane	ND	ND	ug/l	NC		20
1,2-Dichloroethane	ND	ND	ug/l	NC		20
1,1,1-Trichloroethane	ND	ND	ug/l	NC		20
Bromodichloromethane	ND	ND	ug/l	NC		20
trans-1,3-Dichloropropene	ND	ND	ug/l	NC		20
cis-1,3-Dichloropropene	ND	ND	ug/l	NC		20
Bromoform	ND	ND	ug/l	NC		20
1,1,2,2-Tetrachloroethane	ND	ND	ug/l	NC		20
Benzene	ND	ND	ug/l	NC		20
Toluene	ND	ND	ug/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG674525-3 QC Sample: L1404520-01 Client ID: DUP Sample					
Ethylbenzene	ND	ND	ug/l	NC	20
p/m-Xylene	ND	ND	ug/l	NC	20
Chloromethane	ND	ND	ug/l	NC	20
Bromomethane	ND	ND	ug/l	NC	20
Vinyl chloride	ND	ND	ug/l	NC	20
Chloroethane	ND	ND	ug/l	NC	20
1,1-Dichloroethene	ND	ND	ug/l	NC	20
trans-1,2-Dichloroethene	ND	ND	ug/l	NC	20
cis-1,2-Dichloroethene	ND	ND	ug/l	NC	20
Trichloroethene	0.47J	0.54	ug/l	NC	20
1,2-Dichlorobenzene	ND	ND	ug/l	NC	20
1,3-Dichlorobenzene	ND	ND	ug/l	NC	20
1,4-Dichlorobenzene	ND	ND	ug/l	NC	20
Styrene	ND	ND	ug/l	NC	20
o-Xylene	ND	ND	ug/l	NC	20
1,1-Dichloropropene	ND	ND	ug/l	NC	20
2,2-Dichloropropane	ND	ND	ug/l	NC	20
1,1,1,2-Tetrachloroethane	ND	ND	ug/l	NC	20
1,2,3-Trichloropropane	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG674525-3 QC Sample: L1404520-01 Client ID: DUP Sample					
Bromochloromethane	ND	ND	ug/l	NC	20
n-Butylbenzene	ND	ND	ug/l	NC	20
Dichlorodifluoromethane	ND	ND	ug/l	NC	20
Hexachlorobutadiene	ND	ND	ug/l	NC	20
Isopropylbenzene	ND	ND	ug/l	NC	20
p-Isopropyltoluene	ND	ND	ug/l	NC	20
Naphthalene	ND	ND	ug/l	NC	20
n-Propylbenzene	ND	ND	ug/l	NC	20
sec-Butylbenzene	ND	ND	ug/l	NC	20
tert-Butylbenzene	ND	ND	ug/l	NC	20
1,2,3-Trichlorobenzene	ND	ND	ug/l	NC	20
1,2,4-Trichlorobenzene	ND	ND	ug/l	NC	20
1,2,4-Trimethylbenzene	ND	ND	ug/l	NC	20
1,3,5-Trimethylbenzene	ND	ND	ug/l	NC	20
Bromobenzene	ND	ND	ug/l	NC	20
o-Chlorotoluene	ND	ND	ug/l	NC	20
p-Chlorotoluene	ND	ND	ug/l	NC	20
Dibromomethane	ND	ND	ug/l	NC	20
1,2-Dibromoethane	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03 QC Batch ID: WG674525-3 QC Sample: L1404520-01 Client ID: DUP Sample					
1,2-Dibromo-3-chloropropane	ND	ND	ug/l	NC	20
1,3-Dichloropropane	ND	ND	ug/l	NC	20
Methyl tert butyl ether	ND	ND	ug/l	NC	20
Xylene (Total)[1]	ND	ND	ug/l	NC	20

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	95		100		80-120
4-Bromofluorobenzene	93		90		80-120

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 QC Batch ID: WG674829-3 QC Sample: L1404498-01 Client ID: DUP Sample					
Methylene chloride	ND	ND	ug/l	NC	20
1,1-Dichloroethane	ND	ND	ug/l	NC	20
Chloroform	ND	ND	ug/l	NC	20
Carbon tetrachloride	ND	ND	ug/l	NC	20
1,2-Dichloropropane	ND	ND	ug/l	NC	20
Dibromochloromethane	ND	ND	ug/l	NC	20
1,1,2-Trichloroethane	ND	ND	ug/l	NC	20
Tetrachloroethene	ND	ND	ug/l	NC	20
Chlorobenzene	ND	ND	ug/l	NC	20
Trichlorofluoromethane	ND	ND	ug/l	NC	20
1,2-Dichloroethane	ND	ND	ug/l	NC	20
1,1,1-Trichloroethane	ND	ND	ug/l	NC	20
Bromodichloromethane	ND	ND	ug/l	NC	20
trans-1,3-Dichloropropene	ND	ND	ug/l	NC	20
cis-1,3-Dichloropropene	ND	ND	ug/l	NC	20
Bromoform	ND	ND	ug/l	NC	20
1,1,2,2-Tetrachloroethane	ND	ND	ug/l	NC	20
Benzene	ND	ND	ug/l	NC	20
Toluene	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 QC Batch ID: WG674829-3 QC Sample: L1404498-01 Client ID: DUP Sample					
Ethylbenzene	ND	ND	ug/l	NC	20
p/m-Xylene	ND	ND	ug/l	NC	20
Chloromethane	ND	ND	ug/l	NC	20
Bromomethane	ND	ND	ug/l	NC	20
Vinyl chloride	ND	ND	ug/l	NC	20
Chloroethane	ND	ND	ug/l	NC	20
1,1-Dichloroethene	ND	ND	ug/l	NC	20
trans-1,2-Dichloroethene	ND	ND	ug/l	NC	20
cis-1,2-Dichloroethene	ND	ND	ug/l	NC	20
Trichloroethene	ND	ND	ug/l	NC	20
1,2-Dichlorobenzene	ND	ND	ug/l	NC	20
1,3-Dichlorobenzene	ND	ND	ug/l	NC	20
1,4-Dichlorobenzene	ND	ND	ug/l	NC	20
Styrene	ND	ND	ug/l	NC	20
o-Xylene	ND	ND	ug/l	NC	20
1,1-Dichloropropene	ND	ND	ug/l	NC	20
2,2-Dichloropropane	ND	ND	ug/l	NC	20
1,1,1,2-Tetrachloroethane	ND	ND	ug/l	NC	20
1,2,3-Trichloropropane	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 QC Batch ID: WG674829-3 QC Sample: L1404498-01 Client ID: DUP Sample					
Bromochloromethane	ND	ND	ug/l	NC	20
n-Butylbenzene	ND	ND	ug/l	NC	20
Dichlorodifluoromethane	ND	ND	ug/l	NC	20
Hexachlorobutadiene	ND	ND	ug/l	NC	20
Isopropylbenzene	ND	ND	ug/l	NC	20
p-Isopropyltoluene	ND	ND	ug/l	NC	20
Naphthalene	ND	ND	ug/l	NC	20
n-Propylbenzene	ND	ND	ug/l	NC	20
sec-Butylbenzene	ND	ND	ug/l	NC	20
tert-Butylbenzene	ND	ND	ug/l	NC	20
1,2,3-Trichlorobenzene	ND	ND	ug/l	NC	20
1,2,4-Trichlorobenzene	ND	ND	ug/l	NC	20
1,2,4-Trimethylbenzene	ND	ND	ug/l	NC	20
1,3,5-Trimethylbenzene	ND	ND	ug/l	NC	20
Bromobenzene	ND	ND	ug/l	NC	20
o-Chlorotoluene	ND	ND	ug/l	NC	20
p-Chlorotoluene	ND	ND	ug/l	NC	20
Dibromomethane	ND	ND	ug/l	NC	20
1,2-Dibromoethane	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 04 QC Batch ID: WG674829-3 QC Sample: L1404498-01 Client ID: DUP Sample					
1,2-Dibromo-3-chloropropane	ND	ND	ug/l	NC	20
1,3-Dichloropropane	ND	ND	ug/l	NC	20
Methyl tert butyl ether	ND	ND	ug/l	NC	20
Xylene (Total)[1]	ND	ND	ug/l	NC	20

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	105		101		80-120
4-Bromofluorobenzene	97		91		80-120

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1405140
Project Number: Not Specified
Report Date: 03/28/14

SAMPLE RESULTS

Lab ID:	L1405140-01	Date Collected:	03/10/14 10:30
Client ID:	SCHOOLHOUSE RD_025	Date Received:	03/10/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/13/14 20:48
Analytical Date:	03/18/14 23:20		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	47		15-110

Project Name: EASTHAM DW
Lab Number: L1405140
Project Number: Not Specified
Report Date: 03/28/14

SAMPLE RESULTS

Lab ID:	L1405140-02	Date Collected:	03/10/14 12:30
Client ID:	NAUSET RD_1525	Date Received:	03/10/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/13/14 20:48
Analytical Date:	03/19/14 01:30		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.153	0.0765	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	41		15-110

Project Name: EASTHAM DW
Lab Number: L1405140
Project Number: Not Specified
Report Date: 03/28/14

SAMPLE RESULTS

Lab ID:	L1405140-03	Date Collected:	03/10/14 15:30
Client ID:	MASSASOIT RD_295	Date Received:	03/10/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/13/14 20:48
Analytical Date:	03/19/14 02:15		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	38		15-110

Project Name: EASTHAM DW
Lab Number: L1405140
Project Number: Not Specified
Report Date: 03/28/14

SAMPLE RESULTS

Lab ID:	L1405140-04	Date Collected:	03/10/14 00:00
Client ID:	TRIP BLANK	Date Received:	03/10/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/13/14 20:48
Analytical Date:	03/19/14 03:00		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.156	0.0781	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	40		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 03/18/14 15:50
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 03/13/14 20:48

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01-04 Batch: WG676172-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	52		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405140

Report Date: 03/28/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 01-04		Batch: WG676172-2		WG676172-3			
1,4-Dioxane	100		100		40-140	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	40		38		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405140
Report Date: 03/28/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405140-01A	Vial Ascorbic Acid/HCl preserved	B	N/A	3.4	Y	Absent	524.2(14)
L1405140-01B	Vial Ascorbic Acid/HCl preserved	B	N/A	3.4	Y	Absent	524.2(14)
L1405140-01C	Amber 1000ml unpreserved	B	7	3.4	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405140-01D	Amber 1000ml unpreserved	B	7	3.4	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405140-02A	Vial Ascorbic Acid/HCl preserved	B	N/A	3.4	Y	Absent	524.2(14)
L1405140-02B	Vial Ascorbic Acid/HCl preserved	B	N/A	3.4	Y	Absent	524.2(14)
L1405140-02C	Amber 1000ml unpreserved	B	7	3.4	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405140-02D	Amber 1000ml unpreserved	B	7	3.4	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405140-03A	Vial Ascorbic Acid/HCl preserved	B	N/A	3.4	Y	Absent	524.2(14)
L1405140-03B	Vial Ascorbic Acid/HCl preserved	B	N/A	3.4	Y	Absent	524.2(14)
L1405140-03C	Amber 1000ml unpreserved	B	7	3.4	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405140-03D	Amber 1000ml unpreserved	B	7	3.4	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405140-04A	Vial Ascorbic Acid/HCl preserved	B	N/A	3.4	Y	Absent	524.2(14)
L1405140-04B	Vial Ascorbic Acid/HCl preserved	B	N/A	3.4	Y	Absent	524.2(14)
L1405140-04C	Amber 1000ml unpreserved	B	7	3.4	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405140-04D	Amber 1000ml unpreserved	B	7	3.4	Y	Absent	A2-14-DIOXANESIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1405140
Project Number:	Not Specified	**Report Date:**	03/28/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405140
Project Number:	Not Specified	**Report Date:**	03/28/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405140
Project Number:	Not Specified	**Report Date:**	03/28/14

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

16 Methods for the Determination of Organic Compounds in Drinking Water - Supplement II. EPA/600/R-92/129, August 1992.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised December 11, 2013

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — Mansfield Class Chemistry

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:

ALPHA Job #: L1405140

Client Information

Client: Environmental Strategies & Mgmt.

Address: 273 West Main Street

Norton, MA 02766

Phone: 508-226-1800

Fax:

Email: aboyd@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Eastham DW

Project Location: Eastham, MA

Project #:

Project Manager: Angela Boyd

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:

Also report to lflynn@esm-inc.com

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?

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	1,4 Dioxane by 8270	524.2	Sample Specific Comments	TOTAL # BOTTLES
L1405140 01	Schoolhouse Rd_025	3/10/14	1030	DW	EC	☒	☒		4
02	Nauset Rd_1525	3/10/14	1230	DW	EC	☒	☒		4
03	Massasoit Rd_295	3/10/14	1530	DW	EC	☒	☒		4
04	Tripblank					☒	☒		3

Container Type	A	V	-	-	-	-	-	-	-	-	-	-	
Preservative	A	I	-	-	-	-	-	-	-	-	-	-	

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	3/10/14 1730		3-10-14 1730

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

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — World Class Chemistry

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

Client Information

Client: Environmental Strategies & Mgmt.
Address: 273 West Main Street
Norton, MA 02766
Phone: 508-226-1800
Fax:
Email: aboyd@esm-inc.com
☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Eastham DW
Project Location: Eastham, MA
Project #:
Project Manager: Angela Boyd
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)
Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:
Also report to lflynn@esm-inc.com

Date Rec'd in Lab:

ALPHA Job #: L1405140

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?

ANALYSIS

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

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 Dioxane by 8270	524.2											TOTAL # BOTTLES
05140 01	Schoolhouse Rd_025	3/10/14	1030	DW	EC	[redacted]	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	4
02	Nauset Rd_1525	3/10/14	1230	DW	EC	[redacted]	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	4
03	Massasoit Rd_295	3/10/14	1530	DW	EC	[redacted]	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	4
04	Tripblank					[redacted]	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	3
							☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1405143	3/11/2014	drinking water	Yes	Yes	Yes	Yes	Yes	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
Glacier Hills_270	3/11/2014	L1405143-01	DW	8270
Glacier Hills_270 DUP	3/11/2014	L1405143-02	DW	8270
Salt Pond Rd_049	3/11/2014	L1405143-03	DW	8270
Salt Pond Rd_049 DUP	3/11/2014	L1405143-04	DW	8270
Trip Blank		L1405143-05	DW	8270

All QAQC data, including surrogate, method blank, Laboratory Control Sample (LCS) and LCS duplicate results were reviewed
This report was deemed usable by Angela Boyd on 3/25/14.

ANALYTICAL REPORT

Lab Number:	L1405143
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	Not Specified
Report Date:	03/25/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405143
Report Date: 03/25/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1405143-01	GLACIER HILLS_270	EASTHAM, MA	03/11/14 16:30
L1405143-02	GLACIER HILLS_270 DUP	EASTHAM, MA	03/11/14 16:30
L1405143-03	SALT POND RD_049	EASTHAM, MA	03/11/14 15:00
L1405143-04	SALT POND RD_049 DUP	EASTHAM, MA	03/11/14 15:00
L1405143-05	TRIPBLANK	EASTHAM, MA	03/11/14 00:00

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405143
Report Date: 03/25/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405143
Report Date: 03/25/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405143
Report Date: 03/25/14

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Report Submission

All MCP required questions were answered with affirmative responses; therefore, there are no relevant protocol-specific QC and/or performance standard non-conformances to report.

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: Michelle M. Morris

Title: Technical Director/Representative Date: 03/25/14

ORGANICS

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1405143
Project Number: Not Specified
Report Date: 03/25/14

SAMPLE RESULTS

Lab ID:	L1405143-01	Date Collected:	03/11/14 16:30
Client ID:	GLACIER HILLS_270	Date Received:	03/11/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/14/14 09:53
Analytical Date:	03/19/14 06:45		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	50		15-110

Project Name: EASTHAM DW
Lab Number: L1405143
Project Number: Not Specified
Report Date: 03/25/14

SAMPLE RESULTS

Lab ID:	L1405143-03	Date Collected:	03/11/14 15:00
Client ID:	SALT POND RD_049	Date Received:	03/11/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/14/14 09:53
Analytical Date:	03/19/14 07:30		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.177		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	50		15-110

Project Name: EASTHAM DW
Lab Number: L1405143
Project Number: Not Specified
Report Date: 03/25/14

SAMPLE RESULTS

Lab ID:	L1405143-04	Date Collected:	03/11/14 15:00
Client ID:	SALT POND RD_049 DUP	Date Received:	03/11/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/16/14 10:00
Analytical Date:	03/19/14 14:32		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.166		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	46		15-110

Project Name: EASTHAM DW
Lab Number: L1405143
Project Number: Not Specified
Report Date: 03/25/14

SAMPLE RESULTS

Lab ID:	L1405143-05	Date Collected:	03/11/14 00:00
Client ID:	TRIPBLANK	Date Received:	03/11/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/14/14 09:53
Analytical Date:	03/19/14 08:15		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	53		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405143
Report Date: 03/25/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 03/19/14 03:45
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 03/14/14 09:53

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01,03,05 Batch: WG676173-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	48		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405143
Report Date: 03/25/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 03/19/14 12:20
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 03/16/14 10:00

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 04 Batch: WG676176-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	38		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405143

Report Date: 03/25/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 01,03,05		Batch: WG676173-2		WG676173-3			
1,4-Dioxane	97		97		40-140	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	51		48		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405143

Report Date: 03/25/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 04		Batch: WG676176-2	WG676176-3				
1,4-Dioxane	100		101		40-140	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	33		35		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405143
Report Date: 03/25/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405143-01A	Amber 500ml unpreserved	A	7	5.7	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405143-01B	Amber 500ml unpreserved	A	7	5.7	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405143-02A	Amber 500ml unpreserved	A	7	5.7	Y	Absent	HOLD(14)
L1405143-02B	Amber 500ml unpreserved	A	7	5.7	Y	Absent	HOLD(14)
L1405143-03A	Amber 500ml unpreserved	A	7	5.7	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405143-03B	Amber 500ml unpreserved	A	7	5.7	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405143-04A	Amber 500ml unpreserved	A	7	5.7	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405143-04B	Amber 500ml unpreserved	A	7	5.7	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405143-05A	Amber 500ml unpreserved	A	7	5.7	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405143-05B	Amber 500ml unpreserved	A	7	5.7	Y	Absent	A2-14-DIOXANESIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1405143
Project Number:	Not Specified	**Report Date:**	03/25/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405143
Project Number:	Not Specified	**Report Date:**	03/25/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405143
Project Number:	Not Specified	**Report Date:**	03/25/14

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised December 11, 2013

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

coc edited 3/18/14-KER

CHAIN OF CUSTODY

PAGE 1 OF 1

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:

ALPHA Job #: L1406193

Project Information

Project Name: Eastham DW
Project Location: Eastham, MA
Project #:
Project Manager: Angela Boyd
ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt.
Address: 273 West Main Street
Norton, MA 02766
Phone: 508-226-1800
Fax:
Email: aboyd@esm-inc.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:
PLEASE REPORT TRIPBLANK RESULTS FROM COC #1
Schoolhouse Rd - 690 + 690 DUP on separate chain of custody and should be reported separately.

ANALYSIS

1,4 DIOXANE by 8270

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

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE by 8270	Sample Specific Comments	TOTAL # BOTTLES
	~~SCHOOLHOUSE RD_060 690~~	~~3/11/14~~	~~0855~~	DW	EC	☒	EC	2
	~~SCHOOLHOUSE RD_060 DUP 690 DUP~~	~~3/11/14~~	~~0855~~	DW	EC	☒	EC	2
051.93-01	GLACIER HILLS_270	3/11/14	1630	DW	EC	☒		2
02	GLACIER HILLS_270 DUP	3/11/14	1630	DW	EC	☒		2
03	SALT POND RD_049	3/11/14	1500	DW	EC	☒		2
04	SALT POND RD_049 DUP	3/11/14	1500	DW	EC	☒		2
-5	Trip Blank					☒		
						☐		
						☐		
						☐		

Container Type	A	-	-	-	-	-	-	-	-	-	-	-
Preservative	A	-	-	-	-	-	-	-	-	-	-	-

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	3/11/14 1840		3/11/14 18:40

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

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

CHAIN OF CUSTODY

PAGE 1 OF 1

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:

ALPHA Job #: L1406193

Client Information

Client: Environmental Strategies & Mgmt.
Address: 273 West Main Street
Norton, MA 02766
Phone: 508-226-1800
Fax:
Email: aboyd@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Eastham DW
Project Location: Eastham, MA
Project #:
Project Manager: Angela Boyd
ALPHA Quote #:

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:
PLEASE REPORT TRIPBLANK RESULTS FROM COC #1
Schoolhouse Rd - 690 + 690 DUP on separate chain of custody and should be reported separately.

ANALYSIS

1,4 DIOXANE by 8270

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

TOTAL # BOTTLES

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE by 8270	Sample Specific Comments	TOTAL # BOTTLES
	~~SCHOOLHOUSE RD_060 690~~	~~3/11/14~~	~~0855~~	DW	~~EC~~	☒	EC	2
	~~SCHOOLHOUSE RD_060 DUP 690 DUP~~	~~3/11/14~~	~~0855~~	DW	~~EC~~	☒	EC	2
01	GLACIER HILLS_270	3/11/14	1630	DW	EC	☒		2
02	GLACIER HILLS_270 D	3/11/14	1630	DW	EC	☒		2
03	SALT POND RD_049	3/11/14	1500	DW	EC	☒		2
04	SALT POND RD_049 DUP	3/11/14	1500	DW	EC	☒		2
						☐		
						☐		
						☐		
						☐		

Container Type	A	-	-	-	-	-	-	-	-	-	-	-
Preservative	A	-	-	-	-	-	-	-	-	-	-	-

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	3/11/14 1840		3/11/14 18:40

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

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

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1405181	3/11/2014	drinking water	Yes	Yes	Yes	Yes	Yes	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
Schoolhouse Rd_690	3/11/2014	L1405181-01	DW	8270
Schoolhouse Rd_690 DUP	3/11/2014	L1405181-02	DW	8270

All QAQC data, including surrogate, method blank, Laboratory Control Sample (LCS) and LCS duplicate results were reviewed
This report was deemed usable by Angela Boyd on 3/21/14.

ANALYTICAL REPORT

Lab Number:	L1405181
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	Not Specified
Report Date:	03/19/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405181
Report Date: 03/19/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1405181-01	SCHOOLHOUSE RD_690	EASTHAM, MA	03/11/14 08:55
L1405181-02	SCHOOLHOUSE RD_690 DUP	EASTHAM, MA	03/11/14 08:55

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405181
Report Date: 03/19/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405181
Report Date: 03/19/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405181
Report Date: 03/19/14

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Report Submission

All MCP required questions were answered with affirmative responses; therefore, there are no relevant protocol-specific QC and/or performance standard non-conformances to report.

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: 03/19/14

ORGANICS

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1405181
Project Number: Not Specified
Report Date: 03/19/14

SAMPLE RESULTS

Lab ID:	L1405181-01	Date Collected:	03/11/14 08:55
Client ID:	SCHOOLHOUSE RD_690	Date Received:	03/11/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/14/14 09:53
Analytical Date:	03/19/14 06:00		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.105	J	ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	50		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405181
Report Date: 03/19/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 03/19/14 03:45
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 03/14/14 09:53

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01 Batch: WG676173-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	48		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405181

Report Date: 03/19/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 01 Batch: WG676173-2 WG676173-3								
1,4-Dioxane	97		97		40-140	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	51		48		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405181
Report Date: 03/19/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405181-01A	Amber 500ml unpreserved	A	7	6.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405181-01B	Amber 500ml unpreserved	A	7	6.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405181-02A	Amber 500ml unpreserved	A	7	6.2	Y	Absent	HOLD(14)
L1405181-02B	Amber 500ml unpreserved	A	7	6.2	Y	Absent	HOLD(14)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1405181
Project Number:	Not Specified	**Report Date:**	03/19/14

GLOSSARY

Acronyms

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

Footnotes

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

Terms

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.
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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405181
Project Number:	Not Specified	**Report Date:**	03/19/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405181
Project Number:	Not Specified	**Report Date:**	03/19/14

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised December 11, 2013

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab:

ALPHA Job #: L1405181

8 Walkup Drive
Westboro, MA 01581
Tel: 508-898-9220

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

Client Information

Client: ES+M

Address: 273 West Main St.
Norton, MA 02766

Phone: 508-226-1800

Email: aboyd@esm-inc.com

Additional Project Information:

Project Information

Project Name: Eastham DW

Project Location: Eastham, MA

Project #:

Project Manager: Angela Boyd

ALPHA Quote #:

Turn-Around Time

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

Date Due:

Report Information - Data Deliverables

☒ ADEx ☒ EMAIL

Billing Information

☒ Same as Client info PO #:

Regulatory Requirements & Project Information Requirements

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

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler Initials	ANALYSIS: 1,4 Dioxane by 8270	SAMPLE INFO	TOTAL # BOTTLES
05181 01	Schoolhouse Rd_690	3/11/14	0855	DW	EC	X		
02	Schoolhouse Rd_690 DUP	3/11/14	0855	DW	EC	X		

ANALYSIS: VOC: ☐ 8260 ☐ 624 ☐ 524.2 | SVOC: ☐ ABN ☐ PAH | METALS: ☐ MCP 13 ☐ MCP 14 ☐ RCP 15 | METALS: ☐ RCRA5 ☐ RCRA8 ☐ PP13 | EPH: ☐ Ranges & Targets ☐ Ranges Only | VPH: ☐ Ranges & Targets ☐ Ranges Only | ☐ PCB ☐ PEST | TPH: ☐ Quant Only ☐ Fingerprint

SAMPLE INFO: *Filtration* ☐ Field ☐ Lab to do; *Preservation* ☐ Lab to do

Sample Comments

Container Type																			
Preservative																			

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

Preservative
A= None
B= HCl
C= HNO_3
D= H_2SO_4
E= NaOH
F= MeOH
G= $NaHSO_4$
H = $Na_2S_2O_3$
I= Ascorbic Acid
J = NH_4Cl
K= Zn Acetate
O= Other

Relinquished By:	Date/Time	Received By:	Date/Time
	3/11/14 1840		3/11/14 1840

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

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

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1405183	3/12/2014	drinking water	Yes	No	Yes	Yes	Yes	Usable

Sample ID	Date	Lab ID	Matrix	Analysis
Kingsbury Beach Rd_115	3/12/2014	L1405183-01	DW	8270, 524.2
Tripblank	3/12/2014	L1405183-02	DW	8270, 524.2

Lab presumptive certainty was not achieved because the proper field QC was not delivered (Duplicate analytical sample) and the analytical method specified in the CAM protocol was not followed for volatile organics (524.2 is a non-CAM method). Drinking water methodology was used instead.

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS), matrix spike, laboratory duplicate and LCS duplicate results were reviewed

The matrix spike recovered low for bromomethane. This compound was not detected in the analytical samples.

This report was deemed usable by Angela Boyd on 3/25/14.

ANALYTICAL REPORT

Lab Number:	L1405183
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	Not Specified
Report Date:	03/20/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405183
Report Date: 03/20/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1405183-01	KINGSBURY BEACH RD_115	EASTHAM, MA	03/12/14 12:45
L1405183-02	TRIPBLANK	EASTHAM, MA	03/12/14 00:00

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405183
Report Date: 03/20/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	NO
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	NO
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405183
Report Date: 03/20/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name:	EASTHAM DW	**Lab Number:**	L1405183
Project Number:	Not Specified	**Report Date:**	03/20/14

Case Narrative (continued)

Report Submission

This report replaces the report issued earlier today. TIC's have been removed from the Volatile Organics analysis and the MCP questionnaire has been revised.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

Sample Receipt

In reference to question A:

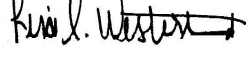
The proper field QC samples were not delivered with drinking water samples.

Volatile Organics

In reference to question B:

At the client's request, the analytical method specified in the CAM protocol was not followed.

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:  Lisa Westerlind

Title: Technical Director/Representative Date: 03/20/14

ORGANICS

VOLATILES

Project Name: EASTHAM DW **Lab Number:** L1405183

Project Number: Not Specified **Report Date:** 03/20/14

SAMPLE RESULTS

Lab ID: L1405183-01
Client ID: KINGSBURY BEACH RD_115
Sample Location: EASTHAM, MA
Matrix: Drinking Water
Analytical Method: 16,524.2
Analytical Date: 03/13/14 18:03
Analyst: GT

Date Collected: 03/12/14 12:45
Date Received: 03/12/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	ND		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1405183

Project Number: Not Specified **Report Date:** 03/20/14

SAMPLE RESULTS

Lab ID: L1405183-01 Date Collected: 03/12/14 12:45

Client ID: KINGSBURY BEACH RD_115 Date Received: 03/12/14

Sample Location: EASTHAM, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	94		80-120
4-Bromofluorobenzene	90		80-120

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405183
Report Date: 03/20/14

SAMPLE RESULTS

Lab ID: L1405183-02
Client ID: TRIPBLANK
Sample Location: EASTHAM, MA
Matrix: Drinking Water
Analytical Method: 16,524.2
Analytical Date: 03/13/14 13:33
Analyst: GT

Date Collected: 03/12/14 00:00
Date Received: 03/12/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	ND		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1405183

Project Number: Not Specified **Report Date:** 03/20/14

SAMPLE RESULTS

Lab ID: L1405183-02 Date Collected: 03/12/14 00:00

Client ID: TRIPBLANK Date Received: 03/12/14

Sample Location: EASTHAM, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	108		80-120
4-Bromofluorobenzene	94		80-120

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405183
Report Date: 03/20/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/13/14 11:23
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG674829-8					
Methylene chloride	ND		ug/l	0.50	0.15
1,1-Dichloroethane	ND		ug/l	0.50	0.09
Chloroform	ND		ug/l	0.50	0.05
Carbon tetrachloride	ND		ug/l	0.50	0.10
1,2-Dichloropropane	ND		ug/l	0.50	0.09
Dibromochloromethane	ND		ug/l	0.50	0.08
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12
Tetrachloroethene	ND		ug/l	0.50	0.09
Chlorobenzene	ND		ug/l	0.50	0.08
Trichlorofluoromethane	ND		ug/l	0.50	0.11
1,2-Dichloroethane	ND		ug/l	0.50	0.08
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08
Bromodichloromethane	ND		ug/l	0.50	0.05
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10
Bromoform	ND		ug/l	0.50	0.09
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09
Benzene	ND		ug/l	0.50	0.09
Toluene	ND		ug/l	0.50	0.12
Ethylbenzene	ND		ug/l	0.50	0.06
p/m-Xylene	ND		ug/l	0.50	0.12
Chloromethane	ND		ug/l	0.50	0.15
Bromomethane	ND		ug/l	0.50	0.13
Vinyl chloride	ND		ug/l	0.50	0.08
Chloroethane	ND		ug/l	0.50	0.12
1,1-Dichloroethene	ND		ug/l	0.50	0.06
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11
Trichloroethene	ND		ug/l	0.50	0.09
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405183
Report Date: 03/20/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/13/14 11:23
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG674829-8					
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05
Styrene	ND		ug/l	0.50	0.06
o-Xylene	ND		ug/l	0.50	0.09
1,1-Dichloropropene	ND		ug/l	0.50	0.11
2,2-Dichloropropane	ND		ug/l	0.50	0.11
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11
Bromochloromethane	ND		ug/l	0.50	0.10
n-Butylbenzene	ND		ug/l	0.50	0.06
Dichlorodifluoromethane	ND		ug/l	0.50	0.10
Hexachlorobutadiene	ND		ug/l	0.50	0.11
Isopropylbenzene	ND		ug/l	0.50	0.08
p-Isopropyltoluene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.50	0.06
n-Propylbenzene	ND		ug/l	0.50	0.08
sec-Butylbenzene	ND		ug/l	0.50	0.06
tert-Butylbenzene	ND		ug/l	0.50	0.09
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10
Bromobenzene	ND		ug/l	0.50	0.09
o-Chlorotoluene	ND		ug/l	0.50	0.10
p-Chlorotoluene	ND		ug/l	0.50	0.08
Dibromomethane	ND		ug/l	0.50	0.09
1,2-Dibromoethane	ND		ug/l	0.50	0.06
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16
1,3-Dichloropropane	ND		ug/l	0.50	0.11
Methyl tert butyl ether	ND		ug/l	0.50	0.06
Xylenes, Total[1]	ND		ug/l	0.50	0.09

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405183
Report Date: 03/20/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/13/14 11:23
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-02 Batch: WG674829-8					
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/l		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	95		80-120
4-Bromofluorobenzene	83		80-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405183

Report Date: 03/20/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG674829-7								
Methylene chloride	110		-		70-130	-		20
1,1-Dichloroethane	106		-		70-130	-		20
Chloroform	110		-		70-130	-		20
Carbon tetrachloride	108		-		70-130	-		20
1,2-Dichloropropane	101		-		70-130	-		20
Dibromochloromethane	105		-		70-130	-		20
1,1,2-Trichloroethane	99		-		70-130	-		20
Tetrachloroethene	97		-		70-130	-		20
Chlorobenzene	99		-		70-130	-		20
Trichlorofluoromethane	113		-		70-130	-		20
1,2-Dichloroethane	113		-		70-130	-		20
1,1,1-Trichloroethane	110		-		70-130	-		20
Bromodichloromethane	105		-		70-130	-		20
trans-1,3-Dichloropropene	102		-		70-130	-		20
cis-1,3-Dichloropropene	99		-		70-130	-		20
Bromoform	100		-		70-130	-		20
1,1,2,2-Tetrachloroethane	98		-		70-130	-		20
Benzene	96		-		70-130	-		20
Toluene	96		-		70-130	-		20
Ethylbenzene	96		-		70-130	-		20
p/m-Xylene	96		-		70-130	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405183

Report Date: 03/20/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG674829-7								
Chloromethane	99		-		70-130	-		20
Bromomethane	90		-		70-130	-		20
Vinyl chloride	100		-		70-130	-		20
Chloroethane	110		-		70-130	-		20
1,1-Dichloroethene	94		-		70-130	-		20
trans-1,2-Dichloroethene	100		-		70-130	-		20
cis-1,2-Dichloroethene	103		-		70-130	-		20
Trichloroethene	90		-		70-130	-		20
1,2-Dichlorobenzene	98		-		70-130	-		20
1,3-Dichlorobenzene	96		-		70-130	-		20
1,4-Dichlorobenzene	98		-		70-130	-		20
Styrene	94		-		70-130	-		20
o-Xylene	98		-		70-130	-		20
1,1-Dichloropropene	88		-		70-130	-		20
2,2-Dichloropropane	103		-		70-130	-		20
1,1,1,2-Tetrachloroethane	110		-		70-130	-		20
1,2,3-Trichloropropane	107		-		70-130	-		20
Bromochloromethane	106		-		70-130	-		20
n-Butylbenzene	90		-		70-130	-		20
Dichlorodifluoromethane	114		-		70-130	-		20
Hexachlorobutadiene	105		-		70-130	-		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405183
Report Date: 03/20/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG674829-7								
Isopropylbenzene	96		-		70-130	-		20
p-Isopropyltoluene	97		-		70-130	-		20
Naphthalene	83		-		70-130	-		20
n-Propylbenzene	92		-		70-130	-		20
sec-Butylbenzene	93		-		70-130	-		20
tert-Butylbenzene	95		-		70-130	-		20
1,2,3-Trichlorobenzene	87		-		70-130	-		20
1,2,4-Trichlorobenzene	84		-		70-130	-		20
1,2,4-Trimethylbenzene	97		-		70-130	-		20
1,3,5-Trimethylbenzene	93		-		70-130	-		20
Bromobenzene	102		-		70-130	-		20
o-Chlorotoluene	92		-		70-130	-		20
p-Chlorotoluene	101		-		70-130	-		20
Dibromomethane	108		-		70-130	-		20
1,2-Dibromoethane	100		-		70-130	-		20
1,2-Dibromo-3-chloropropane	100		-		70-130	-		20
1,3-Dichloropropane	100		-		70-130	-		20
Methyl tert butyl ether	107		-		70-130	-		20
tert-Butyl Alcohol	103		-		70-130	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405183

Report Date: 03/20/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 Batch: WG674829-7								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichlorobenzene-d4	103				80-120
4-Bromofluorobenzene	117				80-120

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405183
Report Date: 03/20/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG674829-4 QC Sample: L1404498-02 Client ID: MS Sample												
Methylene chloride	ND	4	2.9	72		-	-		70-130	-		20
1,1-Dichloroethane	ND	4	3.1	77		-	-		70-130	-		20
Chloroform	0.58	4	3.6	76		-	-		70-130	-		20
Carbon tetrachloride	ND	4	4.1	103		-	-		70-130	-		20
1,2-Dichloropropane	ND	4	5.1	127		-	-		70-130	-		20
Dibromochloromethane	ND	4	4.0	100		-	-		70-130	-		20
1,1,2-Trichloroethane	ND	4	4.4	110		-	-		70-130	-		20
Tetrachloroethene	4.4	4	7.5	78		-	-		70-130	-		20
Chlorobenzene	ND	4	4.3	109		-	-		70-130	-		20
Trichlorofluoromethane	ND	4	3.5	88		-	-		70-130	-		20
1,2-Dichloroethane	ND	4	4.2	106		-	-		70-130	-		20
1,1,1-Trichloroethane	ND	4	4.1	103		-	-		70-130	-		20
Bromodichloromethane	ND	4	4.1	102		-	-		70-130	-		20
trans-1,3-Dichloropropene	ND	4	3.9	98		-	-		70-130	-		20
cis-1,3-Dichloropropene	ND	4	4.1	102		-	-		70-130	-		20
Bromoform	ND	4	3.9	98		-	-		70-130	-		20
1,1,2,2-Tetrachloroethane	ND	4	4.8	119		-	-		70-130	-		20
Benzene	ND	4	4.5	113		-	-		70-130	-		20
Toluene	ND	4	4.2	105		-	-		70-130	-		20
Ethylbenzene	ND	4	4.2	106		-	-		70-130	-		20
p/m-Xylene	ND	8	8.2	102		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405183
Report Date: 03/20/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG674829-4 QC Sample: L1404498-02 Client ID: MS Sample												
Chloromethane	ND	4	3.0	75		-	-		70-130	-		20
Bromomethane	ND	4	2.5	**62**	Q	-	-		70-130	-		20
Vinyl chloride	ND	4	2.8	70		-	-		70-130	-		20
Chloroethane	ND	4	3.0	76		-	-		70-130	-		20
1,1-Dichloroethene	ND	4	3.2	80		-	-		70-130	-		20
trans-1,2-Dichloroethene	ND	4	3.1	77		-	-		70-130	-		20
cis-1,2-Dichloroethene	ND	4	3.1	78		-	-		70-130	-		20
Trichloroethene	ND	4	3.9	98		-	-		70-130	-		20
1,2-Dichlorobenzene	ND	4	4.1	102		-	-		70-130	-		20
1,3-Dichlorobenzene	ND	4	4.0	99		-	-		70-130	-		20
1,4-Dichlorobenzene	ND	4	3.8	95		-	-		70-130	-		20
Styrene	ND	4	4.0	99		-	-		70-130	-		20
o-Xylene	ND	4	4.2	105		-	-		70-130	-		20
1,1-Dichloropropene	ND	4	4.0	101		-	-		70-130	-		20
2,2-Dichloropropane	ND	4	3.0	76		-	-		70-130	-		20
1,1,1,2-Tetrachloroethane	ND	4	4.4	109		-	-		70-130	-		20
1,2,3-Trichloropropane	ND	4	3.9	97		-	-		70-130	-		20
Bromochloromethane	ND	4	3.4	84		-	-		70-130	-		20
n-Butylbenzene	ND	4	3.9	97		-	-		70-130	-		20
Dichlorodifluoromethane	ND	4	3.9	97		-	-		70-130	-		20
Hexachlorobutadiene	ND	4	4.6	114		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405183
Report Date: 03/20/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG674829-4 QC Sample: L1404498-02 Client ID: MS Sample												
Isopropylbenzene	ND	4	4.2	105		-	-		70-130	-		20
p-Isopropyltoluene	ND	4	3.0	75		-	-		70-130	-		20
Naphthalene	ND	4	3.8	96		-	-		70-130	-		20
n-Propylbenzene	ND	4	4.1	104		-	-		70-130	-		20
sec-Butylbenzene	ND	4	2.8	71		-	-		70-130	-		20
tert-Butylbenzene	ND	4	3.4	86		-	-		70-130	-		20
1,2,3-Trichlorobenzene	ND	4	3.9	99		-	-		70-130	-		20
1,2,4-Trichlorobenzene	ND	4	3.5	88		-	-		70-130	-		20
1,2,4-Trimethylbenzene	ND	4	3.6	89		-	-		70-130	-		20
1,3,5-Trimethylbenzene	ND	4	4.0	101		-	-		70-130	-		20
Bromobenzene	ND	4	4.3	107		-	-		70-130	-		20
o-Chlorotoluene	ND	4	4.1	102		-	-		70-130	-		20
p-Chlorotoluene	ND	4	3.7	93		-	-		70-130	-		20
Dibromomethane	ND	4	4.5	113		-	-		70-130	-		20
1,2-Dibromoethane	ND	4	4.3	108		-	-		70-130	-		20
1,2-Dibromo-3-chloropropane	ND	4	4.4	109		-	-		70-130	-		20
1,3-Dichloropropane	ND	4	4.3	109		-	-		70-130	-		20
Methyl tert butyl ether	ND	4	3.2	81		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405183
Report Date: 03/20/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG674829-4 QC Sample: L1404498-02 Client ID: MS Sample												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	94				80-120
4-Bromofluorobenzene	98				80-120

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405183
Report Date: 03/20/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG674829-3 QC Sample: L1404498-01 Client ID: DUP Sample						
Methylene chloride	ND	ND	ug/l	NC		20
1,1-Dichloroethane	ND	ND	ug/l	NC		20
Chloroform	ND	ND	ug/l	NC		20
Carbon tetrachloride	ND	ND	ug/l	NC		20
1,2-Dichloropropane	ND	ND	ug/l	NC		20
Dibromochloromethane	ND	ND	ug/l	NC		20
1,1,2-Trichloroethane	ND	ND	ug/l	NC		20
Tetrachloroethene	ND	ND	ug/l	NC		20
Chlorobenzene	ND	ND	ug/l	NC		20
Trichlorofluoromethane	ND	ND	ug/l	NC		20
1,2-Dichloroethane	ND	ND	ug/l	NC		20
1,1,1-Trichloroethane	ND	ND	ug/l	NC		20
Bromodichloromethane	ND	ND	ug/l	NC		20
trans-1,3-Dichloropropene	ND	ND	ug/l	NC		20
cis-1,3-Dichloropropene	ND	ND	ug/l	NC		20
Bromoform	ND	ND	ug/l	NC		20
1,1,2,2-Tetrachloroethane	ND	ND	ug/l	NC		20
Benzene	ND	ND	ug/l	NC		20
Toluene	ND	ND	ug/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405183
Report Date: 03/20/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG674829-3 QC Sample: L1404498-01 Client ID: DUP Sample					
Ethylbenzene	ND	ND	ug/l	NC	20
p/m-Xylene	ND	ND	ug/l	NC	20
Chloromethane	ND	ND	ug/l	NC	20
Bromomethane	ND	ND	ug/l	NC	20
Vinyl chloride	ND	ND	ug/l	NC	20
Chloroethane	ND	ND	ug/l	NC	20
1,1-Dichloroethene	ND	ND	ug/l	NC	20
trans-1,2-Dichloroethene	ND	ND	ug/l	NC	20
cis-1,2-Dichloroethene	ND	ND	ug/l	NC	20
Trichloroethene	ND	ND	ug/l	NC	20
1,2-Dichlorobenzene	ND	ND	ug/l	NC	20
1,3-Dichlorobenzene	ND	ND	ug/l	NC	20
1,4-Dichlorobenzene	ND	ND	ug/l	NC	20
Styrene	ND	ND	ug/l	NC	20
o-Xylene	ND	ND	ug/l	NC	20
1,1-Dichloropropene	ND	ND	ug/l	NC	20
2,2-Dichloropropane	ND	ND	ug/l	NC	20
1,1,1,2-Tetrachloroethane	ND	ND	ug/l	NC	20
1,2,3-Trichloropropane	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405183
Report Date: 03/20/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG674829-3 QC Sample: L1404498-01 Client ID: DUP Sample					
Bromochloromethane	ND	ND	ug/l	NC	20
n-Butylbenzene	ND	ND	ug/l	NC	20
Dichlorodifluoromethane	ND	ND	ug/l	NC	20
Hexachlorobutadiene	ND	ND	ug/l	NC	20
Isopropylbenzene	ND	ND	ug/l	NC	20
p-Isopropyltoluene	ND	ND	ug/l	NC	20
Naphthalene	ND	ND	ug/l	NC	20
n-Propylbenzene	ND	ND	ug/l	NC	20
sec-Butylbenzene	ND	ND	ug/l	NC	20
tert-Butylbenzene	ND	ND	ug/l	NC	20
1,2,3-Trichlorobenzene	ND	ND	ug/l	NC	20
1,2,4-Trichlorobenzene	ND	ND	ug/l	NC	20
1,2,4-Trimethylbenzene	ND	ND	ug/l	NC	20
1,3,5-Trimethylbenzene	ND	ND	ug/l	NC	20
Bromobenzene	ND	ND	ug/l	NC	20
o-Chlorotoluene	ND	ND	ug/l	NC	20
p-Chlorotoluene	ND	ND	ug/l	NC	20
Dibromomethane	ND	ND	ug/l	NC	20
1,2-Dibromoethane	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405183
Report Date: 03/20/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-02 QC Batch ID: WG674829-3 QC Sample: L1404498-01 Client ID: DUP Sample					
1,2-Dibromo-3-chloropropane	ND	ND	ug/l	NC	20
1,3-Dichloropropane	ND	ND	ug/l	NC	20
Methyl tert butyl ether	ND	ND	ug/l	NC	20
Xylene (Total)[1]	ND	ND	ug/l	NC	20

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	105		101		80-120
4-Bromofluorobenzene	97		91		80-120

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1405183
Project Number: Not Specified
Report Date: 03/20/14

SAMPLE RESULTS

Lab ID:	L1405183-01	Date Collected:	03/12/14 12:45
Client ID:	KINGSBURY BEACH RD_115	Date Received:	03/12/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/14/14 09:53
Analytical Date:	03/19/14 09:00		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	49		15-110

Project Name: EASTHAM DW
Lab Number: L1405183
Project Number: Not Specified
Report Date: 03/20/14

SAMPLE RESULTS

Lab ID:	L1405183-02	Date Collected:	03/12/14 00:00
Client ID:	TRIPBLANK	Date Received:	03/12/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/14/14 09:53
Analytical Date:	03/19/14 09:45		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	49		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405183
Report Date: 03/20/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 03/19/14 03:45
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 03/14/14 09:53

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01-02 Batch: WG676173-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	48		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405183

Report Date: 03/20/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 01-02		Batch: WG676173-2		WG676173-3			
1,4-Dioxane	97		97		40-140	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	51		48		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405183
Report Date: 03/20/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405183-01A	Vial Ascorbic Acid/HCl preserved	A	N/A	5.6	Y	Absent	524.2(14)
L1405183-01B	Vial Ascorbic Acid/HCl preserved	A	N/A	5.6	Y	Absent	524.2(14)
L1405183-01C	Amber 500ml unpreserved	A	7	5.6	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405183-01D	Amber 500ml unpreserved	A	7	5.6	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405183-02A	Vial Ascorbic Acid/HCl preserved	A	N/A	5.6	Y	Absent	524.2(14)
L1405183-02B	Amber 500ml unpreserved	A	7	5.6	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405183-02C	Amber 500ml unpreserved	A	7	5.6	Y	Absent	A2-14-DIOXANESIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1405183
Project Number:	Not Specified	**Report Date:**	03/20/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405183
Project Number:	Not Specified	**Report Date:**	03/20/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405183
Project Number:	Not Specified	**Report Date:**	03/20/14

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

16 Methods for the Determination of Organic Compounds in Drinking Water - Supplement II. EPA/600/R-92/129, August 1992.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised December 11, 2013

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — Where Trust Counts

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:

ALPHA Job #: L1405183

Project Information

Project Name: Eastham DW

Project Location: Eastham, MA

Project #:

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt.

Address: 273 West Main Street

Norton, MA 02766

Phone: 508-226-1800

Fax:

Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:

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?

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	1,4 DIOXANE by 8270	524.2	Sample Specific Comments	TOTAL # BOTTLES
~~05183 01~~	~~GLACIER HILLS RD_015~~	~~3/12/14~~	~~0840~~	~~DW~~	EC	☒	☒	EC	4
05183 01	KINGSBURY BEACH RD_115	3/12/14	1245	DW	EC	☒	☒		4
02	TRIPBLANK					☒	☒		3
						☐	☐	Report trip blanks for data on both Col's	

Container Type	A	V	-	-	-	-	-	-	-	-	-	-
Preservative	A	I	-	-	-	-	-	-	-	-	-	-

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
	3/12/14 1630		3.12.14 1630

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.

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL

Date Rec'd in Lab:

ALPHA Job #: L1405183

Project Information

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

Project Name: Eastham DW

Project Location: Eastham, MA

Project #:

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt.

Address: 273 West Main Street

Norton, MA 02766

Phone: 508-226-1800

Fax:

Email: lflynn@esm-inc.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:

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	1,4 DIOXANE by 8270	524.2	Sample Specific Comments	TOTAL # BOTTLES
	~~GLACIER HILLS RD_015~~	~~3/12/14~~	~~0840~~	~~DW~~	~~EC~~	☒	☒	EC	4
05183 01	KINGSBURY BEACH RD_115	3/12/14	1245	DW	EC	☒	☒		4
↓ 02	TRIPBLANK					☒	☒		3
						☐	☐	Report trip blanks for data on both CoC's	
						☐	☐		
						☐	☐		
						☐	☐		
						☐	☐		
						☐	☐		
						☐	☐		

Container Type	A	V	-	-	-	-	-	-	-	-	-	-
Preservative	A	I	-	-	-	-	-	-	-	-	-	-

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
	3/12/14 1630		3-12-14 1630
	3-12-14 1745		3/12/14 1745

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.

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1405185	3/12/2014	drinking water	Yes	Yes	Yes	Yes	Yes	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
Jason Dr_020	3/12/2014	L1405185-01	DW	8270
Jason Dr_020 DUP	3/12/2014	L1405185-02	DW	8270
State Highway_3315	3/12/2014	L1405185-03	DW	8270
State Highway_3315 Dup	3/12/2014	L1405185-04	DW	8270
Trip Blank		L1405185-05	DW	8270

All QAQC data, including trip blank, surrogate, method blank, Laboratory Control Sample (LCS) and LCS duplicate results were reviewed
This report was deemed usable by Angela Boyd on 4/3/14.

ANALYTICAL REPORT

Lab Number:	L1405185
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	Not Specified
Report Date:	03/26/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405185
Report Date: 03/26/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1405185-01	JASON DR_020	EASTHAM ,MA	03/12/14 14:30
L1405185-02	JASON DR_020 DUP	EASTHAM ,MA	03/12/14 14:30
L1405185-03	STATE HIGHWAY_3315	EASTHAM ,MA	03/12/14 10:40
L1405185-04	STATE HIGHWAY_3315 DUP	EASTHAM ,MA	03/12/14 10:40
L1405185-05	TRIP BLANK	EASTHAM ,MA	03/12/14 00:00

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405185
Report Date: 03/26/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405185
Report Date: 03/26/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name:	EASTHAM DW	**Lab Number:**	L1405185
Project Number:	Not Specified	**Report Date:**	03/26/14

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Report Submission

All MCP required questions were answered with affirmative responses; therefore, there are no relevant protocol-specific QC and/or performance standard non-conformances to report.

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: 03/26/14

ORGANICS

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1405185
Project Number: Not Specified
Report Date: 03/26/14

SAMPLE RESULTS

Lab ID:	L1405185-01	Date Collected:	03/12/14 14:30
Client ID:	JASON DR_020	Date Received:	03/12/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/14/14 09:53
Analytical Date:	03/19/14 10:30		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	45		15-110

Project Name: EASTHAM DW
Lab Number: L1405185
Project Number: Not Specified
Report Date: 03/26/14

SAMPLE RESULTS

Lab ID:	L1405185-03	Date Collected:	03/12/14 10:40
Client ID:	STATE HIGHWAY_3315	Date Received:	03/12/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/14/14 09:53
Analytical Date:	03/19/14 11:15		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.232		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	49		15-110

Project Name: EASTHAM DW
Lab Number: L1405185
Project Number: Not Specified
Report Date: 03/26/14

SAMPLE RESULTS

Lab ID:	L1405185-04	Date Collected:	03/12/14 10:40
Client ID:	STATE HIGHWAY_3315 DUP	Date Received:	03/12/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/16/14 10:00
Analytical Date:	03/19/14 15:16		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.194		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	53		15-110

Project Name: EASTHAM DW
Lab Number: L1405185
Project Number: Not Specified
Report Date: 03/26/14

SAMPLE RESULTS

Lab ID:	L1405185-05	Date Collected:	03/12/14 00:00
Client ID:	TRIP BLANK	Date Received:	03/12/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/14/14 09:53
Analytical Date:	03/19/14 09:45		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	49		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405185
Report Date: 03/26/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 03/19/14 03:45
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 03/14/14 09:53

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01,03,05 Batch: WG676173-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	48		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405185
Report Date: 03/26/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 03/19/14 12:20
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 03/16/14 10:00

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 04 Batch: WG676176-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	38		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405185

Report Date: 03/26/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 01,03,05		Batch: WG676173-2		WG676173-3			
1,4-Dioxane	97		97		40-140	0		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	51		48		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405185

Report Date: 03/26/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 04		Batch: WG676176-2	WG676176-3				
1,4-Dioxane	100		101		40-140	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	33		35		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405185
Report Date: 03/26/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405185-01A	Amber 500ml unpreserved	A	7	5.6	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405185-01B	Amber 500ml unpreserved	A	7	5.6	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405185-02A	Amber 500ml unpreserved	A	7	5.6	Y	Absent	HOLD(14)
L1405185-02B	Amber 500ml unpreserved	A	7	5.6	Y	Absent	HOLD(14)
L1405185-03A	Amber 500ml unpreserved	A	7	5.6	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405185-03B	Amber 500ml unpreserved	A	7	5.6	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405185-04A	Amber 500ml unpreserved	A	7	5.6	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405185-04B	Amber 500ml unpreserved	A	7	5.6	Y	Absent	A2-14-DIOXANESIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1405185
Project Number:	Not Specified	**Report Date:**	03/26/14

GLOSSARY

Acronyms

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

Footnotes

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

Terms

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.
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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405185
Project Number:	Not Specified	**Report Date:**	03/26/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised December 11, 2013

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

Revised 3/25/14 BV

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — World Class Chemistry

Date Rec'd in Lab:

ALPHA Job #: L1405185

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193

Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Project Information

Project Name: Eastham DW

Project Location: Eastham, MA

Project #:

Project Manager: Angela Boyd

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt.

Address: 273 West Main Street

Norton, MA 02766

Phone: 508-226-1800

Fax:

Email: aboyd@esm-inc.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:

PLEASE REPORT TRIPBLANK RESULTS FROM COC #1

ANALYSIS

1,4 DIOXANE by 8270

SAMPLE HANDLING

Filtration
☐ Done
☐ Not Needed
☐ Lab to do

Preservation
☐ Lab to do

(Please specify below)

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE by 8270	Sample Specific Comments	TOTAL # BOTTLES
01	JASON DR_020	3/12/14	1430	DW	EC	☒		2
02	JASON DR_020 DUP	3/12/14	1430	DW	EC	☒	hold	2
03	STATE HIGHWAY_3315	3/12/14	1040	DW	EC	☒		2
04	STATE HIGHWAY_3315 DUP	3/12/14	1040	DW	EC	☒		2
	Trip Blank					☒	Report trip blanks separately in both sets of data from both CoC's	

Container Type	A	-	-	-	-	-	-	-	-	-	-	-
Preservative	A	-	-	-	-	-	-	-	-	-	-	-

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	3/12/14 1630		3-12-14 1630

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

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — World Class Chemistry

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:

ALPHA Job #: L1405185

Project Information

Project Name: Eastham DW

Project Location: Eastham, MA

Project #:

Project Manager: Angela Boyd

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt.

Address: 273 West Main Street

Norton, MA 02766

Phone: 508-226-1800

Fax:

Email: aboyd@esm-inc.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:
PLEASE REPORT TRIPBLANK RESULTS FROM COC #1

ANALYSIS

1,4 DIOXANE by 8270

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

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE by 8270	Sample Specific Comments	TOTAL # BOTTLES
01	JASON DR_020	3/12/14	1430	DW	EC	☒		2
02	JASON DR_020 DUP	3/12/14	1430	DW	EC	☒		2
03	STATE HIGHWAY_3315	3/12/14	1040	DW	EC	☒		2
04	STATE HIGHWAY_3315 DUP	3/12/14	1040	DW	EC	☒		2
	Trip Blank					☒	Report trip blanks separately in both sets of data from both CoC's	
						☐		
						☐		
						☐		
						☐		
						☐		

Container Type	A	-	-	-	-	-	-	-	-	-	-	-
Preservative	A	-	-	-	-	-	-	-	-	-	-	-

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	3/12/14 1630		3-12-14 1630

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

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

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1405341	3/13/2014	drinking water	Yes	Yes	Yes	Yes	Yes	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
Glacier Hills Rd_165	3/13/2014	L1405341-01	DW	8270
Glacier Hills Rd_165 DUP	3/13/2014	L1405341-02	DW	8270
State Highway_3100 A	3/13/2014	L1405341-03	DW	8270
State Highway_3100 A DUP	3/13/2014	L1405341-04	DW	8270
Glacier Hills Rd_015	3/13/2014	L1405341-05	DW	8270
Glacier Hills Rd_015 DUP	3/13/2014	L1405341-05	DW	8270
Trip Blank	3/13/2014	L1405341-05	DW	8270

All QAQC data, including surrogate, method blank, Laboratory Control Sample (LCS) and LCS duplicate results were reviewed
This report was deemed usable by Angela Boyd on 4/3/14.

ANALYTICAL REPORT

Lab Number:	L1405341
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	Not Specified
Report Date:	03/28/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405341
Report Date: 03/28/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1405341-01	GLACIER HILLS RD_165	EASTHAM, MA	03/13/14 10:45
L1405341-02	GLACIER HILLS RD_165 DUP	EASTHAM, MA	03/13/14 10:45
L1405341-03	STATE HIGHWAY_3100 A	EASTHAM, MA	03/13/14 16:00
L1405341-04	STATE HIGHWAY_3100 A DUP	EASTHAM, MA	03/13/14 16:00
L1405341-05	TRIP BLANK	EASTHAM, MA	03/13/14 00:00
L1405341-06	GLACIER HILLS RD_015	EASTHAM, MA	03/13/14 11:15
L1405341-07	GLACIER HILLS RD_015 DUP	EASTHAM, MA	03/13/14 11:15

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405341
Report Date: 03/28/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405341
Report Date: 03/28/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405341
Report Date: 03/28/14

Case Narrative (continued)

Report Submission

This report replaces the report issued March 24, 2014. At the client's request, the Client IDs were changed on L1405341-03 and -04.

A previously-issued report replaced the report issued March 20, 2014. The 1,4-Dioxane by SIM extraction date was corrected on all samples.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Report Submission

All MCP required questions were answered with affirmative responses; therefore, there are no relevant protocol-specific QC and/or performance standard non-conformances to report.

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: 03/28/14

ORGANICS

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1405341
Project Number: Not Specified
Report Date: 03/28/14

SAMPLE RESULTS

Lab ID:	L1405341-01	Date Collected:	03/13/14 10:45
Client ID:	GLACIER HILLS RD_165	Date Received:	03/13/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/16/14 10:00
Analytical Date:	03/19/14 16:00		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	50		15-110

Project Name: EASTHAM DW
Lab Number: L1405341
Project Number: Not Specified
Report Date: 03/28/14

SAMPLE RESULTS

Lab ID:	L1405341-03	Date Collected:	03/13/14 16:00
Client ID:	STATE HIGHWAY_3100 A	Date Received:	03/13/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/16/14 10:00
Analytical Date:	03/19/14 16:44		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	55		15-110

Project Name: EASTHAM DW
Lab Number: L1405341
Project Number: Not Specified
Report Date: 03/28/14

SAMPLE RESULTS

Lab ID:	L1405341-05	Date Collected:	03/13/14 00:00
Client ID:	TRIP BLANK	Date Received:	03/13/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/16/14 10:00
Analytical Date:	03/19/14 20:24		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	51		15-110

Project Name: EASTHAM DW
Lab Number: L1405341
Project Number: Not Specified
Report Date: 03/28/14

SAMPLE RESULTS

Lab ID:	L1405341-06	Date Collected:	03/13/14 11:15
Client ID:	GLACIER HILLS RD_015	Date Received:	03/13/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/16/14 10:00
Analytical Date:	03/19/14 17:28		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	48		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405341
Report Date: 03/28/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 03/19/14 12:20
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 03/16/14 10:00

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01,03,05-06 Batch: WG676176-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	38		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405341

Report Date: 03/28/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s):	01,03,05-06	Batch:	WG676176-2	WG676176-3			
1,4-Dioxane	100		101		40-140	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	33		35		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405341
Report Date: 03/28/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405341-01A	Amber 500ml unpreserved	A	7	3.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405341-01B	Amber 500ml unpreserved	A	7	3.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405341-02A	Amber 500ml unpreserved	A	7	3.2	Y	Absent	HOLD(14)
L1405341-02B	Amber 500ml unpreserved	A	7	3.2	Y	Absent	HOLD(14)
L1405341-03A	Amber 500ml unpreserved	A	7	3.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405341-03B	Amber 500ml unpreserved	A	7	3.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405341-04A	Amber 500ml unpreserved	A	7	3.2	Y	Absent	HOLD(14)
L1405341-04B	Amber 500ml unpreserved	A	7	3.2	Y	Absent	HOLD(14)
L1405341-06A	Amber 500ml unpreserved	A	7	3.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405341-06B	Amber 500ml unpreserved	A	7	3.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405341-07A	Amber 500ml unpreserved	A	7	3.2	Y	Absent	HOLD(14)
L1405341-07B	Amber 500ml unpreserved	A	7	3.2	Y	Absent	HOLD(14)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1405341
Project Number:	Not Specified	**Report Date:**	03/28/14

GLOSSARY

Acronyms

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

Footnotes

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

Terms

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.
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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405341
Project Number:	Not Specified	**Report Date:**	03/28/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405341
Project Number:	Not Specified	**Report Date:**	03/28/14

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised December 11, 2013

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — World Class Chemistry

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: 3/13/14

ALPHA Job #: L1405341

Project Information

Project Name: Eastham DW

Project Location: Eastham, MA

Project #:

Project Manager: ~~Angela Boyd~~ Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt.

Address: 273 West Main Street

Norton, MA 02766

Phone: 508-226-1800

Fax:

Email: ~~aboyd@esmine.com~~ lflynn@esm-inc.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:
PLEASE REPORT TRIPBLANK RESULTS FROM COC #1

ANALYSIS

1,4 DIOXANE by 8270 SIM

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

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE by 8270 SIM	TOTAL # BOTTLES	Sample Specific Comments
05341 01	GLACIER HILLS RD_165	3/13/14	1045	DW	EC	☒	2	
02	GLACIER HILLS RD_165 DUP	3/13/14	1045	DW	EC	☒	2	
03	STATE HIGHWAY_3310 A	3/13/14	1600	DW	EC	☒	2	
04	STATE HIGHWAY_3310 A DUP	3/13/14	1600	DW	EC	☒	2	
05	Trip Blank					☒		Report trip blanks separately on both COC's
06	GLACIER HILLS RD_015	3/13/14	1115		EC	☐		
07	GLACIER HILLS RD_015 DUP	3/13/14	1115		EC	☐		
						☐		
						☐		
						☐		

Container Type	A	-	-	-	-	-	-	-	-	-	-	-
Preservative	A	-	-	-	-	-	-	-	-	-	-	-

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	3/13/14 1840		3/13/14 1746

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

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

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1405346	3/13/2014	drinking water	Yes	No	Yes	Yes	Yes	Usable

Sample ID	Date	Lab ID	Matrix	Analysis
North Sunken Meadow Rd _0265	3/13/2014	L1405346-01	DW	524.2
Meadow Dr_155	3/13/2014	L1405346-02	DW	8270, 524.2
Ballwic Rd_010	3/13/2014	L1405346-03	DW	8270, 524.2
Tripblank	3/13/2014	L1405346-04	DW	8270, 524.2

Lab presumptive certainty was not achieved because the proper field QC was not delivered (Duplicate analytical samples) and the analytical method specified in the CAM protocol was not followed for volatile organics (524.2 is a non-CAM method). Drinking water methodology was used instead.

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS), matrix spike, laboratory duplicate and LCS duplicate results were reviewed

The matrix spike recovered low for bromomethane. This compound was not detected in the analytical samples.

This report was deemed usable by Angela Boyd on 3/25/14.

ANALYTICAL REPORT

Lab Number:	L1405346
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	Not Specified
Report Date:	03/24/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405346
Report Date: 03/24/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1405346-01	NORTH SUNKEN MEADOW RD_265	EASTHAM, MA	03/13/14 08:45
L1405346-02	MEADOW DR_155	EASTHAM, MA	03/13/14 12:45
L1405346-03	BALLWIC RD_010	EASTHAM, MA	03/13/14 14:35
L1405346-04	TRIPBLANK	EASTHAM, MA	03/13/14 00:00

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405346
Report Date: 03/24/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	NO
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	NO
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405346
Report Date: 03/24/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405346
Report Date: 03/24/14

Case Narrative (continued)

Report Submission

This report replaces the report issued March 20, 2014. The 1,4-Dioxane by SIM extraction date was corrected on all samples.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Sample Receipt

In reference to question A:

The proper field QC samples were not delivered with drinking water samples.

Volatile Organics

In reference to question B:

At the client's request, the analytical method specified in the CAM protocol was not followed.

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: 03/24/14

ORGANICS

VOLATILES

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405346
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID: L1405346-02
Client ID: MEADOW DR_155
Sample Location: EASTHAM, MA
Matrix: Drinking Water
Analytical Method: 16,524.2
Analytical Date: 03/17/14 12:13
Analyst: GT

Date Collected: 03/13/14 12:45
Date Received: 03/13/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	ND		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1405346

Project Number: Not Specified **Report Date:** 03/24/14

SAMPLE RESULTS

Lab ID: L1405346-02 Date Collected: 03/13/14 12:45

Client ID: MEADOW DR_155 Date Received: 03/13/14

Sample Location: EASTHAM, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	101		80-120
4-Bromofluorobenzene	103		80-120

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405346
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID: L1405346-03
Client ID: BALLWIC RD_010
Sample Location: EASTHAM, MA
Matrix: Drinking Water
Analytical Method: 16,524.2
Analytical Date: 03/17/14 12:46
Analyst: GT

Date Collected: 03/13/14 14:35
Date Received: 03/13/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	2.2		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1405346

Project Number: Not Specified **Report Date:** 03/24/14

SAMPLE RESULTS

Lab ID: L1405346-03 Date Collected: 03/13/14 14:35

Client ID: BALLWIC RD_010 Date Received: 03/13/14

Sample Location: EASTHAM, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	105		80-120
4-Bromofluorobenzene	92		80-120

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405346
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID: L1405346-04
Client ID: TRIPBLANK
Sample Location: EASTHAM, MA
Matrix: Drinking Water
Analytical Method: 16,524.2
Analytical Date: 03/17/14 11:40
Analyst: GT

Date Collected: 03/13/14 00:00
Date Received: 03/13/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	ND		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405346
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID: L1405346-04
Client ID: TRIPBLANK
Sample Location: EASTHAM, MA
Date Collected: 03/13/14 00:00
Date Received: 03/13/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	99		80-120
4-Bromofluorobenzene	96		80-120

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405346
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/17/14 11:08
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG674829-12					
Methylene chloride	ND		ug/l	0.50	0.15
1,1-Dichloroethane	ND		ug/l	0.50	0.09
Chloroform	ND		ug/l	0.50	0.05
Carbon tetrachloride	ND		ug/l	0.50	0.10
1,2-Dichloropropane	ND		ug/l	0.50	0.09
Dibromochloromethane	ND		ug/l	0.50	0.08
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12
Tetrachloroethene	ND		ug/l	0.50	0.09
Chlorobenzene	ND		ug/l	0.50	0.08
Trichlorofluoromethane	ND		ug/l	0.50	0.11
1,2-Dichloroethane	ND		ug/l	0.50	0.08
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08
Bromodichloromethane	ND		ug/l	0.50	0.05
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10
Bromoform	ND		ug/l	0.50	0.09
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09
Benzene	ND		ug/l	0.50	0.09
Toluene	ND		ug/l	0.50	0.12
Ethylbenzene	ND		ug/l	0.50	0.06
p/m-Xylene	ND		ug/l	0.50	0.12
Chloromethane	ND		ug/l	0.50	0.15
Bromomethane	ND		ug/l	0.50	0.13
Vinyl chloride	ND		ug/l	0.50	0.08
Chloroethane	ND		ug/l	0.50	0.12
1,1-Dichloroethene	ND		ug/l	0.50	0.06
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11
Trichloroethene	ND		ug/l	0.50	0.09
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405346
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/17/14 11:08
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG674829-12					
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05
Styrene	ND		ug/l	0.50	0.06
o-Xylene	ND		ug/l	0.50	0.09
1,1-Dichloropropene	ND		ug/l	0.50	0.11
2,2-Dichloropropane	ND		ug/l	0.50	0.11
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11
Bromochloromethane	ND		ug/l	0.50	0.10
n-Butylbenzene	ND		ug/l	0.50	0.06
Dichlorodifluoromethane	ND		ug/l	0.50	0.10
Hexachlorobutadiene	ND		ug/l	0.50	0.11
Isopropylbenzene	ND		ug/l	0.50	0.08
p-Isopropyltoluene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.50	0.06
n-Propylbenzene	ND		ug/l	0.50	0.08
sec-Butylbenzene	ND		ug/l	0.50	0.06
tert-Butylbenzene	ND		ug/l	0.50	0.09
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10
Bromobenzene	ND		ug/l	0.50	0.09
o-Chlorotoluene	ND		ug/l	0.50	0.10
p-Chlorotoluene	ND		ug/l	0.50	0.08
Dibromomethane	ND		ug/l	0.50	0.09
1,2-Dibromoethane	ND		ug/l	0.50	0.06
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16
1,3-Dichloropropane	ND		ug/l	0.50	0.11
Methyl tert butyl ether	ND		ug/l	0.50	0.06
Xylenes, Total[1]	ND		ug/l	0.50	0.09

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405346
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/17/14 11:08
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 02-04 Batch: WG674829-12					
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/l		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	99		80-120
4-Bromofluorobenzene	92		80-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405346

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG674829-11								
Methylene chloride	114		-		70-130	-		20
1,1-Dichloroethane	112		-		70-130	-		20
Chloroform	114		-		70-130	-		20
Carbon tetrachloride	113		-		70-130	-		20
1,2-Dichloropropane	104		-		70-130	-		20
Dibromochloromethane	109		-		70-130	-		20
1,1,2-Trichloroethane	111		-		70-130	-		20
Tetrachloroethene	101		-		70-130	-		20
Chlorobenzene	90		-		70-130	-		20
Trichlorofluoromethane	130		-		70-130	-		20
1,2-Dichloroethane	123		-		70-130	-		20
1,1,1-Trichloroethane	111		-		70-130	-		20
Bromodichloromethane	112		-		70-130	-		20
trans-1,3-Dichloropropene	110		-		70-130	-		20
cis-1,3-Dichloropropene	93		-		70-130	-		20
Bromoform	103		-		70-130	-		20
1,1,2,2-Tetrachloroethane	92		-		70-130	-		20
Benzene	99		-		70-130	-		20
Toluene	94		-		70-130	-		20
Ethylbenzene	94		-		70-130	-		20
p/m-Xylene	96		-		70-130	-		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405346
Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG674829-11								
Chloromethane	94		-		70-130	-		20
Bromomethane	101		-		70-130	-		20
Vinyl chloride	110		-		70-130	-		20
Chloroethane	122		-		70-130	-		20
1,1-Dichloroethene	118		-		70-130	-		20
trans-1,2-Dichloroethene	104		-		70-130	-		20
cis-1,2-Dichloroethene	116		-		70-130	-		20
Trichloroethene	93		-		70-130	-		20
1,2-Dichlorobenzene	88		-		70-130	-		20
1,3-Dichlorobenzene	94		-		70-130	-		20
1,4-Dichlorobenzene	94		-		70-130	-		20
Styrene	91		-		70-130	-		20
o-Xylene	90		-		70-130	-		20
1,1-Dichloropropene	99		-		70-130	-		20
2,2-Dichloropropane	115		-		70-130	-		20
1,1,1,2-Tetrachloroethane	99		-		70-130	-		20
1,2,3-Trichloropropane	108		-		70-130	-		20
Bromochloromethane	114		-		70-130	-		20
n-Butylbenzene	85		-		70-130	-		20
Dichlorodifluoromethane	114		-		70-130	-		20
Hexachlorobutadiene	97		-		70-130	-		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405346
Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG674829-11								
Isopropylbenzene	89		-		70-130	-		20
p-Isopropyltoluene	94		-		70-130	-		20
Naphthalene	76		-		70-130	-		20
n-Propylbenzene	91		-		70-130	-		20
sec-Butylbenzene	92		-		70-130	-		20
tert-Butylbenzene	87		-		70-130	-		20
1,2,3-Trichlorobenzene	75		-		70-130	-		20
1,2,4-Trichlorobenzene	77		-		70-130	-		20
1,2,4-Trimethylbenzene	92		-		70-130	-		20
1,3,5-Trimethylbenzene	88		-		70-130	-		20
Bromobenzene	95		-		70-130	-		20
o-Chlorotoluene	82		-		70-130	-		20
p-Chlorotoluene	93		-		70-130	-		20
Dibromomethane	118		-		70-130	-		20
1,2-Dibromoethane	97		-		70-130	-		20
1,2-Dibromo-3-chloropropane	86		-		70-130	-		20
1,3-Dichloropropane	110		-		70-130	-		20
Methyl tert butyl ether	120		-		70-130	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405346

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 Batch: WG674829-11								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichlorobenzene-d4	101				80-120
4-Bromofluorobenzene	96				80-120

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405346
Report Date: 03/24/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG674829-4 QC Sample: L1404498-02 Client ID: MS Sample												
Methylene chloride	ND	4	2.9	72		-	-		70-130	-		20
1,1-Dichloroethane	ND	4	3.1	77		-	-		70-130	-		20
Chloroform	0.58	4	3.6	76		-	-		70-130	-		20
Carbon tetrachloride	ND	4	4.1	103		-	-		70-130	-		20
1,2-Dichloropropane	ND	4	5.1	127		-	-		70-130	-		20
Dibromochloromethane	ND	4	4.0	100		-	-		70-130	-		20
1,1,2-Trichloroethane	ND	4	4.4	110		-	-		70-130	-		20
Tetrachloroethene	4.4	4	7.5	78		-	-		70-130	-		20
Chlorobenzene	ND	4	4.3	109		-	-		70-130	-		20
Trichlorofluoromethane	ND	4	3.5	88		-	-		70-130	-		20
1,2-Dichloroethane	ND	4	4.2	106		-	-		70-130	-		20
1,1,1-Trichloroethane	ND	4	4.1	103		-	-		70-130	-		20
Bromodichloromethane	ND	4	4.1	102		-	-		70-130	-		20
trans-1,3-Dichloropropene	ND	4	3.9	98		-	-		70-130	-		20
cis-1,3-Dichloropropene	ND	4	4.1	102		-	-		70-130	-		20
Bromoform	ND	4	3.9	98		-	-		70-130	-		20
1,1,2,2-Tetrachloroethane	ND	4	4.8	119		-	-		70-130	-		20
Benzene	ND	4	4.5	113		-	-		70-130	-		20
Toluene	ND	4	4.2	105		-	-		70-130	-		20
Ethylbenzene	ND	4	4.2	106		-	-		70-130	-		20
p/m-Xylene	ND	8	8.2	102		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405346
Report Date: 03/24/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG674829-4 QC Sample: L1404498-02 Client ID: MS Sample												
Chloromethane	ND	4	3.0	75		-	-		70-130	-		20
Bromomethane	ND	4	2.5	**62**	Q	-	-		70-130	-		20
Vinyl chloride	ND	4	2.8	70		-	-		70-130	-		20
Chloroethane	ND	4	3.0	76		-	-		70-130	-		20
1,1-Dichloroethene	ND	4	3.2	80		-	-		70-130	-		20
trans-1,2-Dichloroethene	ND	4	3.1	77		-	-		70-130	-		20
cis-1,2-Dichloroethene	ND	4	3.1	78		-	-		70-130	-		20
Trichloroethene	ND	4	3.9	98		-	-		70-130	-		20
1,2-Dichlorobenzene	ND	4	4.1	102		-	-		70-130	-		20
1,3-Dichlorobenzene	ND	4	4.0	99		-	-		70-130	-		20
1,4-Dichlorobenzene	ND	4	3.8	95		-	-		70-130	-		20
Styrene	ND	4	4.0	99		-	-		70-130	-		20
o-Xylene	ND	4	4.2	105		-	-		70-130	-		20
1,1-Dichloropropene	ND	4	4.0	101		-	-		70-130	-		20
2,2-Dichloropropane	ND	4	3.0	76		-	-		70-130	-		20
1,1,1,2-Tetrachloroethane	ND	4	4.4	109		-	-		70-130	-		20
1,2,3-Trichloropropane	ND	4	3.9	97		-	-		70-130	-		20
Bromochloromethane	ND	4	3.4	84		-	-		70-130	-		20
n-Butylbenzene	ND	4	3.9	97		-	-		70-130	-		20
Dichlorodifluoromethane	ND	4	3.9	97		-	-		70-130	-		20
Hexachlorobutadiene	ND	4	4.6	114		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405346
Report Date: 03/24/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG674829-4 QC Sample: L1404498-02 Client ID: MS Sample												
Isopropylbenzene	ND	4	4.2	105		-	-		70-130	-		20
p-Isopropyltoluene	ND	4	3.0	75		-	-		70-130	-		20
Naphthalene	ND	4	3.8	96		-	-		70-130	-		20
n-Propylbenzene	ND	4	4.1	104		-	-		70-130	-		20
sec-Butylbenzene	ND	4	2.8	71		-	-		70-130	-		20
tert-Butylbenzene	ND	4	3.4	86		-	-		70-130	-		20
1,2,3-Trichlorobenzene	ND	4	3.9	99		-	-		70-130	-		20
1,2,4-Trichlorobenzene	ND	4	3.5	88		-	-		70-130	-		20
1,2,4-Trimethylbenzene	ND	4	3.6	89		-	-		70-130	-		20
1,3,5-Trimethylbenzene	ND	4	4.0	101		-	-		70-130	-		20
Bromobenzene	ND	4	4.3	107		-	-		70-130	-		20
o-Chlorotoluene	ND	4	4.1	102		-	-		70-130	-		20
p-Chlorotoluene	ND	4	3.7	93		-	-		70-130	-		20
Dibromomethane	ND	4	4.5	113		-	-		70-130	-		20
1,2-Dibromoethane	ND	4	4.3	108		-	-		70-130	-		20
1,2-Dibromo-3-chloropropane	ND	4	4.4	109		-	-		70-130	-		20
1,3-Dichloropropane	ND	4	4.3	109		-	-		70-130	-		20
Methyl tert butyl ether	ND	4	3.2	81		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405346
Report Date: 03/24/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG674829-4 QC Sample: L1404498-02 Client ID: MS Sample												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	94				80-120
4-Bromofluorobenzene	98				80-120

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405346
Report Date: 03/24/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG674829-3 QC Sample: L1404498-01 Client ID: DUP Sample						
Methylene chloride	ND	ND	ug/l	NC		20
1,1-Dichloroethane	ND	ND	ug/l	NC		20
Chloroform	ND	ND	ug/l	NC		20
Carbon tetrachloride	ND	ND	ug/l	NC		20
1,2-Dichloropropane	ND	ND	ug/l	NC		20
Dibromochloromethane	ND	ND	ug/l	NC		20
1,1,2-Trichloroethane	ND	ND	ug/l	NC		20
Tetrachloroethene	ND	ND	ug/l	NC		20
Chlorobenzene	ND	ND	ug/l	NC		20
Trichlorofluoromethane	ND	ND	ug/l	NC		20
1,2-Dichloroethane	ND	ND	ug/l	NC		20
1,1,1-Trichloroethane	ND	ND	ug/l	NC		20
Bromodichloromethane	ND	ND	ug/l	NC		20
trans-1,3-Dichloropropene	ND	ND	ug/l	NC		20
cis-1,3-Dichloropropene	ND	ND	ug/l	NC		20
Bromoform	ND	ND	ug/l	NC		20
1,1,2,2-Tetrachloroethane	ND	ND	ug/l	NC		20
Benzene	ND	ND	ug/l	NC		20
Toluene	ND	ND	ug/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405346
Report Date: 03/24/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG674829-3 QC Sample: L1404498-01 Client ID: DUP Sample					
Ethylbenzene	ND	ND	ug/l	NC	20
p/m-Xylene	ND	ND	ug/l	NC	20
Chloromethane	ND	ND	ug/l	NC	20
Bromomethane	ND	ND	ug/l	NC	20
Vinyl chloride	ND	ND	ug/l	NC	20
Chloroethane	ND	ND	ug/l	NC	20
1,1-Dichloroethene	ND	ND	ug/l	NC	20
trans-1,2-Dichloroethene	ND	ND	ug/l	NC	20
cis-1,2-Dichloroethene	ND	ND	ug/l	NC	20
Trichloroethene	ND	ND	ug/l	NC	20
1,2-Dichlorobenzene	ND	ND	ug/l	NC	20
1,3-Dichlorobenzene	ND	ND	ug/l	NC	20
1,4-Dichlorobenzene	ND	ND	ug/l	NC	20
Styrene	ND	ND	ug/l	NC	20
o-Xylene	ND	ND	ug/l	NC	20
1,1-Dichloropropene	ND	ND	ug/l	NC	20
2,2-Dichloropropane	ND	ND	ug/l	NC	20
1,1,1,2-Tetrachloroethane	ND	ND	ug/l	NC	20
1,2,3-Trichloropropane	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405346
Report Date: 03/24/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG674829-3 QC Sample: L1404498-01 Client ID: DUP Sample					
Bromochloromethane	ND	ND	ug/l	NC	20
n-Butylbenzene	ND	ND	ug/l	NC	20
Dichlorodifluoromethane	ND	ND	ug/l	NC	20
Hexachlorobutadiene	ND	ND	ug/l	NC	20
Isopropylbenzene	ND	ND	ug/l	NC	20
p-Isopropyltoluene	ND	ND	ug/l	NC	20
Naphthalene	ND	ND	ug/l	NC	20
n-Propylbenzene	ND	ND	ug/l	NC	20
sec-Butylbenzene	ND	ND	ug/l	NC	20
tert-Butylbenzene	ND	ND	ug/l	NC	20
1,2,3-Trichlorobenzene	ND	ND	ug/l	NC	20
1,2,4-Trichlorobenzene	ND	ND	ug/l	NC	20
1,2,4-Trimethylbenzene	ND	ND	ug/l	NC	20
1,3,5-Trimethylbenzene	ND	ND	ug/l	NC	20
Bromobenzene	ND	ND	ug/l	NC	20
o-Chlorotoluene	ND	ND	ug/l	NC	20
p-Chlorotoluene	ND	ND	ug/l	NC	20
Dibromomethane	ND	ND	ug/l	NC	20
1,2-Dibromoethane	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405346
Report Date: 03/24/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 02-04 QC Batch ID: WG674829-3 QC Sample: L1404498-01 Client ID: DUP Sample					
1,2-Dibromo-3-chloropropane	ND	ND	ug/l	NC	20
1,3-Dichloropropane	ND	ND	ug/l	NC	20
Methyl tert butyl ether	ND	ND	ug/l	NC	20
Xylene (Total)[1]	ND	ND	ug/l	NC	20

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	105		101		80-120
4-Bromofluorobenzene	97		91		80-120

SEMIVOLATILES

Project Name: EASTHAM DW **Lab Number:** L1405346

Project Number: Not Specified **Report Date:** 03/24/14

SAMPLE RESULTS

Lab ID:	L1405346-01	Date Collected:	03/13/14 08:45
Client ID:	NORTH SUNKEN MEADOW RD_265	Date Received:	03/13/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/16/14 10:00
Analytical Date:	03/19/14 18:12		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	51		15-110

Project Name: EASTHAM DW
Lab Number: L1405346
Project Number: Not Specified
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID:	L1405346-02	Date Collected:	03/13/14 12:45
Client ID:	MEADOW DR_155	Date Received:	03/13/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/16/14 10:00
Analytical Date:	03/19/14 18:56		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	50		15-110

Project Name: EASTHAM DW
Lab Number: L1405346
Project Number: Not Specified
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID:	L1405346-03	Date Collected:	03/13/14 14:35
Client ID:	BALLWIC RD_010	Date Received:	03/13/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/16/14 10:00
Analytical Date:	03/19/14 19:40		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	51		15-110

Project Name: EASTHAM DW
Lab Number: L1405346
Project Number: Not Specified
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID:	L1405346-04	Date Collected:	03/13/14 00:00
Client ID:	TRIPBLANK	Date Received:	03/13/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/16/14 10:00
Analytical Date:	03/19/14 20:24		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	51		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405346
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 03/19/14 12:20
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 03/16/14 10:00

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01-04 Batch: WG676176-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	38		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405346

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 01-04		Batch: WG676176-2		WG676176-3			
1,4-Dioxane	100		101		40-140	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	33		35		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405346
Report Date: 03/24/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405346-01A	Amber 500ml unpreserved	A	7	3.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405346-01B	Amber 500ml unpreserved	A	7	3.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405346-02A	Vial Ascorbic Acid/HCl preserved	A	N/A	3.2	Y	Absent	524.2(14)
L1405346-02B	Vial Ascorbic Acid/HCl preserved	A	N/A	3.2	Y	Absent	524.2(14)
L1405346-02C	Amber 500ml unpreserved	A	7	3.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405346-02D	Amber 500ml unpreserved	A	7	3.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405346-03A	Vial Ascorbic Acid/HCl preserved	A	N/A	3.2	Y	Absent	524.2(14)
L1405346-03B	Vial Ascorbic Acid/HCl preserved	A	N/A	3.2	Y	Absent	524.2(14)
L1405346-03C	Amber 500ml unpreserved	A	7	3.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405346-03D	Amber 500ml unpreserved	A	7	3.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405346-04A	Vial Ascorbic Acid/HCl preserved	A	N/A	3.2	Y	Absent	524.2(14)
L1405346-04B	Amber 500ml unpreserved	A	7	3.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405346-04C	Amber 500ml unpreserved	A	7	3.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1405346
Project Number:	Not Specified	**Report Date:**	03/24/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405346
Project Number:	Not Specified	**Report Date:**	03/24/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405346
Project Number:	Not Specified	**Report Date:**	03/24/14

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

16 Methods for the Determination of Organic Compounds in Drinking Water - Supplement II. EPA/600/R-92/129, August 1992.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised December 11, 2013

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — Westborough, MA / Mansfield, MA

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: 3/13/14

ALPHA Job #: L1405346

Project Information

Project Name: Eastham DW

Project Location: Eastham, MA

Project #:

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt.

Address: 273 West Main Street

Norton, MA 02766

Phone: 508-226-1800

Fax:

Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time: 3/20/14

Other Project Specific Requirements/Comments/Detection Limits:

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?

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE by 8270 SIM	524.2										Sample Specific Comments	TOTAL # BOTTLES
0534606 01	NORTH SUNKEN MEADOW RD_265	3/13/14	0845	DW	EC	☒	~~☒~~	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	$270 only	#2
02	MEADOW DR_155	3/13/14	1245	DW	EC	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		4
03	BALLWIC RD_010	3/13/14	1435	DW	EC	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		4
04	TRIPBLANK					☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	Report $ip	3
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	blanks separately	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	on both Col's	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		

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

Container Type	A	V	-	-	-	-	-	-	-	-	-	-	-
Preservative	A	I	-	-	-	-	-	-	-	-	-	-	-

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

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

Relinquished By:	Date/Time	Received By:	Date/Time
	3/13/14 1840		3/13/14 1840

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.

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — Mansfield, MA

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: 3/13/14

ALPHA Job #: L1405346

Project Information

Project Name: Eastham DW

Project Location: Eastham, MA

Project #:

Project Manager: Lisa Flynn

ALPHA Quote #:

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:

Client Information

Client: Environmental Strategies & Mgmt.

Address: 273 West Main Street

Norton, MA 02766

Phone: 508-226-1800

Fax:

Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time: 3/20/14

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:

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4-DIOXANE by 8270 SIM	524.2											Sample Specific Comments	TOTAL # BOTTLES
05346-01	NORTH SUNKEN MEADOW RD_265	3/13/14	0845	DW	EC	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	$270 only	2
02	MEADOW DR_155	3/13/14	1245	DW	EC	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		4
03	BALLWIC RD_010	3/13/14	1435	DW	EC	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		4
04	TRIPBLANK					☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	Report 1:p	3
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	blanks separately	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	on both COC's	
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						Container Type	A	V	-	-	-	-	-	-	-	-	-		
						Preservative	A	I	-	-	-	-	-	-	-	-	-		

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
	3/13/14 1840		3/13/14 1840
	3/14/14		3/14/14 1925

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.

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1405456	3/14/2014	drinking water	Yes	No	Yes	Yes	No	Usable

Sample ID	Date	Lab ID	Matrix	Analysis
Alston Ave _285	3/14/2014	L1405456-01	DW	524.2, 8270, 3200.8
Meetinghouse Rd_100	3/14/2014	L1405456-02	DW	524.2, 8270, 3200.8
Old Orchard Rd_180	3/14/2014	L1405456-03	DW	524.2, 8270, 3200.8
Glacier Hills Rd_175	3/14/2014	L1405456-04	DW	8270
Glacier Hills Rd_175 DUP	3/14/2014	L1405456-05	DW	
Glacier Hills Rd_205	3/14/2014	L1405456-06	DW	8270
Glacier Hills Rd_205 DUP	3/14/2014	L1405456-07	DW	
Poland Water	3/14/2014	L1405456-08	DW	8270
Poland Water DUP	3/14/2014	L1405456-09	DW	
Tripblank	3/14/2014	L1405456-10	DW	524.2, 8270, 3200.8

Lab presumptive certainty was not achieved because the proper field QC was not delivered (duplicate analytical samples and metals matrix spike) and the analytical methods specified in the CAM protocol were not followed for volatile organics and metals (524.2 and 3200.8 are non-CAM methods). Drinking water methodology was used instead.

Arsenic was the only metal reported.

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS), matrix spike, laboratory duplicate and LCS duplicate results were reviewed.

The matrix spike recovered high for carbon tetrachloride, trichlorofluoromethane, and 1,1,1-trichloroethane. These compounds were not detected in the analytical samples.

This report was deemed usable by Angela Boyd on 3/25/14.

ANALYTICAL REPORT

Lab Number:	L1405456
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	Not Specified
Report Date:	03/24/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1405456-01	ALSTON AVE_285	EASTHAM, MA	03/14/14 10:45
L1405456-02	MEETINGHOUSE RD_100	EASTHAM, MA	03/14/14 12:35
L1405456-03	OLD ORCHARD RD_180	EASTHAM, MA	03/14/14 13:40
L1405456-04	GLACIER HILLS RD_175	EASTHAM, MA	03/14/14 14:00
L1405456-05	GLACIER HILLS RD_175 DUP	EASTHAM, MA	03/14/14 14:00
L1405456-06	GLACIER HILLS RD_205	EASTHAM, MA	03/14/14 14:30
L1405456-07	GLACIER HILLS RD_205 DUP	EASTHAM, MA	03/14/14 14:30
L1405456-08	POLAND WATER	EASTHAM, MA	03/14/14 12:45
L1405456-09	POLAND WATER DUP	EASTHAM, MA	03/14/14 12:45
L1405456-10	TRIPBLANK	EASTHAM, MA	03/14/14 00:00

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405456
Report Date: 03/24/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	NO
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	NO
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name:	EASTHAM DW	**Lab Number:**	L1405456
Project Number:	Not Specified	**Report Date:**	03/24/14

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Sample Receipt

In reference to question A:

The proper field QC samples were not delivered with drinking water samples.

A Matrix Spike was not submitted for the analysis of Total Metals.

Volatile Organics

In reference to question B:

At the client's request, the analytical method specified in the CAM protocol was not followed.

Total Metals

In reference to question B:

At the client's request, the analytical method specified in the CAM protocol was not followed.

In reference to question I:

All samples were analyzed for a subset of MCP elements per the Chain of Custody.

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: Michelle M. Morris

Title: Technical Director/Representative Date: 03/24/14

ORGANICS

VOLATILES

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405456
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID: L1405456-01
Client ID: ALSTON AVE_285
Sample Location: EASTHAM, MA
Matrix: Water
Analytical Method: 16,524.2
Analytical Date: 03/17/14 16:39
Analyst: GT

Date Collected: 03/14/14 10:45
Date Received: 03/14/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	0.65		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405456
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID: L1405456-01
Client ID: ALSTON AVE_285
Sample Location: EASTHAM, MA
Date Collected: 03/14/14 10:45
Date Received: 03/14/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	109		80-120
4-Bromofluorobenzene	106		80-120

Project Name: EASTHAM DW **Lab Number:** L1405456

Project Number: Not Specified **Report Date:** 03/24/14

SAMPLE RESULTS

Lab ID: L1405456-02
Client ID: MEETINGHOUSE RD_100
Sample Location: EASTHAM, MA
Matrix: Water
Analytical Method: 16,524.2
Analytical Date: 03/17/14 17:12
Analyst: GT

Date Collected: 03/14/14 12:35
Date Received: 03/14/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	0.67		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1405456

Project Number: Not Specified **Report Date:** 03/24/14

SAMPLE RESULTS

Lab ID: L1405456-02 Date Collected: 03/14/14 12:35

Client ID: MEETINGHOUSE RD_100 Date Received: 03/14/14

Sample Location: EASTHAM, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	113		80-120
4-Bromofluorobenzene	98		80-120

Project Name: EASTHAM DW **Lab Number:** L1405456

Project Number: Not Specified **Report Date:** 03/24/14

SAMPLE RESULTS

Lab ID: L1405456-03
Client ID: OLD ORCHARD RD_180
Sample Location: EASTHAM, MA
Matrix: Water
Analytical Method: 16,524.2
Analytical Date: 03/17/14 17:44
Analyst: GT

Date Collected: 03/14/14 13:40
Date Received: 03/14/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	ND		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1405456

Project Number: Not Specified **Report Date:** 03/24/14

SAMPLE RESULTS

Lab ID: L1405456-03 Date Collected: 03/14/14 13:40

Client ID: OLD ORCHARD RD_180 Date Received: 03/14/14

Sample Location: EASTHAM, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	0.25	J	ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	100		80-120
4-Bromofluorobenzene	82		80-120

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405456
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID: L1405456-10
Client ID: TRIPBLANK
Sample Location: EASTHAM, MA
Matrix: Water
Analytical Method: 16,524.2
Analytical Date: 03/17/14 16:06
Analyst: GT

Date Collected: 03/14/14 00:00
Date Received: 03/14/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	ND		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1405456

Project Number: Not Specified **Report Date:** 03/24/14

SAMPLE RESULTS

Lab ID: L1405456-10 Date Collected: 03/14/14 00:00

Client ID: TRIPBLANK Date Received: 03/14/14

Sample Location: EASTHAM, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	104		80-120
4-Bromofluorobenzene	102		80-120

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/17/14 11:08
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03,10 Batch: WG676252-2					
Methylene chloride	ND		ug/l	0.50	0.15
1,1-Dichloroethane	ND		ug/l	0.50	0.09
Chloroform	ND		ug/l	0.50	0.05
Carbon tetrachloride	ND		ug/l	0.50	0.10
1,2-Dichloropropane	ND		ug/l	0.50	0.09
Dibromochloromethane	ND		ug/l	0.50	0.08
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12
Tetrachloroethene	ND		ug/l	0.50	0.09
Chlorobenzene	ND		ug/l	0.50	0.08
Trichlorofluoromethane	ND		ug/l	0.50	0.11
1,2-Dichloroethane	ND		ug/l	0.50	0.08
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08
Bromodichloromethane	ND		ug/l	0.50	0.05
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10
Bromoform	ND		ug/l	0.50	0.09
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09
Benzene	ND		ug/l	0.50	0.09
Toluene	ND		ug/l	0.50	0.12
Ethylbenzene	ND		ug/l	0.50	0.06
p/m-Xylene	ND		ug/l	0.50	0.12
Chloromethane	ND		ug/l	0.50	0.15
Bromomethane	ND		ug/l	0.50	0.13
Vinyl chloride	ND		ug/l	0.50	0.08
Chloroethane	ND		ug/l	0.50	0.12
1,1-Dichloroethene	ND		ug/l	0.50	0.06
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11
Trichloroethene	ND		ug/l	0.50	0.09
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/17/14 11:08
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03,10 Batch: WG676252-2					
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05
Styrene	ND		ug/l	0.50	0.06
o-Xylene	ND		ug/l	0.50	0.09
1,1-Dichloropropene	ND		ug/l	0.50	0.11
2,2-Dichloropropane	ND		ug/l	0.50	0.11
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11
Bromochloromethane	ND		ug/l	0.50	0.10
n-Butylbenzene	ND		ug/l	0.50	0.06
Dichlorodifluoromethane	ND		ug/l	0.50	0.10
Hexachlorobutadiene	ND		ug/l	0.50	0.11
Isopropylbenzene	ND		ug/l	0.50	0.08
p-Isopropyltoluene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.50	0.06
n-Propylbenzene	ND		ug/l	0.50	0.08
sec-Butylbenzene	ND		ug/l	0.50	0.06
tert-Butylbenzene	ND		ug/l	0.50	0.09
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10
Bromobenzene	ND		ug/l	0.50	0.09
o-Chlorotoluene	ND		ug/l	0.50	0.10
p-Chlorotoluene	ND		ug/l	0.50	0.08
Dibromomethane	ND		ug/l	0.50	0.09
1,2-Dibromoethane	ND		ug/l	0.50	0.06
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16
1,3-Dichloropropane	ND		ug/l	0.50	0.11
Methyl tert butyl ether	ND		ug/l	0.50	0.06
Xylenes, Total[1]	ND		ug/l	0.50	0.09

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 03/17/14 11:08
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01-03,10 Batch: WG676252-2					
Tentatively Identified Compounds					
No Tentatively Identified Compounds	ND		ug/l		

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	99		80-120
4-Bromofluorobenzene	92		80-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405456

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,10 Batch: WG676252-1								
Methylene chloride	114		-		70-130	-		20
1,1-Dichloroethane	112		-		70-130	-		20
Chloroform	114		-		70-130	-		20
Carbon tetrachloride	113		-		70-130	-		20
1,2-Dichloropropane	104		-		70-130	-		20
Dibromochloromethane	109		-		70-130	-		20
1,1,2-Trichloroethane	111		-		70-130	-		20
Tetrachloroethene	101		-		70-130	-		20
Chlorobenzene	90		-		70-130	-		20
Trichlorofluoromethane	130		-		70-130	-		20
1,2-Dichloroethane	123		-		70-130	-		20
1,1,1-Trichloroethane	111		-		70-130	-		20
Bromodichloromethane	112		-		70-130	-		20
trans-1,3-Dichloropropene	110		-		70-130	-		20
cis-1,3-Dichloropropene	93		-		70-130	-		20
Bromoform	103		-		70-130	-		20
1,1,2,2-Tetrachloroethane	92		-		70-130	-		20
Benzene	99		-		70-130	-		20
Toluene	94		-		70-130	-		20
Ethylbenzene	94		-		70-130	-		20
p/m-Xylene	96		-		70-130	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405456

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,10 Batch: WG676252-1								
Chloromethane	94		-		70-130	-		20
Bromomethane	101		-		70-130	-		20
Vinyl chloride	110		-		70-130	-		20
Chloroethane	122		-		70-130	-		20
1,1-Dichloroethene	118		-		70-130	-		20
trans-1,2-Dichloroethene	104		-		70-130	-		20
cis-1,2-Dichloroethene	116		-		70-130	-		20
Trichloroethene	93		-		70-130	-		20
1,2-Dichlorobenzene	88		-		70-130	-		20
1,3-Dichlorobenzene	94		-		70-130	-		20
1,4-Dichlorobenzene	94		-		70-130	-		20
Styrene	91		-		70-130	-		20
o-Xylene	90		-		70-130	-		20
1,1-Dichloropropene	99		-		70-130	-		20
2,2-Dichloropropane	115		-		70-130	-		20
1,1,1,2-Tetrachloroethane	99		-		70-130	-		20
1,2,3-Trichloropropane	108		-		70-130	-		20
Bromochloromethane	114		-		70-130	-		20
n-Butylbenzene	85		-		70-130	-		20
Dichlorodifluoromethane	114		-		70-130	-		20
Hexachlorobutadiene	97		-		70-130	-		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,10 Batch: WG676252-1								
Isopropylbenzene	89		-		70-130	-		20
p-Isopropyltoluene	94		-		70-130	-		20
Naphthalene	76		-		70-130	-		20
n-Propylbenzene	91		-		70-130	-		20
sec-Butylbenzene	92		-		70-130	-		20
tert-Butylbenzene	87		-		70-130	-		20
1,2,3-Trichlorobenzene	75		-		70-130	-		20
1,2,4-Trichlorobenzene	77		-		70-130	-		20
1,2,4-Trimethylbenzene	92		-		70-130	-		20
1,3,5-Trimethylbenzene	88		-		70-130	-		20
Bromobenzene	95		-		70-130	-		20
o-Chlorotoluene	82		-		70-130	-		20
p-Chlorotoluene	93		-		70-130	-		20
Dibromomethane	118		-		70-130	-		20
1,2-Dibromoethane	97		-		70-130	-		20
1,2-Dibromo-3-chloropropane	86		-		70-130	-		20
1,3-Dichloropropane	110		-		70-130	-		20
Methyl tert butyl ether	120		-		70-130	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405456

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,10 Batch: WG676252-1								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichlorobenzene-d4	101				80-120
4-Bromofluorobenzene	96				80-120

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,10 QC Batch ID: WG676252-4 QC Sample: L1405451-01 Client ID: MS Sample												
Methylene chloride	ND	4	4.7	118		-	-		70-130	-		20
1,1-Dichloroethane	ND	4	4.9	123		-	-		70-130	-		20
Chloroform	ND	4	4.8	119		-	-		70-130	-		20
Carbon tetrachloride	ND	4	5.6	**141**	Q	-	-		70-130	-		20
1,2-Dichloropropane	ND	4	4.3	107		-	-		70-130	-		20
Dibromochloromethane	ND	4	4.5	113		-	-		70-130	-		20
1,1,2-Trichloroethane	ND	4	4.4	110		-	-		70-130	-		20
Tetrachloroethene	ND	4	4.6	114		-	-		70-130	-		20
Chlorobenzene	ND	4	3.9	98		-	-		70-130	-		20
Trichlorofluoromethane	ND	4	5.9	**147**	Q	-	-		70-130	-		20
1,2-Dichloroethane	ND	4	5.2	130		-	-		70-130	-		20
1,1,1-Trichloroethane	ND	4	5.4	**134**	Q	-	-		70-130	-		20
Bromodichloromethane	ND	4	4.7	118		-	-		70-130	-		20
trans-1,3-Dichloropropene	ND	4	4.4	111		-	-		70-130	-		20
cis-1,3-Dichloropropene	ND	4	4.1	103		-	-		70-130	-		20
Bromoform	ND	4	4.5	113		-	-		70-130	-		20
1,1,2,2-Tetrachloroethane	ND	4	3.3	83		-	-		70-130	-		20
Benzene	ND	4	4.2	104		-	-		70-130	-		20
Toluene	ND	4	4.1	102		-	-		70-130	-		20
Ethylbenzene	ND	4	3.9	97		-	-		70-130	-		20
p/m-Xylene	ND	8	7.3	92		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,10 QC Batch ID: WG676252-4 QC Sample: L1405451-01 Client ID: MS Sample												
Chloromethane	ND	4	4.6	116		-	-		70-130	-		20
Bromomethane	ND	4	3.6	91		-	-		70-130	-		20
Vinyl chloride	ND	4	4.8	121		-	-		70-130	-		20
Chloroethane	ND	4	4.9	123		-	-		70-130	-		20
1,1-Dichloroethene	ND	4	5.0	126		-	-		70-130	-		20
trans-1,2-Dichloroethene	ND	4	4.3	108		-	-		70-130	-		20
cis-1,2-Dichloroethene	ND	4	4.5	114		-	-		70-130	-		20
Trichloroethene	ND	4	4.2	104		-	-		70-130	-		20
1,2-Dichlorobenzene	ND	4	4.2	104		-	-		70-130	-		20
1,3-Dichlorobenzene	ND	4	4.1	102		-	-		70-130	-		20
1,4-Dichlorobenzene	ND	4	4.0	99		-	-		70-130	-		20
Styrene	ND	4	3.9	98		-	-		70-130	-		20
o-Xylene	ND	4	4.0	101		-	-		70-130	-		20
1,1-Dichloropropene	ND	4	4.2	106		-	-		70-130	-		20
2,2-Dichloropropane	ND	4	5.2	129		-	-		70-130	-		20
1,1,1,2-Tetrachloroethane	ND	4	4.3	107		-	-		70-130	-		20
1,2,3-Trichloropropane	ND	4	3.6	91		-	-		70-130	-		20
Bromochloromethane	ND	4	4.7	118		-	-		70-130	-		20
n-Butylbenzene	ND	4	3.8	94		-	-		70-130	-		20
Dichlorodifluoromethane	ND	4	5.0	125		-	-		70-130	-		20
Hexachlorobutadiene	ND	4	4.6	114		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,10 QC Batch ID: WG676252-4 QC Sample: L1405451-01 Client ID: MS Sample												
Isopropylbenzene	ND	4	3.8	96		-	-		70-130	-		20
p-Isopropyltoluene	ND	4	3.9	98		-	-		70-130	-		20
Naphthalene	ND	4	3.3	82		-	-		70-130	-		20
n-Propylbenzene	ND	4	3.9	97		-	-		70-130	-		20
sec-Butylbenzene	ND	4	3.8	96		-	-		70-130	-		20
tert-Butylbenzene	ND	4	3.8	96		-	-		70-130	-		20
1,2,3-Trichlorobenzene	ND	4	3.2	80		-	-		70-130	-		20
1,2,4-Trichlorobenzene	ND	4	3.6	90		-	-		70-130	-		20
1,2,4-Trimethylbenzene	ND	4	3.9	98		-	-		70-130	-		20
1,3,5-Trimethylbenzene	ND	4	4.2	104		-	-		70-130	-		20
Bromobenzene	ND	4	3.6	90		-	-		70-130	-		20
o-Chlorotoluene	ND	4	3.4	84		-	-		70-130	-		20
p-Chlorotoluene	ND	4	3.8	94		-	-		70-130	-		20
Dibromomethane	ND	4	4.4	110		-	-		70-130	-		20
1,2-Dibromoethane	ND	4	3.4	85		-	-		70-130	-		20
1,2-Dibromo-3-chloropropane	ND	4	4.0	101		-	-		70-130	-		20
1,3-Dichloropropane	ND	4	4.2	105		-	-		70-130	-		20
Methyl tert butyl ether	ND	4	4.7	119		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,10 QC Batch ID: WG676252-4 QC Sample: L1405451-01 Client ID: MS Sample												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	103				80-120
4-Bromofluorobenzene	99				80-120

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,10 QC Batch ID: WG676252-3 QC Sample: L1405456-03 Client ID: OLD ORCHARD RD_180						
Methylene chloride	ND	ND	ug/l	NC		20
1,1-Dichloroethane	ND	ND	ug/l	NC		20
Chloroform	ND	0.46J	ug/l	NC		20
Carbon tetrachloride	ND	ND	ug/l	NC		20
1,2-Dichloropropane	ND	ND	ug/l	NC		20
Dibromochloromethane	ND	ND	ug/l	NC		20
1,1,2-Trichloroethane	ND	ND	ug/l	NC		20
Tetrachloroethene	ND	ND	ug/l	NC		20
Chlorobenzene	ND	ND	ug/l	NC		20
Trichlorofluoromethane	ND	ND	ug/l	NC		20
1,2-Dichloroethane	ND	ND	ug/l	NC		20
1,1,1-Trichloroethane	ND	ND	ug/l	NC		20
Bromodichloromethane	ND	ND	ug/l	NC		20
trans-1,3-Dichloropropene	ND	ND	ug/l	NC		20
cis-1,3-Dichloropropene	ND	ND	ug/l	NC		20
Bromoform	ND	ND	ug/l	NC		20
1,1,2,2-Tetrachloroethane	ND	ND	ug/l	NC		20
Benzene	ND	ND	ug/l	NC		20
Toluene	ND	ND	ug/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,10 QC Batch ID: WG676252-3 QC Sample: L1405456-03 Client ID: OLD ORCHARD RD_180					
Ethylbenzene	ND	ND	ug/l	NC	20
p/m-Xylene	ND	ND	ug/l	NC	20
Chloromethane	ND	ND	ug/l	NC	20
Bromomethane	ND	ND	ug/l	NC	20
Vinyl chloride	ND	ND	ug/l	NC	20
Chloroethane	ND	ND	ug/l	NC	20
1,1-Dichloroethene	ND	ND	ug/l	NC	20
trans-1,2-Dichloroethene	ND	ND	ug/l	NC	20
cis-1,2-Dichloroethene	ND	ND	ug/l	NC	20
Trichloroethene	ND	ND	ug/l	NC	20
1,2-Dichlorobenzene	ND	ND	ug/l	NC	20
1,3-Dichlorobenzene	ND	ND	ug/l	NC	20
1,4-Dichlorobenzene	ND	ND	ug/l	NC	20
Styrene	ND	ND	ug/l	NC	20
o-Xylene	ND	ND	ug/l	NC	20
1,1-Dichloropropene	ND	ND	ug/l	NC	20
2,2-Dichloropropane	ND	ND	ug/l	NC	20
1,1,1,2-Tetrachloroethane	ND	ND	ug/l	NC	20
1,2,3-Trichloropropane	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,10 QC Batch ID: WG676252-3 QC Sample: L1405456-03 Client ID: OLD ORCHARD RD_180					
Bromochloromethane	ND	ND	ug/l	NC	20
n-Butylbenzene	ND	ND	ug/l	NC	20
Dichlorodifluoromethane	ND	ND	ug/l	NC	20
Hexachlorobutadiene	ND	ND	ug/l	NC	20
Isopropylbenzene	ND	ND	ug/l	NC	20
p-Isopropyltoluene	ND	ND	ug/l	NC	20
Naphthalene	ND	ND	ug/l	NC	20
n-Propylbenzene	ND	ND	ug/l	NC	20
sec-Butylbenzene	ND	ND	ug/l	NC	20
tert-Butylbenzene	ND	ND	ug/l	NC	20
1,2,3-Trichlorobenzene	ND	ND	ug/l	NC	20
1,2,4-Trichlorobenzene	ND	ND	ug/l	NC	20
1,2,4-Trimethylbenzene	ND	ND	ug/l	NC	20
1,3,5-Trimethylbenzene	ND	ND	ug/l	NC	20
Bromobenzene	ND	ND	ug/l	NC	20
o-Chlorotoluene	ND	ND	ug/l	NC	20
p-Chlorotoluene	ND	ND	ug/l	NC	20
Dibromomethane	ND	ND	ug/l	NC	20
1,2-Dibromoethane	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01-03,10 QC Batch ID: WG676252-3 QC Sample: L1405456-03 Client ID: OLD ORCHARD RD_180					
1,2-Dibromo-3-chloropropane	ND	ND	ug/l	NC	20
1,3-Dichloropropane	ND	ND	ug/l	NC	20
Methyl tert butyl ether	0.25J	ND	ug/l	NC	20
Xylenes, Total[1]	ND	ND	ug/l	NC	20

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	100		95		80-120
4-Bromofluorobenzene	82		85		80-120

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1405456
Project Number: Not Specified
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID:	L1405456-01	Date Collected:	03/14/14 10:45
Client ID:	ALSTON AVE_285	Date Received:	03/14/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/16/14 10:00
Analytical Date:	03/19/14 22:32		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.636		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	48		15-110

Project Name: EASTHAM DW
Lab Number: L1405456
Project Number: Not Specified
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID:	L1405456-02	Date Collected:	03/14/14 12:35
Client ID:	MEETINGHOUSE RD_100	Date Received:	03/14/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/16/14 10:00
Analytical Date:	03/19/14 23:16		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	1.73		ug/l	0.153	0.0765	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	49		15-110

Project Name: EASTHAM DW
Lab Number: L1405456
Project Number: Not Specified
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID:	L1405456-03	Date Collected:	03/14/14 13:40
Client ID:	OLD ORCHARD RD_180	Date Received:	03/14/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/16/14 10:00
Analytical Date:	03/20/14 00:00		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.0953	J	ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	46		15-110

Project Name: EASTHAM DW
Lab Number: L1405456
Project Number: Not Specified
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID:	L1405456-04	Date Collected:	03/14/14 14:00
Client ID:	GLACIER HILLS RD_175	Date Received:	03/14/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/16/14 10:00
Analytical Date:	03/20/14 00:44		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	53		15-110

Project Name: EASTHAM DW
Lab Number: L1405456
Project Number: Not Specified
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID:	L1405456-06	Date Collected:	03/14/14 14:30
Client ID:	GLACIER HILLS RD_205	Date Received:	03/14/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/16/14 10:00
Analytical Date:	03/20/14 01:28		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	51		15-110

Project Name: EASTHAM DW
Lab Number: L1405456
Project Number: Not Specified
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID:	L1405456-08	Date Collected:	03/14/14 12:45
Client ID:	POLAND WATER	Date Received:	03/14/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/16/14 10:00
Analytical Date:	03/20/14 02:12		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.147	0.0735	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	51		15-110

Project Name: EASTHAM DW
Lab Number: L1405456
Project Number: Not Specified
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID:	L1405456-10	Date Collected:	03/14/14 00:00
Client ID:	TRIPBLANK	Date Received:	03/14/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	1,8270D-SIM	Extraction Date:	03/16/14 10:00
Analytical Date:	03/20/14 02:57		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	54		15-110

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 1,8270D-SIM
Analytical Date: 03/19/14 12:20
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 03/16/14 10:00

Parameter	Result	Qualifier	Units	RL	MDL
1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01-04,06,08,10 Batch: WG676176-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	38		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405456

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 01-04,06,08,10		Batch: WG676176-2 WG676176-3					
1,4-Dioxane	100		101		40-140	1		30

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	33		35		15-110

METALS

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405456
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID: L1405456-01
Client ID: ALSTON AVE_285
Sample Location: EASTHAM, MA
Matrix: Water
Date Collected: 03/14/14 10:45
Date Received: 03/14/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	0.00043	J	mg/l	0.00100	0.00020	1	03/21/14 09:07	03/21/14 22:23	EPA 3005A	3,200.8	BM

Project Name: EASTHAM DW
Lab Number: L1405456
Project Number: Not Specified
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID: L1405456-02
Client ID: MEETINGHOUSE RD_100
Sample Location: EASTHAM, MA
Matrix: Water
Date Collected: 03/14/14 12:35
Date Received: 03/14/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	0.00032	J	mg/l	0.00100	0.00020	1	03/21/14 09:07	03/21/14 22:29	EPA 3005A	3,200.8	BM

Project Name: EASTHAM DW
Lab Number: L1405456
Project Number: Not Specified
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID: L1405456-03
Client ID: OLD ORCHARD RD_180
Sample Location: EASTHAM, MA
Matrix: Water

Date Collected: 03/14/14 13:40
Date Received: 03/14/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	0.00025	J	mg/l	0.00100	0.00020	1	03/21/14 09:07	03/21/14 22:35	EPA 3005A	3,200.8	BM

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405456
Report Date: 03/24/14

SAMPLE RESULTS

Lab ID: L1405456-10
Client ID: TRIPBLANK
Sample Location: EASTHAM, MA
Matrix: Water
Date Collected: 03/14/14 00:00
Date Received: 03/14/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	ND		mg/l	0.00100	0.00020	1	03/21/14 09:07	03/21/14 22:42	EPA 3005A	3,200.8	BM

Project Name: EASTHAM DW
Project Number: Not Specified
Lab Number: L1405456
Report Date: 03/24/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01-03,10 Batch: WG677457-1										
Arsenic, Total	ND		mg/l	0.00100	0.00020	1	03/21/14 09:07	03/21/14 18:43	3,200.8	BM

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: Not Specified

Lab Number: L1405456

Report Date: 03/24/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-03,10 Batch: WG677457-2								
Arsenic, Total	102		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-03,10 QC Batch ID: WG677457-4 QC Sample: L1400003-60 Client ID: MS Sample												
Arsenic, Total	0.02300	0.12	0.1508	106		-	-		70-130	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01-03,10 QC Batch ID: WG677457-3 QC Sample: L1400003-60 Client ID: DUP Sample						
Arsenic, Total	0.02300	0.02187	mg/l	5		20

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405456-01A	Vial Ascorbic Acid/HCl preserved	A	N/A	5.2	Y	Absent	524.2(14)
L1405456-01B	Vial Ascorbic Acid/HCl preserved	A	N/A	5.2	Y	Absent	524.2(14)
L1405456-01C	Plastic 500ml HNO3 preserved	B	<2	4.3	Y	Absent	AS-2008T(180)
L1405456-01D	Amber 500ml unpreserved	B	7	4.3	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405456-01E	Amber 500ml unpreserved	B	7	4.3	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405456-02A	Vial Ascorbic Acid/HCl preserved	A	N/A	5.2	Y	Absent	524.2(14)
L1405456-02B	Vial Ascorbic Acid/HCl preserved	A	N/A	5.2	Y	Absent	524.2(14)
L1405456-02C	Plastic 500ml HNO3 preserved	B	<2	4.3	Y	Absent	AS-2008T(180)
L1405456-02D	Amber 500ml unpreserved	B	7	4.3	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405456-02E	Amber 500ml unpreserved	B	7	4.3	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405456-03A	Vial Ascorbic Acid/HCl preserved	A	N/A	5.2	Y	Absent	524.2(14)
L1405456-03B	Vial Ascorbic Acid/HCl preserved	A	N/A	5.2	Y	Absent	524.2(14)
L1405456-03C	Plastic 500ml HNO3 preserved	B	<2	4.3	Y	Absent	AS-2008T(180)
L1405456-03D	Amber 500ml unpreserved	B	7	4.3	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405456-03E	Amber 500ml unpreserved	B	7	4.3	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405456-04A	Amber 500ml unpreserved	B	7	4.3	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405456-04B	Amber 500ml unpreserved	B	7	4.3	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405456-05A	Amber 500ml unpreserved	A	7	5.2	Y	Absent	HOLD(14)
L1405456-05B	Amber 500ml unpreserved	A	7	5.2	Y	Absent	HOLD(14)
L1405456-06A	Amber 500ml unpreserved	A	7	5.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405456-06B	Amber 500ml unpreserved	A	7	5.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405456-07A	Amber 500ml unpreserved	A	7	5.2	Y	Absent	HOLD(14)
L1405456-07B	Amber 500ml unpreserved	A	7	5.2	Y	Absent	HOLD(14)
L1405456-08A	Amber 500ml unpreserved	A	7	5.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405456-08B	Amber 500ml unpreserved	A	7	5.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405456-09A	Amber 500ml unpreserved	A	7	5.2	Y	Absent	HOLD(14)

*Values in parentheses indicate holding time in days

Project Name: EASTHAM DW
Project Number: Not Specified

Lab Number: L1405456
Report Date: 03/24/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1405456-09B	Amber 500ml unpreserved	A	7	5.2	Y	Absent	HOLD(14)
L1405456-10A	Vial Ascorbic Acid/HCl preserved	A	N/A	5.2	Y	Absent	524.2(14)
L1405456-10B	Plastic 500ml HNO3 preserved	B	<2	4.3	Y	Absent	AS-2008T(180)
L1405456-10D	Amber 500ml unpreserved	A	7	5.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)
L1405456-10E	Amber 500ml unpreserved	A	7	5.2	Y	Absent	A2-14-DIOXANESIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1405456
Project Number:	Not Specified	**Report Date:**	03/24/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405456
Project Number:	Not Specified	**Report Date:**	03/24/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1405456
Project Number:	Not Specified	**Report Date:**	03/24/14

REFERENCES

1 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IV, 2007.

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

16 Methods for the Determination of Organic Compounds in Drinking Water - Supplement II. EPA/600/R-92/129, August 1992.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised December 11, 2013

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
WORK SUITE CHEMISTRY

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:

ALPHA Job #: L1405456

Project Information

Project Name: Eastham DW

Project Location: Eastham, MA

Project #:

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt.

Address: 273 West Main Street

Norton, MA 02766

Phone: 508-226-1800

Fax:

Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:

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?

ANALYSIS

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

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE by 8270 SIM	524.2	TOTAL As										TOTAL # BOTTLES
65456-01	ALSTON AVE_285	3/14/14	1045	DW	EC	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	5
02	MEETINGHOUSE RD_100	3/14/14	1235	DW	EC	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	5
03	OLD ORCHARD RD_180	3/14/14	1340	DW	EC	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	5
04	GLACIER HILLS RD_175	3/14/14	1400	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
05	GLACIER HILLS RD_175 DUP	3/14/14	1400	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
06	GLACIER HILLS RD_205	3/14/14	1430	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
07	GLACIER HILLS RD_205 DUP	3/14/14	1430	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
08	POLAND WATER	3/14/14	1245	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
09	POLAND WATER DUP	3/14/14	1245	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
10	TRIPBLANK					☒	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	4
					Container Type	A	V	-	-	-	-	-	-	-	-	-	-	
					Preservative	A	I	-	-	-	-	-	-	-	-	-	-	

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
	3/14/14 1555		3-14-14 1555

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.

CHAIN OF CUSTODY

PAGE 1 OF 1

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:

ALPHA Job #: L1405456

Project Information

Project Name: Eastham DW

Project Location: Eastham, MA

Project #:

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt.

Address: 273 West Main Street

Norton, MA 02766

Phone: 508-226-1800

Fax:

Email: lflynn@esm-inc.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:

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4-Dioxane by 8270-SIM	524.2	TOTAL As										Sample Specific Comments	TOTAL # BOTTLES
65456-01	ALSTON AVE_285	3/14/14	1045	DW	EC	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐		5
02	MEETINGHOUSE RD_100	3/14/14	1235	DW	EC	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐		5
03	OLD ORCHARD RD_180	3/14/14	1340	DW	EC	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐		5
04	GLACIER HILLS RD_175	3/14/14	1400	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
05	GLACIER HILLS RD_175 DUP	3/14/14	1400	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
06	GLACIER HILLS RD_205	3/14/14	1430	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
07	GLACIER HILLS RD_205 DUP	3/14/14	1430	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
08	POLAND WATER	3/14/14	1245	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
09	POLAND WATER DUP	3/14/14	1245	DW	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
10	TRIPBLANK					☒	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐		4
					Container Type	A	V	-	-	-	-	-	-	-	-	-	-		
					Preservative	A	I	-	-	-	-	-	-	-	-	-	-		

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

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
	3/14/14 1555		3-14-14 1555
	3/14/14 1925		3/14/14 1925

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.

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1406225	3/24/2014	drinking water	Yes	Yes	Yes	Yes	Yes	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
Sharon Circle_020	3/24/2014	L1406225-01	DW	8270
Sharon Circle_020 DUP	3/24/2014	L1406225-02	DW	8270
Meetinghouse Rd_140	3/24/2014	L1406225-03	DW	8270
Meetinghouse Rd_140 DUP	3/24/2014	L1406225-04	DW	8270
Alston Ave_065	3/24/2014	L1406225-05	DW	8270
Alston Ave_065 DUP	3/24/2014	L1406225-06	DW	8270
Eldia Way_007	3/24/2014	L1406225-07	DW	8270
Eldia Way_007 DUP	3/24/2014	L1406225-08	DW	8270
Meetinghouse Rd_375	3/24/2014	L1406225-09	DW	8270
Meetinghouse Rd_375 DUP	3/24/2014	L1406225-10	DW	8270
Trip Blank	3/24/2014	L1406225-11	DW	8270

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS) and LCS duplicate results were reviewed.

This report was deemed usable by Angela Boyd on 4/7/14.

ANALYTICAL REPORT

Lab Number:	L1406225
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	2013-027
Report Date:	04/03/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406225
Report Date: 04/03/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1406225-01	SHARON CIRCLE_020	EASTHAM MA	03/24/14 09:25
L1406225-02	SHARON CIRCLE_020 DUP	EASTHAM MA	03/24/14 09:25
L1406225-03	MEETINGHOUSE RD_140	EASTHAM MA	03/24/14 10:05
L1406225-04	MEETINGHOUSE RD_140 DUP	EASTHAM MA	03/24/14 10:05
L1406225-05	ALSTON AVE_065	EASTHAM MA	03/24/14 10:45
L1406225-06	ALSTON AVE_065 DUP	EASTHAM MA	03/24/14 10:45
L1406225-07	ELDIA WAY_007	EASTHAM MA	03/24/14 13:40
L1406225-08	ELDIA WAY_007 DUP	EASTHAM MA	03/24/14 13:40
L1406225-09	MEETINGHOUSE RD_375	EASTHAM MA	03/24/14 15:25
L1406225-10	MEETINGHOUSE RD_375 DUP	EASTHAM MA	03/24/14 15:25
L1406225-11	TRIP BLANK	EASTHAM MA	03/24/14 00:00

Project Name:	EASTHAM DW	**Lab Number:**	L1406225
Project Number:	2013-027	**Report Date:**	04/03/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406225
Report Date: 04/03/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406225
Report Date: 04/03/14

Case Narrative (continued)

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: Elizabeth Porta

Title: Technical Director/Representative

Date: 04/03/14

ORGANICS

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1406225
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406225-01	Date Collected:	03/24/14 09:25
Client ID:	SHARON CIRCLE_020	Date Received:	03/24/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/27/14 11:32
Analytical Date:	03/27/14 22:20		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.104	J	ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1406225
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406225-03	Date Collected:	03/24/14 10:05
Client ID:	MEETINGHOUSE RD_140	Date Received:	03/24/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/27/14 11:32
Analytical Date:	03/27/14 23:05		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	27		15-110

Project Name: EASTHAM DW
Lab Number: L1406225
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406225-05	Date Collected:	03/24/14 10:45
Client ID:	ALSTON AVE_065	Date Received:	03/24/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/27/14 11:32
Analytical Date:	03/27/14 23:50		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.0813	J	ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1406225
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406225-07	Date Collected:	03/24/14 13:40
Client ID:	ELDIA WAY_007	Date Received:	03/24/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/27/14 11:32
Analytical Date:	03/28/14 00:34		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	27		15-110

Project Name: EASTHAM DW
Lab Number: L1406225
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406225-09	Date Collected:	03/24/14 15:25
Client ID:	MEETINGHOUSE RD_375	Date Received:	03/24/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/27/14 11:32
Analytical Date:	03/28/14 01:19		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.175		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Project Name: EASTHAM DW
Lab Number: L1406225
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406225-10	Date Collected:	03/24/14 15:25
Client ID:	MEETINGHOUSE RD_375 DUP	Date Received:	03/24/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 03:36		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.156		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	19		15-110

Project Name: EASTHAM DW
Lab Number: L1406225
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406225-11	Date Collected:	03/24/14 00:00
Client ID:	TRIP BLANK	Date Received:	03/24/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/27/14 11:32
Analytical Date:	03/28/14 02:04		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	27		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406225
Report Date: 04/03/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 03/27/14 20:06
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 03/27/14 11:32

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01,03,05,07,09,11 Batch: WG678302-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	30		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406225
Report Date: 04/03/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 03/31/14 01:21
Analyst: CM

Extraction Method: EPA 3510C
Extraction Date: 03/30/14 10:42

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 10 Batch: WG678940-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1406225

Report Date: 04/03/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s):	01,03,05,07,09,11	Batch:	WG678302-2	WG678302-3			
1,4-Dioxane	103		102		40-140	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	30		33		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1406225

Report Date: 04/03/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 10 Batch: WG678940-2 WG678940-3								
1,4-Dioxane	102		104		40-140	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	28		31		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406225
Report Date: 04/03/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1406225-01A	Amber 500ml unpreserved	A	7	4.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406225-01B	Amber 500ml unpreserved	A	7	4.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406225-02A	Amber 500ml unpreserved	A	7	4.3	Y	Absent	HOLD(14)
L1406225-02B	Amber 500ml unpreserved	A	7	4.3	Y	Absent	HOLD(14)
L1406225-03A	Amber 500ml unpreserved	A	7	4.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406225-03B	Amber 500ml unpreserved	A	7	4.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406225-04A	Amber 500ml unpreserved	A	7	4.3	Y	Absent	HOLD(14)
L1406225-04B	Amber 500ml unpreserved	A	7	4.3	Y	Absent	HOLD(14)
L1406225-05A	Amber 500ml unpreserved	A	7	4.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406225-05B	Amber 500ml unpreserved	A	7	4.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406225-06A	Amber 500ml unpreserved	A	7	4.3	Y	Absent	HOLD(14)
L1406225-06B	Amber 500ml unpreserved	A	7	4.3	Y	Absent	HOLD(14)
L1406225-07A	Amber 500ml unpreserved	A	7	4.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406225-07B	Amber 500ml unpreserved	A	7	4.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406225-08A	Amber 500ml unpreserved	A	7	4.3	Y	Absent	HOLD(14)
L1406225-08B	Amber 500ml unpreserved	A	7	4.3	Y	Absent	HOLD(14)
L1406225-09A	Amber 500ml unpreserved	A	7	4.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406225-09B	Amber 500ml unpreserved	A	7	4.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406225-10A	Amber 500ml unpreserved	A	7	4.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406225-10B	Amber 500ml unpreserved	A	7	4.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406225-11A	Amber 500ml unpreserved	A	7	4.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406225-11B	Amber 500ml unpreserved	A	7	4.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406225-11C	Amber 500ml unpreserved	A	7	4.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406225-11D	Amber 500ml unpreserved	A	7	4.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1406225
Project Number:	2013-027	**Report Date:**	04/03/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1406225
Project Number:	2013-027	**Report Date:**	04/03/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised December 11, 2013

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 2

ALPHA ANALYTICAL — World Class Chemistry

Date Rec'd in Lab:

ALPHA Job #: L1406225

Westborough, MA
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA
TEL: 508-822-9300
FAX: 508-822-3288

Client Information

Client: Environmental Strategies & Mgmt

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: aboyd@esm-inc.com *

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Eastham DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

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
8270-MCP CAM	0.15 UG/L FOR 1,4 DIOXANE, GW 1

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:

* please also email results to lflynn@esm-inc.com

Run duplicate samples (DUP) if 1,4 dioxane is detected above the RL (0.15 ug/L)

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	1,4 DIOXANE BY 8270 SIM	Sample Specific Comments	TOTAL # BOTTLES
01	SHARON CIRCLE_020	03/24/14	0925	w	MD	☒		
02	SHARON CIRCLE_020 DUP	03/24/14	0925	w	MD	☒		
03	MEETINGHOUSE RD_140	03/24/14	1005	w	MD	☒		
04	MEETINGHOUSE RD_140 DUP	03/24/14	1005	w	MD	☒		
05	ALSTON AVE_065	03/24/14	1045	w	MD	☒		
06	ALSTON AVE_065 DUP	03/24/14	1045	w	MD	☒		
07	ELDIA WAY_007	03/24/14	1340	w	MD	☒		
08	ELDIA WAY_007 DUP	03/24/14	1340	w	MD	☒		
09	MEETINGHOUSE RD_375	03/24/14	1525	w	MD	☒		
10	MEETINGHOUSE RD_375 DUP	03/24/14	1525	w	MD	☒		
						Container Type		
						Preservative		

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
	3/24/14		3/24/14 17:25

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.

CHAIN OF CUSTODY

PAGE 2 OF 2

ALPHA ANALYTICAL — World Class Chemistry

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:

ALPHA Job #: L1406225

Project Information

Project Name: Eastham DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: aboyd@esm-inc.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
8270-MCP CAM	0.15 UG/L FOR 1,4 DIOXANE, GW 1

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:

* please also email results to lflynn@esm-inc.com

Run duplicate samples (DUP) if 1,4 dioxane is detected above the RL (0.15 ug/L)

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	1,4 DIOXANE BY 8270 SIM	Sample Specific Comments	TOTAL # BOTTLES
71	TRIP BLANK					☒		
						☐		
						☐		
						☐		
						☐		
						☐		
						☐		
						☐		
						☐		
						☐		

Container Type	-	-	-	-	-	-	-	-	-	-	-	-	
Preservative	-	-	-	-	-	-	-	-	-	-	-	-	

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	3/24/14		3/24/14 17:25

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

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

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1406277	3/25/2014	drinking water	Yes	Yes	Yes	Yes	Yes	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
State Hwy_3172 PR	3/25/2014	L1406277-01	DW	8270
State Hwy_3172 PR DUP	3/25/2014	L1406277-02	DW	8270
State Hwy_3172 BU	3/25/2014	L1406277-03	DW	8270
State Hwy_3172 BU DUP	3/25/2014	L1406277-04	DW	8270
Preservation Way _004	3/25/2014	L1406277-05	DW	8270
Preservation Way _004 DUP	3/25/2014	L1406277-06	DW	8270
Starlight Ln_030	3/25/2014	L1406277-07	DW	8270
Starlight Ln_030 Dup	3/25/2014	L1406277-08	DW	8270
Cedar Ln_030	3/25/2014	L1406277-09	DW	8270
Cedar Ln_030 Dup	3/25/2014	L1406277-10	DW	8270
Trip Blank	3/25/2014	L1406277-11	DW	8270

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS) and LCS duplicate results were reviewed.

This report was deemed usable by Angela Boyd on 4/7/14.

ANALYTICAL REPORT

Lab Number:	L1406277
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	2013-027
Report Date:	04/03/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406277
Report Date: 04/03/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1406277-01	STATE HWY_3172 PR	EASTHAM ,MA	03/25/14 08:40
L1406277-02	STATE HWY_3172 PR DUP	EASTHAM ,MA	03/25/14 08:40
L1406277-03	STATE HWY_3172 BU	EASTHAM ,MA	03/25/14 09:00
L1406277-04	STATE HWY_3172 BU DUP	EASTHAM ,MA	03/25/14 09:00
L1406277-05	PRESERVATION WAY_004	EASTHAM ,MA	03/25/14 10:15
L1406277-06	PRESERVATION WAY_004 DUP	EASTHAM ,MA	03/25/14 10:15
L1406277-07	STARLIGHT LN_030	EASTHAM ,MA	03/25/14 11:30
L1406277-08	STARLIGHT LN_030 DUP	EASTHAM ,MA	03/25/14 11:30
L1406277-09	CEDAR LN_030	EASTHAM ,MA	03/25/14 13:35
L1406277-10	CEDAR LN_030 DUP	EASTHAM ,MA	03/25/14 13:35
L1406277-11	TRIP BLANK	EASTHAM ,MA	03/25/14 00:00

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1406277
Report Date: 04/03/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406277
Report Date: 04/03/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406277
Report Date: 04/03/14

Case Narrative (continued)

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: Elizabeth Porta

Title: Technical Director/Representative

Date: 04/03/14

ORGANICS

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1406277
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406277-01	Date Collected:	03/25/14 08:40
Client ID:	STATE HWY_3172 PR	Date Received:	03/25/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/27/14 11:32
Analytical Date:	03/28/14 02:48		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.326		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	29		15-110

Project Name: EASTHAM DW
Lab Number: L1406277
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406277-02	Date Collected:	03/25/14 08:40
Client ID:	STATE HWY_3172 PR DUP	Date Received:	03/25/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 04:21		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.306		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	22		15-110

Project Name: EASTHAM DW
Lab Number: L1406277
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406277-03	Date Collected:	03/25/14 09:00
Client ID:	STATE HWY_3172 BU	Date Received:	03/25/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/27/14 11:32
Analytical Date:	03/28/14 03:33		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.335		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Project Name: EASTHAM DW
Lab Number: L1406277
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406277-04	Date Collected:	03/25/14 09:00
Client ID:	STATE HWY_3172 BU DUP	Date Received:	03/25/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 05:06		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.338		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	22		15-110

Project Name: EASTHAM DW
Lab Number: L1406277
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406277-05	Date Collected:	03/25/14 10:15
Client ID:	PRESERVATION WAY_004	Date Received:	03/25/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/27/14 11:32
Analytical Date:	03/28/14 04:18		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.208		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: EASTHAM DW
Lab Number: L1406277
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406277-06	Date Collected:	03/25/14 10:15
Client ID:	PRESERVATION WAY_004 DUP	Date Received:	03/25/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 05:51		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.196		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: EASTHAM DW
Lab Number: L1406277
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406277-07	Date Collected:	03/25/14 11:30
Client ID:	STARLIGHT LN_030	Date Received:	03/25/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/27/14 11:32
Analytical Date:	03/28/14 05:03		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.278		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	21		15-110

Project Name: EASTHAM DW
Lab Number: L1406277
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406277-08	Date Collected:	03/25/14 11:30
Client ID:	STARLIGHT LN_030 DUP	Date Received:	03/25/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 06:36		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.249		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	21		15-110

Project Name: EASTHAM DW
Lab Number: L1406277
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406277-09	Date Collected:	03/25/14 13:35
Client ID:	CEDAR LN_030	Date Received:	03/25/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/27/14 11:32
Analytical Date:	03/28/14 05:47		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.289		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: EASTHAM DW
Lab Number: L1406277
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406277-10	Date Collected:	03/25/14 13:35
Client ID:	CEDAR LN_030 DUP	Date Received:	03/25/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 07:21		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.285		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	22		15-110

Project Name: EASTHAM DW
Lab Number: L1406277
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406277-11	Date Collected:	03/25/14 00:00
Client ID:	TRIP BLANK	Date Received:	03/25/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/27/14 11:32
Analytical Date:	03/31/14 09:44		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406277
Report Date: 04/03/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 03/27/14 20:06
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 03/27/14 11:32

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01,03,05,07,09,11 Batch: WG678302-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	30		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406277
Report Date: 04/03/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 03/31/14 01:21
Analyst: CM

Extraction Method: EPA 3510C
Extraction Date: 03/30/14 10:42

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 02,04,06,08,10 Batch: WG678940-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1406277

Report Date: 04/03/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s):	01,03,05,07,09,11	Batch:	WG678302-2	WG678302-3			
1,4-Dioxane	103		102		40-140	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	30		33		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1406277

Report Date: 04/03/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s):	02,04,06,08,10	Batch:	WG678940-2	WG678940-3			
1,4-Dioxane	102		104		40-140	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	28		31		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406277
Report Date: 04/03/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information	Custody Seal
Cooler	
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1406277-01A	Amber 500ml unpreserved	A	7	5.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-01B	Amber 500ml unpreserved	A	7	5.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-02A	Amber 500ml unpreserved	A	7	5.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-02B	Amber 500ml unpreserved	A	7	5.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-03A	Amber 500ml unpreserved	A	7	5.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-03B	Amber 500ml unpreserved	A	7	5.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-04A	Amber 500ml unpreserved	A	7	5.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-04B	Amber 500ml unpreserved	A	7	5.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-05A	Amber 500ml unpreserved	A	7	5.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-05B	Amber 500ml unpreserved	A	7	5.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-06A	Amber 500ml unpreserved	A	7	5.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-06B	Amber 500ml unpreserved	A	7	5.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-07A	Amber 500ml unpreserved	A	7	5.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-07B	Amber 500ml unpreserved	A	7	5.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-08A	Amber 500ml unpreserved	A	7	5.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-08B	Amber 500ml unpreserved	A	7	5.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-09A	Amber 500ml unpreserved	A	7	5.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-09B	Amber 500ml unpreserved	A	7	5.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-10A	Amber 500ml unpreserved	B	7	3.6	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-10B	Amber 500ml unpreserved	B	7	3.6	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-11A	Amber 500ml unpreserved	B	7	3.6	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-11B	Amber 500ml unpreserved	B	7	3.6	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-11C	Amber 500ml unpreserved	B	7	3.6	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406277-11D	Amber 500ml unpreserved	B	7	3.6	Y	Absent	A2-MCP-14DX-SIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1406277
Project Number:	2013-027	**Report Date:**	04/03/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1406277
Project Number:	2013-027	**Report Date:**	04/03/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised December 11, 2013

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 2

ALPHA ANALYTICAL — Worldclass Chemistry

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:

ALPHA Job #: L1406277

Client Information

Client: Environmental Strategies & Mgmt
Address: 273 West Main Street
Norton, MA 02703
Phone: 508-226-1800
Fax: 508-226-1811
Email: aboyd@esm-inc.com *

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Eastham DW
Project Location: Eastham MA
Project #: 2013-027
Project Manager: Lisa Flynn
ALPHA Quote #:

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
8270-MCP CAM	0.15 UG/L FOR 1,4 DIOXANE, GW 1

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:
* please also email results to lflynn@esm-inc.com

Run duplicate samples (DUP) if 1,4 dioxane is detected above the RL (0.15 ug/L)

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	1,4 DIOXANE BY 8270 SIM	Sample Specific Comments	TOTAL # BOTTLES
01	STATE HWY_3172 PR	03/25/14	840	w	MD	☒		
02	STATE HWY_3172 PR DUP	03/25/14	840	w	MD	☒		
03	STATE HWY_3172 BU	03/25/14	900	w	MD	☒		
04	STATE HWY_3172 BU DUP	03/25/14	900	w	MD	☒		
05	PRESERVATION WAY_004	03/25/14	1015	w	MD	☒		
06	PRESERVATION WAY_004 DUP	03/25/14	1015	w	MD	☒		
07	STARLIGHT LN_030	03/25/14	1130	w	MD	☒		
08	STARLIGHT LN_030 DUP	03/25/14	1130	w	MD	☒		
09	CEDAR LN 030	03/25/14	1335	w	MD	☒		
10	CEDAR LN 030 DUP	03/25/14	1335	w	MD	☒		
	Container Type					-		
	Preservative					-		

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
	3/25/14		3/25/14 1515

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.

CHAIN OF CUSTODY

PAGE 2 OF 2

ALPHA ANALYTICAL — World Class Chemistry

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:

ALPHA Job #: L1406277

Client Information

Client: Environmental Strategies & Mgmt
Address: 273 West Main Street
Norton, MA 02703
Phone: 508-226-1800
Fax: 508-226-1811
Email: aboyd@esm-inc.com *

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Eastham DW
Project Location: Eastham MA
Project #: 2013-027
Project Manager: Lisa Flynn
ALPHA Quote #:

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
8270-MCP CAM	0.15 UG/L FOR 1,4 DIOXANE, GW 1

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:
* please also email results to lflynn@esm-inc.com

Run duplicate samples (DUP) if 1,4 dioxane is detected above the RL (0.15 ug/L)

ANALYSIS

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

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270 SIM	Sample Specific Comments
	~~GLACIER HILLS RD_14~~ MD					☒	
	~~GLACIER HILLS RD_145 DUP~~ MD					☒	
-11	TRIP BLANK					☒	
						☐	
						☐	
						☐	
						☐	
						☐	
						☐	
						☐	
						☐	

Container Type	-	-	-	-	-	-	-	-	-	-	-	-
Preservative	-	-	-	-	-	-	-	-	-	-	-	-

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
	3/25/14		3/25/14 15:[illegible]

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.

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1406451	3/27/2014	drinking water	Yes	Yes	Yes	Yes	Yes	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
Starlight Ln_050	3/27/2014	L1406451-01	DW	8270
Starlight Ln_050 Dup	3/27/2014	L1406451-02	DW	8270
Meetinghouse Rd_185	3/27/2014	L1406451-03	DW	8270
Meetinghouse Rd_185 Dup	3/27/2014	L1406451-04	DW	8270
Chipman St_030	3/27/2014	L1406451-05	DW	8270
Chipman St_030 Dup	3/27/2014	L1406451-06	DW	8270
Knowles St_065	3/27/2014	L1406451-07	DW	8270
Knowles St_065 Dup	3/27/2014	L1406451-08	DW	8270
Trip Blank	3/27/2014	L1406451-09	DW	8270

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS) and LCS duplicate results were reviewed.

This report was deemed usable by Angela Boyd on 4/7/14.

ANALYTICAL REPORT

Lab Number:	L1406451
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	2013-027
Report Date:	04/03/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406451
Report Date: 04/03/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1406451-01	STARLIGHT LN_050	EASTHAM, MA	03/27/14 08:45
L1406451-02	STARLIGHT LN_050 DUP	EASTHAM, MA	03/27/14 08:45
L1406451-03	MEETINGHOUSE RD_185	EASTHAM, MA	03/27/14 10:30
L1406451-04	MEETINGHOUSE RD_185 DUP	EASTHAM, MA	03/27/14 10:30
L1406451-05	CHIPMAN ST_030	EASTHAM, MA	03/27/14 12:35
L1406451-06	CHIPMAN ST_030 DUP	EASTHAM, MA	03/27/14 12:35
L1406451-07	KNOWLES ST_065	EASTHAM, MA	03/27/14 13:30
L1406451-08	KNOWLES ST_065 DUP	EASTHAM, MA	03/27/14 13:30
L1406451-09	TRIP BLANK	EASTHAM, MA	03/27/14 00:00

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1406451
Report Date: 04/03/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406451
Report Date: 04/03/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1406451
Report Date: 04/03/14

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Report Submission

All MCP required questions were answered with affirmative responses; therefore, there are no relevant protocol-specific QC and/or performance standard non-conformances to report.

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: Cynthia McQueen

Title: Technical Director/Representative Date: 04/03/14

ORGANICS

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1406451
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406451-01	Date Collected:	03/27/14 08:45
Client ID:	STARLIGHT LN_050	Date Received:	03/27/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 09:31		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	25		15-110

Project Name: EASTHAM DW
Lab Number: L1406451
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406451-03	Date Collected:	03/27/14 10:30
Client ID:	MEETINGHOUSE RD_185	Date Received:	03/27/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 10:16		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: EASTHAM DW
Lab Number: L1406451
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406451-05	Date Collected:	03/27/14 12:35
Client ID:	CHIPMAN ST_030	Date Received:	03/27/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 11:01		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.0969	J	ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	25		15-110

Project Name: EASTHAM DW
Lab Number: L1406451
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406451-07	Date Collected:	03/27/14 13:30
Client ID:	KNOWLES ST_065	Date Received:	03/27/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 11:46		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	5.03		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: EASTHAM DW
Lab Number: L1406451
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406451-08	Date Collected:	03/27/14 13:30
Client ID:	KNOWLES ST_065 DUP	Date Received:	03/27/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/03/14 07:23
Analytical Date:	04/03/14 14:38		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	5.42		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	27		15-110

Project Name: EASTHAM DW
Lab Number: L1406451
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406451-09	Date Collected:	03/27/14 00:00
Client ID:	TRIP BLANK	Date Received:	03/27/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 12:30		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406451
Report Date: 04/03/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 03/31/14 01:21
Analyst: CM

Extraction Method: EPA 3510C
Extraction Date: 03/30/14 10:42

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01,03,05,07,09 Batch: WG678940-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406451
Report Date: 04/03/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 04/03/14 12:23
Analyst: CM

Extraction Method: EPA 3510C
Extraction Date: 04/03/14 07:23

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 08 Batch: WG679860-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	36		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1406451

Report Date: 04/03/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s):	01,03,05,07,09	Batch:	WG678940-2	WG678940-3			
1,4-Dioxane	102		104		40-140	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	28		31		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1406451

Report Date: 04/03/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 08 Batch: WG679860-2 WG679860-3								
1,4-Dioxane	104		106		40-140	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	34		37		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406451
Report Date: 04/03/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1406451-01A	Amber 500ml unpreserved	A	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406451-01B	Amber 500ml unpreserved	A	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406451-02A	Amber 500ml unpreserved	A	7	3.3	Y	Absent	HOLD(14)
L1406451-02B	Amber 500ml unpreserved	A	7	3.3	Y	Absent	HOLD(14)
L1406451-03A	Amber 500ml unpreserved	A	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406451-03B	Amber 500ml unpreserved	A	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406451-04A	Amber 500ml unpreserved	A	7	3.3	Y	Absent	HOLD(14)
L1406451-04B	Amber 500ml unpreserved	A	7	3.3	Y	Absent	HOLD(14)
L1406451-05A	Amber 500ml unpreserved	A	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406451-05B	Amber 500ml unpreserved	A	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406451-06A	Amber 500ml unpreserved	A	7	3.3	Y	Absent	HOLD(14)
L1406451-06B	Amber 500ml unpreserved	A	7	3.3	Y	Absent	HOLD(14)
L1406451-07A	Amber 500ml unpreserved	A	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406451-07B	Amber 500ml unpreserved	A	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406451-08A	Amber 500ml unpreserved	A	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406451-08B	Amber 500ml unpreserved	A	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406451-09A	Amber 500ml unpreserved	A	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406451-09B	Amber 500ml unpreserved	A	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1406451
Project Number:	2013-027	**Report Date:**	04/03/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1406451
Project Number:	2013-027	**Report Date:**	04/03/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1406451
Project Number:	2013-027	**Report Date:**	04/03/14

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised December 11, 2013

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — Worldclass Chemistry

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:

ALPHA Job #: L1406451

Project Information

Project Name: Eastham DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Report Information — Data Deliverables

☐ FAX ☒ EMAIL

☒ ADEx ☐ Add'l Deliverables

Billing Information

☒ Same as Client info PO #:

Client Information

Client: Environmental Strategies & Mgmt

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: aboyd@esm-inc.com *

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Regulatory Requirements/Report Limits

State/Fed Program	Criteria
8270-MCP CAM	0.15 UG/L FOR 1,4 DIOXANE, GW 1

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:

* please also email results to lflynn@esm-inc.com

Run duplicate samples (DUP) if 1,4 dioxane is detected above the RL (0.15 ug/L)

ANALYSIS

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

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270 SIM	TOTAL # BOTTLES
06451 01	STARLIGHT LN_050	03/27/14	0845	w	MD	☒	
02	STARLIGHT LN_050 DUP	03/27/14	0845	w	MD	☒	
03	MEETINGHOUSE RD_185	03/27/14	1030	w	MD	☒	
04	MEETINGHOUSE RD_185 DUP	03/27/14	1030	w	MD	☒	
05	CHIPMAN ST_030	03/27/14	1235	w	MD	☒	
06	CHIPMAN ST_030 DUP	03/27/14	1235	w	MD	☒	
07	KNOWLES ST_065	03/27/14	1330	w	MD	☒	
08	KNOWLES ST_065 DUP	03/27/14	1330	w	MD	☒	
09	TRIP BLANK					☒	
						☐	

Container Type	-	-	-	-	-	-	-	-	-	-	-	-
Preservative	-	-	-	-	-	-	-	-	-	-	-	-

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
	03/27/14		3/27/14 15:30

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.

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1406558	3/28/2014	drinking water	Yes	Yes	Yes	Yes	Yes	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
Alston Ave_265	3/28/2014	L1406558-01	DW	8270
Alston Ave_265 Dup	3/28/2014	L1406558-02	DW	8270
PTC-12_255 Alston Inf	3/28/2014	L1406558-03	DW	8270
PTC-12_255 Alston Mid	3/28/2014	L1406558-04	DW	8270
PTC-12_255 Alston Eff	3/28/2014	L1406558-05	DW	8270
Redberry Ln_045	3/28/2014	L1406558-06	DW	8270
Redberry Ln_045 Dup	3/28/2014	L1406558-07	DW	8270
Deepwood Dr_065	3/28/2014	L1406558-08	DW	8270
Deepwood Dr_065 Dup	3/28/2014	L1406558-09	DW	8270
Alson Ave _080	3/28/2014	L1406558-10	DW	8270
Alson Ave _080 Dup	3/28/2014	L1406558-11	DW	8270
Trip Blank	3/28/2014	L1406558-12	DW	8270

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS) and LCS duplicate results were reviewed.

This report was deemed usable by Angela Boyd on 4/7/14.

ANALYTICAL REPORT

Lab Number:	L1406558
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	2013-027
Report Date:	04/03/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406558
Report Date: 04/03/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1406558-01	ALSTON AVE_265	EASTHAM, MA	03/28/14 09:05
L1406558-02	ALSTON AVE_265 DUP	EASTHAM, MA	03/28/14 09:05
L1406558-03	PTC-12_255 ALSTON INF	EASTHAM, MA	03/28/14 08:48
L1406558-04	PTC-12_255 ALSTON MID	EASTHAM, MA	03/28/14 08:46
L1406558-05	PTC-12_255 ALSTON EFF	EASTHAM, MA	03/28/14 08:44
L1406558-06	REDBERRY LN_045	EASTHAM, MA	03/28/14 10:20
L1406558-07	REDBERRY LN_045 DUP	EASTHAM, MA	03/28/14 10:20
L1406558-08	DEEPWOOD DR_065	EASTHAM, MA	03/28/14 12:35
L1406558-09	DEEPWOOD DR_065 DUP	EASTHAM, MA	03/28/14 12:35
L1406558-10	ALSTON AVE_080	EASTHAM, MA	03/28/14 14:15
L1406558-11	ALSTON AVE_080 DUP	EASTHAM, MA	03/28/14 14:15
L1406558-12	TRIP BLANK	EASTHAM, MA	03/28/14 00:00

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1406558
Report Date: 04/03/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406558
Report Date: 04/03/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406558
Report Date: 04/03/14

Case Narrative (continued)

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: Elizabeth Porta

Title: Technical Director/Representative

Date: 04/03/14

ORGANICS

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1406558
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406558-01	Date Collected:	03/28/14 09:05
Client ID:	ALSTON AVE_265	Date Received:	03/28/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 13:15		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	25		15-110

Project Name: EASTHAM DW
Lab Number: L1406558
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406558-03	Date Collected:	03/28/14 08:48
Client ID:	PTC-12_255 ALSTON INF	Date Received:	03/28/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 14:10		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	2.06		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1406558
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406558-04	Date Collected:	03/28/14 08:46
Client ID:	PTC-12_255 ALSTON MID	Date Received:	03/28/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 14:54		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.127	J	ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	22		15-110

Project Name: EASTHAM DW
Lab Number: L1406558
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406558-05	Date Collected:	03/28/14 08:44
Client ID:	PTC-12_255 ALSTON EFF	Date Received:	03/28/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 15:39		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1406558
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406558-06	Date Collected:	03/28/14 10:20
Client ID:	REDBERRY LN_045	Date Received:	03/28/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 16:24		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.105	J	ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1406558
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406558-08	Date Collected:	03/28/14 12:35
Client ID:	DEEPWOOD DR_065	Date Received:	03/28/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 17:09		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.297		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1406558
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406558-09	Date Collected:	03/28/14 12:35
Client ID:	DEEPWOOD DR_065 DUP	Date Received:	03/28/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/03/14 07:23
Analytical Date:	04/03/14 15:23		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.336		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	30		15-110

Project Name: EASTHAM DW
Lab Number: L1406558
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406558-10	Date Collected:	03/28/14 14:15
Client ID:	ALSTON AVE_080	Date Received:	03/28/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/31/14 11:24
Analytical Date:	04/01/14 12:21		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	27		15-110

Project Name: EASTHAM DW
Lab Number: L1406558
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406558-12	Date Collected:	03/28/14 00:00
Client ID:	TRIP BLANK	Date Received:	03/28/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 17:54		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.156	0.0781	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406558
Report Date: 04/03/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 03/31/14 01:21
Analyst: CM

Extraction Method: EPA 3510C
Extraction Date: 03/30/14 10:42

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01,03-06,08,12 Batch: WG678940-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406558
Report Date: 04/03/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 03/31/14 20:03
Analyst: CM

Extraction Method: EPA 3510C
Extraction Date: 03/31/14 11:24

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 10 Batch: WG679062-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	30		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406558
Report Date: 04/03/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 04/03/14 12:23
Analyst: CM

Extraction Method: EPA 3510C
Extraction Date: 04/03/14 07:23

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 09 Batch: WG679860-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	36		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1406558

Report Date: 04/03/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s):	01,03-06,08,12	Batch:	WG678940-2	WG678940-3			
1,4-Dioxane	102		104		40-140	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	28		31		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1406558

Report Date: 04/03/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 10 Batch: WG679062-2 WG679062-3								
1,4-Dioxane	101		105		40-140	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	28		26		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1406558

Report Date: 04/03/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 09 Batch: WG679860-2 WG679860-3								
1,4-Dioxane	104		106		40-140	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	34		37		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406558
Report Date: 04/03/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1406558-01A	Amber 500ml unpreserved	B	7	4.5	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-01B	Amber 500ml unpreserved	B	7	4.5	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-02A	Amber 500ml unpreserved	B	7	4.5	Y	Absent	HOLD(14)
L1406558-02B	Amber 500ml unpreserved	B	7	4.5	Y	Absent	HOLD(14)
L1406558-03A	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-03B	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-04A	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-04B	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-05A	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-05B	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-06A	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-06B	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-07A	Amber 500ml unpreserved	A	7	3.7	Y	Absent	HOLD(14)
L1406558-07B	Amber 500ml unpreserved	A	7	3.7	Y	Absent	HOLD(14)
L1406558-08A	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-08B	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-09A	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-09B	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-10A	Amber 1000ml unpreserved	B	7	4.5	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-10B	Amber 1000ml unpreserved	B	7	4.5	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-11A	Amber 1000ml unpreserved	B	7	4.5	Y	Absent	HOLD(14)
L1406558-11B	Amber 1000ml unpreserved	B	7	4.5	Y	Absent	HOLD(14)
L1406558-12A	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-12B	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1406558
Project Number:	2013-027	**Report Date:**	04/03/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1406558
Project Number:	2013-027	**Report Date:**	04/03/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1406558
Project Number:	2013-027	**Report Date:**	04/03/14

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised December 11, 2013

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 2

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:

ALPHA Job #: L1406558

Project Information

Project Name: Eastham DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: aboyd@esm-inc.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
8270-MCP CAM	0.15 UG/L FOR 1,4 DIOXANE, GW 1

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:

* please also email results to lflynn@esm-inc.com

Run duplicate samples (DUP) if 1,4 dioxane is detected above the RL (0.15 ug/L)

ANALYSIS

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

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270 SIM	Sample Specific Comments
01	ALSTON AVE_265	03/28/14	0905	W	MD	☒	
02	ALSTON AVE_265 DUP	03/28/14	0905	W	MD	☒	
03	PTC-12_255 Alston INF	03/28/14	0848	W	MD	☒	
04	PTC-12_255 Alston MID	03/28/14	0846	W	MD	☒	
05	PTC-12_255 Alston EFF	03/28/14	0844	W	MD	☒	
06	REDBERRY LN_045	03/28/14	1020	W	MD	☒	
07	REDBERRY LN_045 DUP	03/28/14	1020	W	MD	☒	
08	DEEPWOOD DR_065	3/28/14	1235	W	MD	☒	
09	DEEPWOOD DR_065 DUP	3/28/14	1235	W	MD	☒	
						☐	

Container Type	-	-	-	-	-	-	-	-	-	-	-	-
Preservative	-	-	-	-	-	-	-	-	-	-	-	-

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
	03/28/14		3/28/14 16:30

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.

CHAIN OF CUSTODY

PAGE 2 OF 2

ALPHA ANALYTICAL — World Class Chemistry

Date Rec'd in Lab:

ALPHA Job #: L1406558

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193

Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Project Information

Project Name: Eastham DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: aboyd@esm-inc.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
8270-MCP CAM	0.15 UG/L FOR 1,4 DIOXANE, GW 1

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:

* please also email results to lflynn@esm-inc.com

Run duplicate samples (DUP) if 1,4 dioxane is detected above the RL (0.15 ug/L)

ANALYSIS

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

TOTAL # BOTTLES

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270 SIM													Sample Specific Comments
70	ALSTON AVE_080	03/28/14	1415	W	MD	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
71	ALSTON AVE_080 DUP	03/28/14	1415	W	MD	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
72	TRIP BLANK					☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
Container Type						-	-	-	-	-	-	-	-	-	-	-	-		
Preservative						-	-	-	-	-	-	-	-	-	-	-	-		

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
	03/28/14		3/28/14 16:30

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.

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1407636	4/11/2014	drinking water	Yes	Yes	Yes	Yes	Yes	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
Walters Way_005	4/11/2014	L1407636-1	DW	8270
Walters Way_005 Dup	4/11/2014	L1407636-2	DW	8270
State Hwy_3440	4/11/2014	L1407636-3	DW	8270
State Hwy_3440 Dup	4/11/2014	L1407636-4	DW	not analyzed
Chokeberry Dr_060	4/11/2014	L1407636-5	DW	8270
Chokeberry Dr_060 Dup	4/11/2014	L1407636-6	DW	not analyzed
Trip Blank	4/11/2014	L1407636-7	DW	8270

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS) and LCS duplicate results were reviewed.

This report was deemed usable by Angela Boyd on 4/28/14.

ANALYTICAL REPORT

Lab Number:	L1407636
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	2013-027
Report Date:	04/18/14

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

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

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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407636
Report Date: 04/18/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1407636-01	WALTERS WAY_005	EASTHAM ,MA	04/11/14 09:30
L1407636-02	WALTERS WAY_005 DUP	EASTHAM ,MA	04/11/14 09:35
L1407636-03	STATE HWY_3440	EASTHAM ,MA	04/11/14 11:35
L1407636-04	STATE HWY_3440 DUP	EASTHAM ,MA	04/11/14 11:40
L1407636-05	CHOKEBERRY DR_060	EASTHAM ,MA	04/11/14 12:45
L1407636-06	CHOKEBERRY DR_060 DUP	EASTHAM ,MA	04/11/14 12:50
L1407636-07	TRIP BLANK	EASTHAM ,MA	04/11/14 00:00

Project Name: EASTHAM DW **Lab Number:** L1407636

Project Number: 2013-027 **Report Date:** 04/18/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1407636
Report Date: 04/18/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407636
Report Date: 04/18/14

Case Narrative (continued)

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: Elizabeth Porta

Title: Technical Director/Representative

Date: 04/18/14

ORGANICS

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1407636
Project Number: 2013-027
Report Date: 04/18/14

SAMPLE RESULTS

Lab ID:	L1407636-01	Date Collected:	04/11/14 09:30
Client ID:	WALTERS WAY_005	Date Received:	04/11/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/13/14 14:00
Analytical Date:	04/15/14 00:53		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.147		ug/l	0.142	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: EASTHAM DW
Lab Number: L1407636
Project Number: 2013-027
Report Date: 04/18/14

SAMPLE RESULTS

Lab ID:	L1407636-02	Date Collected:	04/11/14 09:35
Client ID:	WALTERS WAY_005 DUP	Date Received:	04/11/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/15/14 11:32
Analytical Date:	04/16/14 23:56		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: EASTHAM DW
Lab Number: L1407636
Project Number: 2013-027
Report Date: 04/18/14

SAMPLE RESULTS

Lab ID:	L1407636-03	Date Collected:	04/11/14 11:35
Client ID:	STATE HWY_3440	Date Received:	04/11/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/13/14 14:00
Analytical Date:	04/15/14 01:38		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.142	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	27		15-110

Project Name: EASTHAM DW
Lab Number: L1407636
Project Number: 2013-027
Report Date: 04/18/14

SAMPLE RESULTS

Lab ID:	L1407636-05	Date Collected:	04/11/14 12:45
Client ID:	CHOKEBERRY DR_060	Date Received:	04/11/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/13/14 14:00
Analytical Date:	04/15/14 02:23		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.142	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Project Name: EASTHAM DW
Lab Number: L1407636
Project Number: 2013-027
Report Date: 04/18/14

SAMPLE RESULTS

Lab ID:	L1407636-07	Date Collected:	04/11/14 00:00
Client ID:	TRIP BLANK	Date Received:	04/11/14
Sample Location:	EASTHAM ,MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/13/14 14:00
Analytical Date:	04/15/14 03:08		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.147	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407636
Report Date: 04/18/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 04/14/14 22:39
Analyst: CM

Extraction Method: EPA 3510C
Extraction Date: 04/13/14 14:00

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01,03,05,07 Batch: WG681926-1					
1,4-Dioxane	ND		ug/l	0.150	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407636
Report Date: 04/18/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 04/16/14 21:41
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 04/15/14 11:32

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 02 Batch: WG682338-1					
1,4-Dioxane	ND		ug/l	0.150	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	29		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1407636

Report Date: 04/18/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 01,03,05,07 Batch: WG681926-2 WG681926-3								
1,4-Dioxane	103		105		40-140	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	32		31		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1407636

Report Date: 04/18/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 02 Batch: WG682338-2 WG682338-3								
1,4-Dioxane	100		102		40-140	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	25		30		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407636
Report Date: 04/18/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1407636-01A	Amber 500ml unpreserved	A	7	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407636-01B	Amber 500ml unpreserved	A	7	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407636-02A	Amber 500ml unpreserved	A	7	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407636-02B	Amber 500ml unpreserved	A	7	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407636-03A	Amber 500ml unpreserved	A	7	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407636-03B	Amber 500ml unpreserved	A	7	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407636-04A	Amber 500ml unpreserved	A	7	5.2	Y	Absent	HOLD(14)
L1407636-04B	Amber 500ml unpreserved	A	7	5.2	Y	Absent	HOLD(14)
L1407636-05A	Amber 500ml unpreserved	A	7	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407636-05B	Amber 500ml unpreserved	A	7	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407636-06A	Amber 500ml unpreserved	A	7	5.2	Y	Absent	HOLD(14)
L1407636-06B	Amber 500ml unpreserved	A	7	5.2	Y	Absent	HOLD(14)
L1407636-07A	Amber 500ml unpreserved	A	7	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407636-07B	Amber 500ml unpreserved	A	7	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1407636
Project Number:	2013-027	**Report Date:**	04/18/14

GLOSSARY

Acronyms

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

Footnotes

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

Terms

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.
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.

Report Format: Data Usability Report

Project Name:	EASTHAM DW	**Lab Number:**	L1407636
Project Number:	2013-027	**Report Date:**	04/18/14

Data Qualifiers

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.

Report Format: Data Usability Report

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised April 15, 2014

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

Friday

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — World Class Chemistry

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:

ALPHA Job #: L1407636

Report Information — Data Deliverables

☐ FAX ☒ EMAIL

☐ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Project Information

Project Name: EASTHAM DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Managemen

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Regulatory Requirements/Report Limits

State/Fed Program	Criteria
MassDEP MCP -	GW-1

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:
email results to lflynn@esm-inc.com and aboyd@esm-inc.com

ANALYSIS

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

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270	524.2 VOC	TOTAL As	Sample Specific Comments
	WALTERS WAY_005	4/11/14	0930	W	EC	☒	☐	☐	
	WALTERS WAY_005 DUP	4/11/14	0935	W	EC	☒	☐	☐	
	STATE HWY_3440	4/11/14	1135	W	EC	☒	☐	☐	
	STATE HWY_3440 DUP	4/11/14	1140	W	EC	☒	☐	☐	
	CHOKEBERRY DR_060	4/11/14	1245	W	EC	☒	☐	☐	
	CHOKEBERRY DR_060 DUP	4/11/14	1250	W	EC	☒	☐	☐	
	~~ALSTON AVE_050~~	~~4/11/14~~		~~W~~		☒	☒	☐	EC
	~~ALSTON AVE_050 DUP~~	~~4/11/14~~		~~W~~		☒	☒	☐	EC
	TRIP BLANK			W		☒	☒	☐	
						☒	☐	☐	

Container Type	-	-	-	-	-	-	-	-	-	-	-	-
Preservative	-	-	-	-	-	-	-	-	-	-	-	-

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
	4/11/14 1510		4/11/14 15:10

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.

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1407787	4/14/2014	drinking water	Yes	No	Yes	Yes	No	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis	Sample ID	Date	Lab ID	Matrix	Analysis
Jason Dr_025	4/14/2014	L1407787-1	DW	8270	Alston Ave_050	4/14/2014	L1407787-9	DW	524.2, 8270
Jason Dr_025 Dup	4/14/2014	L1407787-2	DW	not analyzed	Alston Ave_050 Dup	4/14/2014	L1407787-10	DW	8270
Glacier Hills Rd_115	4/14/2014	L1407787-3	DW	8270	State Hwy_3280	4/14/2014	L1407787-11	DW	8270
Glacier Hills Rd_115 Dup	4/14/2014	L1407787-4	DW	not analyzed	State Hwy_3280 Dup	4/14/2014	L1407787-12	DW	8270
Glacier Hills Rd_145	4/14/2014	L1407787-5	DW	8270	Knowles St_050	4/14/2014	L1407787-13	DW	8270
Glacier Hills Rd_145 Dup	4/14/2014	L1407787-6	DW	not analyzed	Knowles St_050 Dup	4/14/2014	L1407787-14	DW	not analyzed
Trip Blank	4/14/2014	L1407787-7	DW	8270	Mary Chase Rd_155	4/14/2014	L1407787-15	DW	8270
Trip Blank	4/14/2014	L1407787-8	DW	524.2, 8270					

Lab presumptive certainty was not achieved because the analytical method specified in the CAM protocol was not followed for volatile organics (524.2 is a non-CAM method). Drinking water methodology was used instead.

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS), LCS duplicate, lab duplicate and matrix spike results were reviewed.

This report was deemed usable by Angela Boyd on 6/13/14.

ANALYTICAL REPORT

Lab Number:	L1407787
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	2013-027
Report Date:	06/06/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1407787-01	JASON DR_025	EASTHAM MA	04/14/14 11:35
L1407787-02	JASON DR_025 DUP	EASTHAM MA	04/14/14 11:40
L1407787-03	GLACIER HILLS RD_115	EASTHAM MA	04/14/14 13:30
L1407787-04	GLACIER HILLS RD_115 DUP	EASTHAM MA	04/14/14 13:35
L1407787-05	GLACIER HILLS RD_145	EASTHAM MA	04/14/14 14:25
L1407787-06	GLACIER HILLS RD_145 DUP	EASTHAM MA	04/14/14 14:30
L1407787-07	TRIP BLANK	EASTHAM MA	04/14/14 00:00
L1407787-08	TRIP BLANK	EASTHAM MA	04/14/14 00:00
L1407787-09	ALSTON AVE_050	EASTHAM MA	04/14/14 10:45
L1407787-10	ALSTON AVE_050 DUP	EASTHAM MA	04/14/14 10:50
L1407787-11	STATE HWY_3280	EASTHAM MA	04/14/14 11:55
L1407787-12	STATE HWY_3280 DUP	EASTHAM MA	04/14/14 12:00
L1407787-13	KNOWLES ST_050	EASTHAM MA	04/14/14 13:20
L1407787-14	KNOWLES ST_050 DUP	EASTHAM MA	04/14/14 13:25
L1407787-15	MARY CHASE RD_155	EASTHAM MA	04/14/14 14:20

Project Name:	EASTHAM DW	**Lab Number:**	L1407787
Project Number:	2013-027	**Report Date:**	06/06/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	NO
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name:	EASTHAM DW	**Lab Number:**	L1407787
Project Number:	2013-027	**Report Date:**	06/06/14

Case Narrative (continued)

Report Submission

This report replaces the report issued on April 21, 2014. The MCP questions and the report format have been revised. Please note, Method 524 is not an approved MCP CAM Method, and TIC evaluation was not performed.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

In reference to question B:

At the client's request, the analytical method specified in the CAM protocol was not followed.

Semivolatile Organics by SIM

In reference to question I:

All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

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: Lisa Westerlind

Title: Technical Director/Representative Date: 06/06/14

ORGANICS

VOLATILES

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1407787
Report Date: 06/06/14

SAMPLE RESULTS

Lab ID: L1407787-08
Client ID: TRIP BLANK
Sample Location: EASTHAM MA
Matrix: Drinking Water
Analytical Method: 16,524.2
Analytical Date: 04/17/14 11:46
Analyst: GT

Date Collected: 04/14/14 00:00
Date Received: 04/14/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	ND		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1407787

Project Number: 2013-027 **Report Date:** 06/06/14

SAMPLE RESULTS

Lab ID: L1407787-08 Date Collected: 04/14/14 00:00

Client ID: TRIP BLANK Date Received: 04/14/14

Sample Location: EASTHAM MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	98		80-120
4-Bromofluorobenzene	98		80-120

Project Name: EASTHAM DW
Lab Number: L1407787
Project Number: 2013-027
Report Date: 06/06/14

SAMPLE RESULTS

Lab ID: L1407787-09
Client ID: ALSTON AVE_050
Sample Location: EASTHAM MA
Matrix: Drinking Water
Analytical Method: 16,524.2
Analytical Date: 04/16/14 16:58
Analyst: GT

Date Collected: 04/14/14 10:45
Date Received: 04/14/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	ND		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1407787

Project Number: 2013-027 **Report Date:** 06/06/14

SAMPLE RESULTS

Lab ID: L1407787-09 Date Collected: 04/14/14 10:45

Client ID: ALSTON AVE_050 Date Received: 04/14/14

Sample Location: EASTHAM MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	0.13	J	ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	105		80-120
4-Bromofluorobenzene	98		80-120

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1407787
Report Date: 06/06/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 04/16/14 13:10
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09 Batch: WG682991-2					
Methylene chloride	ND		ug/l	0.50	0.15
1,1-Dichloroethane	ND		ug/l	0.50	0.09
Chloroform	ND		ug/l	0.50	0.05
Carbon tetrachloride	ND		ug/l	0.50	0.10
1,2-Dichloropropane	ND		ug/l	0.50	0.09
Dibromochloromethane	ND		ug/l	0.50	0.08
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12
Tetrachloroethene	ND		ug/l	0.50	0.09
Chlorobenzene	ND		ug/l	0.50	0.08
Trichlorofluoromethane	ND		ug/l	0.50	0.11
1,2-Dichloroethane	ND		ug/l	0.50	0.08
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08
Bromodichloromethane	ND		ug/l	0.50	0.05
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10
Bromoform	ND		ug/l	0.50	0.09
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09
Benzene	ND		ug/l	0.50	0.09
Toluene	ND		ug/l	0.50	0.12
Ethylbenzene	ND		ug/l	0.50	0.06
p/m-Xylene	ND		ug/l	0.50	0.12
Chloromethane	ND		ug/l	0.50	0.15
Bromomethane	ND		ug/l	0.50	0.13
Vinyl chloride	ND		ug/l	0.50	0.08
Chloroethane	ND		ug/l	0.50	0.12
1,1-Dichloroethene	ND		ug/l	0.50	0.06
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11
Trichloroethene	ND		ug/l	0.50	0.09
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1407787
Report Date: 06/06/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 04/16/14 13:10
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09 Batch: WG682991-2					
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05
Styrene	ND		ug/l	0.50	0.06
o-Xylene	ND		ug/l	0.50	0.09
1,1-Dichloropropene	ND		ug/l	0.50	0.11
2,2-Dichloropropane	ND		ug/l	0.50	0.11
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11
Bromochloromethane	ND		ug/l	0.50	0.10
n-Butylbenzene	ND		ug/l	0.50	0.06
Dichlorodifluoromethane	ND		ug/l	0.50	0.10
Hexachlorobutadiene	ND		ug/l	0.50	0.11
Isopropylbenzene	ND		ug/l	0.50	0.08
p-Isopropyltoluene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.50	0.06
n-Propylbenzene	ND		ug/l	0.50	0.08
sec-Butylbenzene	ND		ug/l	0.50	0.06
tert-Butylbenzene	ND		ug/l	0.50	0.09
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10
Bromobenzene	ND		ug/l	0.50	0.09
o-Chlorotoluene	ND		ug/l	0.50	0.10
p-Chlorotoluene	ND		ug/l	0.50	0.08
Dibromomethane	ND		ug/l	0.50	0.09
1,2-Dibromoethane	ND		ug/l	0.50	0.06
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16
1,3-Dichloropropane	ND		ug/l	0.50	0.11
Methyl tert butyl ether	ND		ug/l	0.50	0.06
Xylenes, Total[1]	ND		ug/l	0.50	0.09

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 04/16/14 13:10
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 09 Batch: WG682991-2					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	95		80-120
4-Bromofluorobenzene	99		80-120

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 04/17/14 07:22
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG682991-6					
Methylene chloride	ND		ug/l	0.50	0.15
1,1-Dichloroethane	ND		ug/l	0.50	0.09
Chloroform	ND		ug/l	0.50	0.05
Carbon tetrachloride	ND		ug/l	0.50	0.10
1,2-Dichloropropane	ND		ug/l	0.50	0.09
Dibromochloromethane	ND		ug/l	0.50	0.08
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12
Tetrachloroethene	ND		ug/l	0.50	0.09
Chlorobenzene	ND		ug/l	0.50	0.08
Trichlorofluoromethane	ND		ug/l	0.50	0.11
1,2-Dichloroethane	ND		ug/l	0.50	0.08
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08
Bromodichloromethane	ND		ug/l	0.50	0.05
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10
Bromoform	ND		ug/l	0.50	0.09
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09
Benzene	ND		ug/l	0.50	0.09
Toluene	ND		ug/l	0.50	0.12
Ethylbenzene	ND		ug/l	0.50	0.06
p/m-Xylene	ND		ug/l	0.50	0.12
Chloromethane	ND		ug/l	0.50	0.15
Bromomethane	ND		ug/l	0.50	0.13
Vinyl chloride	ND		ug/l	0.50	0.08
Chloroethane	ND		ug/l	0.50	0.12
1,1-Dichloroethene	ND		ug/l	0.50	0.06
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11
Trichloroethene	ND		ug/l	0.50	0.09
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1407787
Report Date: 06/06/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 04/17/14 07:22
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG682991-6					
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05
Styrene	ND		ug/l	0.50	0.06
o-Xylene	ND		ug/l	0.50	0.09
1,1-Dichloropropene	ND		ug/l	0.50	0.11
2,2-Dichloropropane	ND		ug/l	0.50	0.11
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11
Bromochloromethane	ND		ug/l	0.50	0.10
n-Butylbenzene	ND		ug/l	0.50	0.06
Dichlorodifluoromethane	ND		ug/l	0.50	0.10
Hexachlorobutadiene	ND		ug/l	0.50	0.11
Isopropylbenzene	ND		ug/l	0.50	0.08
p-Isopropyltoluene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.50	0.06
n-Propylbenzene	ND		ug/l	0.50	0.08
sec-Butylbenzene	ND		ug/l	0.50	0.06
tert-Butylbenzene	ND		ug/l	0.50	0.09
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10
Bromobenzene	ND		ug/l	0.50	0.09
o-Chlorotoluene	ND		ug/l	0.50	0.10
p-Chlorotoluene	ND		ug/l	0.50	0.08
Dibromomethane	ND		ug/l	0.50	0.09
1,2-Dibromoethane	ND		ug/l	0.50	0.06
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16
1,3-Dichloropropane	ND		ug/l	0.50	0.11
Methyl tert butyl ether	ND		ug/l	0.50	0.06
Xylenes, Total[1]	ND		ug/l	0.50	0.09

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 04/17/14 07:22
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 08 Batch: WG682991-6					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	107		80-120
4-Bromofluorobenzene	101		80-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG682991-1								
Methylene chloride	94		-		70-130	-		20
1,1-Dichloroethane	92		-		70-130	-		20
Chloroform	92		-		70-130	-		20
Carbon tetrachloride	92		-		70-130	-		20
1,2-Dichloropropane	96		-		70-130	-		20
Dibromochloromethane	88		-		70-130	-		20
1,1,2-Trichloroethane	104		-		70-130	-		20
Tetrachloroethene	103		-		70-130	-		20
Chlorobenzene	98		-		70-130	-		20
Trichlorofluoromethane	92		-		70-130	-		20
1,2-Dichloroethane	94		-		70-130	-		20
1,1,1-Trichloroethane	94		-		70-130	-		20
Bromodichloromethane	87		-		70-130	-		20
trans-1,3-Dichloropropene	96		-		70-130	-		20
cis-1,3-Dichloropropene	96		-		70-130	-		20
Bromoform	89		-		70-130	-		20
1,1,2,2-Tetrachloroethane	91		-		70-130	-		20
Benzene	102		-		70-130	-		20
Toluene	96		-		70-130	-		20
Ethylbenzene	105		-		70-130	-		20
p/m-Xylene	99		-		70-130	-		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG682991-1								
Chloromethane	92		-		70-130	-		20
Bromomethane	94		-		70-130	-		20
Vinyl chloride	97		-		70-130	-		20
Chloroethane	99		-		70-130	-		20
1,1-Dichloroethene	88		-		70-130	-		20
trans-1,2-Dichloroethene	94		-		70-130	-		20
cis-1,2-Dichloroethene	94		-		70-130	-		20
Trichloroethene	91		-		70-130	-		20
1,2-Dichlorobenzene	107		-		70-130	-		20
1,3-Dichlorobenzene	100		-		70-130	-		20
1,4-Dichlorobenzene	104		-		70-130	-		20
Styrene	101		-		70-130	-		20
o-Xylene	103		-		70-130	-		20
1,1-Dichloropropene	95		-		70-130	-		20
2,2-Dichloropropane	94		-		70-130	-		20
1,1,1,2-Tetrachloroethane	96		-		70-130	-		20
1,2,3-Trichloropropane	92		-		70-130	-		20
Bromochloromethane	91		-		70-130	-		20
n-Butylbenzene	106		-		70-130	-		20
Dichlorodifluoromethane	93		-		70-130	-		20
Hexachlorobutadiene	100		-		70-130	-		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG682991-1								
Isopropylbenzene	103		-		70-130	-		20
p-Isopropyltoluene	101		-		70-130	-		20
Naphthalene	94		-		70-130	-		20
n-Propylbenzene	102		-		70-130	-		20
sec-Butylbenzene	100		-		70-130	-		20
tert-Butylbenzene	102		-		70-130	-		20
1,2,3-Trichlorobenzene	107		-		70-130	-		20
1,2,4-Trichlorobenzene	104		-		70-130	-		20
1,2,4-Trimethylbenzene	108		-		70-130	-		20
1,3,5-Trimethylbenzene	106		-		70-130	-		20
Bromobenzene	105		-		70-130	-		20
o-Chlorotoluene	98		-		70-130	-		20
p-Chlorotoluene	103		-		70-130	-		20
Dibromomethane	92		-		70-130	-		20
1,2-Dibromoethane	97		-		70-130	-		20
1,2-Dibromo-3-chloropropane	101		-		70-130	-		20
1,3-Dichloropropane	96		-		70-130	-		20
Methyl tert butyl ether	94		-		70-130	-		20
tert-Butyl Alcohol	95		-		70-130	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1407787

Report Date: 06/06/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 09 Batch: WG682991-1								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichlorobenzene-d4	98				80-120
4-Bromofluorobenzene	108				80-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG682991-5								
Methylene chloride	83		-		70-130	-		20
1,1-Dichloroethane	84		-		70-130	-		20
Chloroform	89		-		70-130	-		20
Carbon tetrachloride	92		-		70-130	-		20
1,2-Dichloropropane	87		-		70-130	-		20
Dibromochloromethane	91		-		70-130	-		20
1,1,2-Trichloroethane	87		-		70-130	-		20
Tetrachloroethene	98		-		70-130	-		20
Chlorobenzene	90		-		70-130	-		20
Trichlorofluoromethane	100		-		70-130	-		20
1,2-Dichloroethane	92		-		70-130	-		20
1,1,1-Trichloroethane	96		-		70-130	-		20
Bromodichloromethane	88		-		70-130	-		20
trans-1,3-Dichloropropene	86		-		70-130	-		20
cis-1,3-Dichloropropene	83		-		70-130	-		20
Bromoform	90		-		70-130	-		20
1,1,2,2-Tetrachloroethane	81		-		70-130	-		20
Benzene	92		-		70-130	-		20
Toluene	89		-		70-130	-		20
Ethylbenzene	87		-		70-130	-		20
p/m-Xylene	91		-		70-130	-		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG682991-5								
Chloromethane	92		-		70-130	-		20
Bromomethane	98		-		70-130	-		20
Vinyl chloride	86		-		70-130	-		20
Chloroethane	85		-		70-130	-		20
1,1-Dichloroethene	97		-		70-130	-		20
trans-1,2-Dichloroethene	85		-		70-130	-		20
cis-1,2-Dichloroethene	87		-		70-130	-		20
Trichloroethene	86		-		70-130	-		20
1,2-Dichlorobenzene	99		-		70-130	-		20
1,3-Dichlorobenzene	93		-		70-130	-		20
1,4-Dichlorobenzene	98		-		70-130	-		20
Styrene	94		-		70-130	-		20
o-Xylene	92		-		70-130	-		20
1,1-Dichloropropene	97		-		70-130	-		20
2,2-Dichloropropane	98		-		70-130	-		20
1,1,1,2-Tetrachloroethane	89		-		70-130	-		20
1,2,3-Trichloropropane	84		-		70-130	-		20
Bromochloromethane	81		-		70-130	-		20
n-Butylbenzene	92		-		70-130	-		20
Dichlorodifluoromethane	94		-		70-130	-		20
Hexachlorobutadiene	88		-		70-130	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1407787

Report Date: 06/06/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG682991-5								
Isopropylbenzene	90		-		70-130	-		20
p-Isopropyltoluene	91		-		70-130	-		20
Naphthalene	91		-		70-130	-		20
n-Propylbenzene	90		-		70-130	-		20
sec-Butylbenzene	92		-		70-130	-		20
tert-Butylbenzene	90		-		70-130	-		20
1,2,3-Trichlorobenzene	102		-		70-130	-		20
1,2,4-Trichlorobenzene	91		-		70-130	-		20
1,2,4-Trimethylbenzene	93		-		70-130	-		20
1,3,5-Trimethylbenzene	93		-		70-130	-		20
Bromobenzene	93		-		70-130	-		20
o-Chlorotoluene	88		-		70-130	-		20
p-Chlorotoluene	96		-		70-130	-		20
Dibromomethane	99		-		70-130	-		20
1,2-Dibromoethane	92		-		70-130	-		20
1,2-Dibromo-3-chloropropane	100		-		70-130	-		20
1,3-Dichloropropane	94		-		70-130	-		20
Methyl tert butyl ether	84		-		70-130	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1407787

Report Date: 06/06/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08 Batch: WG682991-5								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichlorobenzene-d4	100				80-120
4-Bromofluorobenzene	105				80-120

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-09 QC Batch ID: WG682991-4 QC Sample: L1407692-02 Client ID: MS Sample												
Methylene chloride	ND	4	3.9	97		-	-		70-130	-		20
1,1-Dichloroethane	ND	4	4.0	100		-	-		70-130	-		20
Chloroform	ND	4	4.2	104		-	-		70-130	-		20
Carbon tetrachloride	ND	4	4.3	108		-	-		70-130	-		20
1,2-Dichloropropane	ND	4	3.9	98		-	-		70-130	-		20
Dibromochloromethane	ND	4	3.9	97		-	-		70-130	-		20
1,1,2-Trichloroethane	ND	4	4.0	101		-	-		70-130	-		20
Tetrachloroethene	ND	4	4.3	108		-	-		70-130	-		20
Chlorobenzene	ND	4	3.8	95		-	-		70-130	-		20
Trichlorofluoromethane	ND	4	4.4	111		-	-		70-130	-		20
1,2-Dichloroethane	ND	4	3.9	98		-	-		70-130	-		20
1,1,1-Trichloroethane	ND	4	4.5	112		-	-		70-130	-		20
Bromodichloromethane	ND	4	3.9	97		-	-		70-130	-		20
trans-1,3-Dichloropropene	ND	4	3.7	92		-	-		70-130	-		20
cis-1,3-Dichloropropene	ND	4	3.9	99		-	-		70-130	-		20
Bromoform	ND	4	3.8	94		-	-		70-130	-		20
1,1,2,2-Tetrachloroethane	ND	4	4.0	100		-	-		70-130	-		20
Benzene	ND	4	4.0	101		-	-		70-130	-		20
Toluene	ND	4	4.1	102		-	-		70-130	-		20
Ethylbenzene	ND	4	4.1	103		-	-		70-130	-		20
p/m-Xylene	ND	8	7.9	99		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-09 QC Batch ID: WG682991-4 QC Sample: L1407692-02 Client ID: MS Sample												
Chloromethane	ND	4	3.8	96		-	-		70-130	-		20
Bromomethane	ND	4	3.4	84		-	-		70-130	-		20
Vinyl chloride	ND	4	4.4	109		-	-		70-130	-		20
Chloroethane	ND	4	4.5	113		-	-		70-130	-		20
1,1-Dichloroethene	ND	4	4.3	109		-	-		70-130	-		20
trans-1,2-Dichloroethene	ND	4	4.3	107		-	-		70-130	-		20
cis-1,2-Dichloroethene	ND	4	3.9	98		-	-		70-130	-		20
Trichloroethene	ND	4	4.2	106		-	-		70-130	-		20
1,2-Dichlorobenzene	ND	4	4.0	101		-	-		70-130	-		20
1,3-Dichlorobenzene	ND	4	3.8	96		-	-		70-130	-		20
1,4-Dichlorobenzene	ND	4	3.9	98		-	-		70-130	-		20
Styrene	ND	4	4.0	101		-	-		70-130	-		20
o-Xylene	ND	4	4.0	101		-	-		70-130	-		20
1,1-Dichloropropene	ND	4	4.3	108		-	-		70-130	-		20
2,2-Dichloropropane	ND	4	4.3	107		-	-		70-130	-		20
1,1,1,2-Tetrachloroethane	ND	4	3.9	98		-	-		70-130	-		20
1,2,3-Trichloropropane	ND	4	4.1	103		-	-		70-130	-		20
Bromochloromethane	ND	4	3.5	88		-	-		70-130	-		20
n-Butylbenzene	ND	4	3.8	96		-	-		70-130	-		20
Dichlorodifluoromethane	ND	4	4.4	110		-	-		70-130	-		20
Hexachlorobutadiene	ND	4	3.9	97		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-09 QC Batch ID: WG682991-4 QC Sample: L1407692-02 Client ID: MS Sample												
Isopropylbenzene	ND	4	3.9	98		-	-		70-130	-		20
p-Isopropyltoluene	ND	4	4.2	104		-	-		70-130	-		20
Naphthalene	0.13J	4	4.0	100		-	-		70-130	-		20
n-Propylbenzene	ND	4	4.1	102		-	-		70-130	-		20
sec-Butylbenzene	ND	4	4.0	100		-	-		70-130	-		20
tert-Butylbenzene	ND	4	4.1	102		-	-		70-130	-		20
1,2,3-Trichlorobenzene	ND	4	4.0	100		-	-		70-130	-		20
1,2,4-Trichlorobenzene	ND	4	3.9	97		-	-		70-130	-		20
1,2,4-Trimethylbenzene	ND	4	4.1	102		-	-		70-130	-		20
1,3,5-Trimethylbenzene	ND	4	4.0	100		-	-		70-130	-		20
Bromobenzene	ND	4	3.9	98		-	-		70-130	-		20
o-Chlorotoluene	ND	4	3.8	96		-	-		70-130	-		20
p-Chlorotoluene	ND	4	4.0	100		-	-		70-130	-		20
Dibromomethane	ND	4	4.0	99		-	-		70-130	-		20
1,2-Dibromoethane	ND	4	3.8	96		-	-		70-130	-		20
1,2-Dibromo-3-chloropropane	ND	4	3.9	97		-	-		70-130	-		20
1,3-Dichloropropane	ND	4	4.0	100		-	-		70-130	-		20
Methyl tert butyl ether	ND	4	3.9	97		-	-		70-130	-		20
tert-Butyl Alcohol	ND	20	21J	105		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-09 QC Batch ID: WG682991-4 QC Sample: L1407692-02 Client ID: MS Sample												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	100				80-120
4-Bromofluorobenzene	98				80-120

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-09 QC Batch ID: WG682991-3 QC Sample: L1407692-01 Client ID: DUP Sample						
Methylene chloride	ND	ND	ug/l	NC		20
1,1-Dichloroethane	ND	ND	ug/l	NC		20
Chloroform	ND	ND	ug/l	NC		20
Carbon tetrachloride	ND	ND	ug/l	NC		20
1,2-Dichloropropane	ND	ND	ug/l	NC		20
Dibromochloromethane	ND	ND	ug/l	NC		20
1,1,2-Trichloroethane	ND	ND	ug/l	NC		20
Tetrachloroethene	ND	ND	ug/l	NC		20
Chlorobenzene	ND	ND	ug/l	NC		20
Trichlorofluoromethane	ND	ND	ug/l	NC		20
1,2-Dichloroethane	ND	ND	ug/l	NC		20
1,1,1-Trichloroethane	ND	ND	ug/l	NC		20
Bromodichloromethane	ND	ND	ug/l	NC		20
trans-1,3-Dichloropropene	ND	ND	ug/l	NC		20
cis-1,3-Dichloropropene	ND	ND	ug/l	NC		20
Bromoform	ND	ND	ug/l	NC		20
1,1,2,2-Tetrachloroethane	ND	ND	ug/l	NC		20
Benzene	ND	ND	ug/l	NC		20
Toluene	ND	ND	ug/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-09 QC Batch ID: WG682991-3 QC Sample: L1407692-01 Client ID: DUP Sample					
Ethylbenzene	ND	ND	ug/l	NC	20
p/m-Xylene	ND	ND	ug/l	NC	20
Chloromethane	ND	ND	ug/l	NC	20
Bromomethane	ND	ND	ug/l	NC	20
Vinyl chloride	ND	ND	ug/l	NC	20
Chloroethane	ND	ND	ug/l	NC	20
1,1-Dichloroethene	ND	ND	ug/l	NC	20
trans-1,2-Dichloroethene	ND	ND	ug/l	NC	20
cis-1,2-Dichloroethene	ND	ND	ug/l	NC	20
Trichloroethene	ND	ND	ug/l	NC	20
1,2-Dichlorobenzene	ND	ND	ug/l	NC	20
1,3-Dichlorobenzene	ND	ND	ug/l	NC	20
1,4-Dichlorobenzene	ND	ND	ug/l	NC	20
Styrene	ND	ND	ug/l	NC	20
o-Xylene	ND	ND	ug/l	NC	20
1,1-Dichloropropene	ND	ND	ug/l	NC	20
2,2-Dichloropropane	ND	ND	ug/l	NC	20
1,1,1,2-Tetrachloroethane	ND	ND	ug/l	NC	20
1,2,3-Trichloropropane	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-09 QC Batch ID: WG682991-3 QC Sample: L1407692-01 Client ID: DUP Sample					
Bromochloromethane	ND	ND	ug/l	NC	20
n-Butylbenzene	ND	ND	ug/l	NC	20
Dichlorodifluoromethane	ND	ND	ug/l	NC	20
Hexachlorobutadiene	ND	ND	ug/l	NC	20
Isopropylbenzene	ND	ND	ug/l	NC	20
p-Isopropyltoluene	ND	ND	ug/l	NC	20
Naphthalene	ND	ND	ug/l	NC	20
n-Propylbenzene	ND	ND	ug/l	NC	20
sec-Butylbenzene	ND	ND	ug/l	NC	20
tert-Butylbenzene	ND	ND	ug/l	NC	20
1,2,3-Trichlorobenzene	ND	ND	ug/l	NC	20
1,2,4-Trichlorobenzene	ND	ND	ug/l	NC	20
1,2,4-Trimethylbenzene	ND	ND	ug/l	NC	20
1,3,5-Trimethylbenzene	ND	ND	ug/l	NC	20
Bromobenzene	ND	ND	ug/l	NC	20
o-Chlorotoluene	ND	ND	ug/l	NC	20
p-Chlorotoluene	ND	ND	ug/l	NC	20
Dibromomethane	ND	ND	ug/l	NC	20
1,2-Dibromoethane	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 08-09 QC Batch ID: WG682991-3 QC Sample: L1407692-01 Client ID: DUP Sample					
1,2-Dibromo-3-chloropropane	ND	ND	ug/l	NC	20
1,3-Dichloropropane	ND	ND	ug/l	NC	20
Methyl tert butyl ether	ND	ND	ug/l	NC	20
tert-Butyl Alcohol	ND	ND	ug/l	NC	20
Xylene (Total)[1]	ND	ND	ug/l	NC	20

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	101		99		80-120
4-Bromofluorobenzene	97		105		80-120

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1407787
Project Number: 2013-027
Report Date: 06/06/14

SAMPLE RESULTS

Lab ID:	L1407787-01	Date Collected:	04/14/14 11:35
Client ID:	JASON DR_025	Date Received:	04/14/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/15/14 11:32
Analytical Date:	04/17/14 00:41		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.141	J	ug/l	0.147	0.0735	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	25		15-110

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1407787
Report Date: 06/06/14

SAMPLE RESULTS

Lab ID:	L1407787-03	Date Collected:	04/14/14 13:30
Client ID:	GLACIER HILLS RD_115	Date Received:	04/14/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/15/14 11:32
Analytical Date:	04/17/14 01:27		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1407787
Project Number: 2013-027
Report Date: 06/06/14

SAMPLE RESULTS

Lab ID:	L1407787-05	Date Collected:	04/14/14 14:25
Client ID:	GLACIER HILLS RD_145	Date Received:	04/14/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/15/14 11:32
Analytical Date:	04/17/14 02:12		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.0832	J	ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1407787
Report Date: 06/06/14

SAMPLE RESULTS

Lab ID:	L1407787-07	Date Collected:	04/14/14 00:00
Client ID:	TRIP BLANK	Date Received:	04/14/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/15/14 11:32
Analytical Date:	04/17/14 02:57		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.156	0.0781	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	31		15-110

Project Name: EASTHAM DW
Lab Number: L1407787
Project Number: 2013-027
Report Date: 06/06/14

SAMPLE RESULTS

Lab ID:	L1407787-08	Date Collected:	04/14/14 00:00
Client ID:	TRIP BLANK	Date Received:	04/14/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/15/14 11:32
Analytical Date:	04/17/14 03:41		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.148	0.0738	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	19		15-110

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1407787
Report Date: 06/06/14

SAMPLE RESULTS

Lab ID:	L1407787-09	Date Collected:	04/14/14 10:45
Client ID:	ALSTON AVE_050	Date Received:	04/14/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/15/14 11:32
Analytical Date:	04/17/14 04:26		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.218		ug/l	0.146	0.0728	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: EASTHAM DW
Lab Number: L1407787
Project Number: 2013-027
Report Date: 06/06/14

SAMPLE RESULTS

Lab ID:	L1407787-10	Date Collected:	04/14/14 10:50
Client ID:	ALSTON AVE_050 DUP	Date Received:	04/14/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/17/14 14:59
Analytical Date:	04/18/14 13:37		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.210		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: EASTHAM DW
Lab Number: L1407787
Project Number: 2013-027
Report Date: 06/06/14

SAMPLE RESULTS

Lab ID:	L1407787-11	Date Collected:	04/14/14 11:55
Client ID:	STATE HWY_3280	Date Received:	04/14/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/15/14 11:32
Analytical Date:	04/17/14 05:11		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.248		ug/l	0.146	0.0728	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1407787
Project Number: 2013-027
Report Date: 06/06/14

SAMPLE RESULTS

Lab ID:	L1407787-12	Date Collected:	04/14/14 12:00
Client ID:	STATE HWY_3280 DUP	Date Received:	04/14/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/17/14 14:59
Analytical Date:	04/18/14 14:21		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.198		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1407787
Report Date: 06/06/14

SAMPLE RESULTS

Lab ID:	L1407787-13	Date Collected:	04/14/14 13:20
Client ID:	KNOWLES ST_050	Date Received:	04/14/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/15/14 11:32
Analytical Date:	04/17/14 05:57		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.111	J	ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Project Name: EASTHAM DW
Lab Number: L1407787
Project Number: 2013-027
Report Date: 06/06/14

SAMPLE RESULTS

Lab ID:	L1407787-15	Date Collected:	04/14/14 14:20
Client ID:	MARY CHASE RD_155	Date Received:	04/14/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/15/14 11:32
Analytical Date:	04/17/14 06:42		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.145	0.0724	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 04/16/14 21:41
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 04/15/14 11:32

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01,03,05,07-09,11,13,15 Batch: WG682338-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	29		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 04/18/14 11:23
Analyst: CM

Extraction Method: EPA 3510C
Extraction Date: 04/17/14 14:59

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 10,12 Batch: WG683065-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	36		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1407787

Report Date: 06/06/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s):	01,03,05,07-09,11,13,15	Batch:	WG682338-2	WG682338-3			
1,4-Dioxane	100		102		40-140	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	25		30		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1407787

Report Date: 06/06/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 10,12 Batch: WG683065-2 WG683065-3								
1,4-Dioxane	101		102		40-140	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	38		39		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1407787-01A	Amber 500ml unpreserved	B	8	12.8	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-01B	Amber 500ml unpreserved	B	8	12.8	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-02A	Amber 500ml unpreserved	B	8	12.8	Y	Absent	HOLD(14)
L1407787-02B	Amber 500ml unpreserved	B	8	12.8	Y	Absent	HOLD(14)
L1407787-03A	Amber 500ml unpreserved	B	8	12.8	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-03B	Amber 500ml unpreserved	B	8	12.8	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-04A	Amber 500ml unpreserved	B	8	12.8	Y	Absent	HOLD(14)
L1407787-04B	Amber 500ml unpreserved	B	8	12.8	Y	Absent	HOLD(14)
L1407787-05A	Amber 500ml unpreserved	B	8	12.8	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-05B	Amber 500ml unpreserved	B	8	12.8	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-06A	Amber 500ml unpreserved	B	8	12.8	Y	Absent	HOLD(14)
L1407787-06B	Amber 500ml unpreserved	B	8	12.8	Y	Absent	HOLD(14)
L1407787-07A	Amber 500ml unpreserved	B	8	12.8	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-07B	Amber 500ml unpreserved	B	8	12.8	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-08A	Amber 500ml unpreserved	A	8	15.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-08B	Amber 500ml unpreserved	A	8	15.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-08C	Vial Ascorbic Acid/HCl preserved	A	N/A	15.2	Y	Absent	524.2(14)
L1407787-08D	Vial Ascorbic Acid/HCl preserved	A	N/A	15.2	Y	Absent	524.2(14)
L1407787-09A	Amber 500ml unpreserved	A	8	15.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-09B	Amber 500ml unpreserved	A	8	15.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-09C	Vial Ascorbic Acid/HCl preserved	A	N/A	15.2	Y	Absent	524.2(14)
L1407787-09D	Vial Ascorbic Acid/HCl preserved	A	N/A	15.2	Y	Absent	524.2(14)
L1407787-10A	Amber 500ml unpreserved	A	8	15.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-10B	Amber 500ml unpreserved	A	8	15.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-10C	Vial Ascorbic Acid/HCl preserved	A	N/A	15.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-10D	Vial Ascorbic Acid/HCl preserved	A	N/A	15.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1407787
Report Date: 06/06/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1407787-11A	Amber 500ml unpreserved	A	8	15.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-11B	Amber 500ml unpreserved	A	8	15.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-12A	Amber 500ml unpreserved	A	8	15.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-12B	Amber 500ml unpreserved	A	8	15.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-13A	Amber 500ml unpreserved	A	8	15.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-13B	Amber 500ml unpreserved	A	8	15.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-14A	Amber 500ml unpreserved	A	8	15.2	Y	Absent	HOLD(14)
L1407787-14B	Amber 500ml unpreserved	A	8	15.2	Y	Absent	HOLD(14)
L1407787-15A	Amber 500ml unpreserved	A	8	15.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1407787-15B	Amber 500ml unpreserved	A	8	15.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1407787
Project Number:	2013-027	**Report Date:**	06/06/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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

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

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1407787
Project Number:	2013-027	**Report Date:**	06/06/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1407787
Project Number:	2013-027	**Report Date:**	06/06/14

REFERENCES

16 Methods for the Determination of Organic Compounds in Drinking Water - Supplement II. EPA/600/R-92/129, August 1992.

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised April 15, 2014

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 2

ALPHA ANALYTICAL — World Class Chemistry

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: 4/14/14

ALPHA Job #: L1407787

Project Information

Project Name: EASTHAM DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Managemen

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: lflynn@esm-inc.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
MassDEP MCP -	GW-1

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:

email results to lflynn@esm-inc.com and aboyd@esm-inc.com
please run the duplicate samples if there are detections above the RL.

ANALYSIS

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

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270	524.2 VOC	TOTAL As	Sample Specific Comments
	~~CHESTER AVE_120~~	~~4/14/14~~		W		☒	☒	☐	EC
				W		☐	☐	☐	
07787.01	JASON DR_025	4/14/14	1135	W	EC	☒	☐	☐	
02	JASON DR_025 DUP	4/14/14	1140	W	EC	☒	☐	☐	
03	GLACIER HILLS RD_115	4/14/14	1330	W	EC	☒	☐	☐	
04	GLACIER HILLS RD_115 DUP	4/14/14	1335	W	EC	☒	☐	☐	
05	GLACIER HILLS RD_145	4/14/14	1425	W	EC	☒	☐	☐	
06	GLACIER HILLS RD_145 DUP	4/14/14	1430	W	EC	☒	☐	☐	
07	TRIP BLANK			W		☒	☐	☐	
						☐	☐	☐	

Container Type	-	-	-	-	-	-	-	-	-	-	-	-
Preservative	-	-	-	-	-	-	-	-	-	-	-	-

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	4/14/14 1625		4/14/14 16:25

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

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

CHAIN OF CUSTODY

PAGE 2 OF 2

ALPHA ANALYTICAL — World Class Chemistry

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: 4/14/14

ALPHA Job #: L1407787

Project Information

Project Name: Eastham DW

Project Location: Eastham, MA

Project #:

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt.

Address: 273 West Main Street

Norton, MA 02766

Phone: 508-226-1800

Fax:

Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:

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?

ANALYSIS

1,4 DIOXANE by 8270 | VOC's by 524.2

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

TOTAL # BOTTLES

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 Dioxane	VOC's by 524.2												TOTAL # BOTTLES
07787.08	TRIPBLANK			DW		☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
.09	ALSTON AVE_050	4/14/14	1045	DW	DB	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
10	ALSTON AVE_050 DUP	4/14/14	1050	DW	DB	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
11	STATE HWY_3280	4/14/14	1155	DW	DB	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
12	STATE HWY_3280 DUP	4/14/14	1200	DW	DB	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
13	KNOWLES ST_050	4/14/14	1320	DW	DB	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
14	KNOWLES ST_050 DUP	4/14/14	1325	DW	DB	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
15	MARY CHASE RD_155	4/14/14	1420	DW	DB	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
~~MARY CHASE RD_155 DUP~~		~~4/14/14~~	~~1425~~	DW	~~DB~~	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	EC	2
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
Container Type						A	-	-	-	-	-	-	-	-	-	-	-		
Preservative						A	-	-	-	-	-	-	-	-	-	-	-		

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP or CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	4/14/14 1625		4/14/14 16:25

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

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

CHAIN OF CUSTODY

PAGE 2 OF 2

Date Rec'd in Lab: 4/14/14

ALPHA Job #: L1407787

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

Project Information

Project Name: Eastham DW

Project Location: Eastham, MA

Project #:

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt.

Address: 273 West Main Street

Norton, MA 02766

Phone: 508-226-1800

Fax:

Email: lflynn@esm-inc.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:

ANALYSIS

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

TOTAL # BOTTLES

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE by 8270	VOC's by 524.2											TOTAL # BOTTLES
07787.08	TRIPBLANK			DW		☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
.09	ALSTON AVE_050	4/14/14	1045	DW	DB	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
10	ALSTON AVE_050 DUP	4/14/14	1050	DW	DB	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
11	STATE HWY_3280	4/14/14	1155	DW	DB	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
12	STATE HWY_3280 DUP	4/14/14	1200	DW	DB	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
13	KNOWLES ST_050	4/14/14	1320	DW	DB	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
14	KNOWLES ST_050 DUP	4/14/14	1325	DW	DB	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
15	MARY CHASE RD_155	4/14/14	1420	DW	DB	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
~~MARY CHASE RD_155 DUP~~		~~4/14/14~~	~~1425~~	~~DW~~	~~DB~~	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	EC 2
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
	Container Type					A	-	-	-	-	-	-	-	-	-	-	-	
	Preservative					A	-	-	-	-	-	-	-	-	-	-	-	

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
	4/14/14 1625		4/14/14 16:25
	4/15/14 10:30		4/15/14 10:30
	4/15/14 1700		4/15/14 17:00

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.

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1409481	5/5/2014	drinking water	Yes	Yes	Yes	Yes	Yes	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis	Sample ID	Date	Lab ID	Matrix	Analysis
State Hwy_3168	5/5/2014	L1409481-1	DW	8270	Starlight Ln_005 Dup	5/5/2014	L1409481-8	DW	8270
State Hwy_3168 Dup	5/5/2014	L1409481-2	DW	8270	Meetinghouse Rd_205	5/5/2014	L1409481-9	DW	8270
Alson Ave_085	5/5/2014	L1409481-3	DW	8270	Meetinghouse Rd_205 Dup	5/5/2014	L1409481-10	DW	8270
Alson Ave_085 Dup	5/5/2014	L1409481-4	DW	8270	Whidah Ln_003	5/5/2014	L1409481-11	DW	8270
Meetinghouse RD_350	5/5/2014	L1409481-5	DW	8270	Whidah Ln_003 dup	5/5/2014	L1409481-12	DW	not analyzed
Meetinghouse RD_350 Dup	5/5/2014	L1409481-6	DW	8270	trip blank	5/5/2014	L1409481-13	DW	8270
Starlight Ln_005	5/5/2014	L1409481-7	DW	8270					

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS) and LCS duplicate results were reviewed.

This report was deemed usable by Angela Boyd on 5/27/14.

ANALYTICAL REPORT

Lab Number:	L1409481
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	2013-027
Report Date:	05/29/14

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Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409481
Report Date: 05/29/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1409481-01	STATE HWY_3168	EASTHAM MA	05/05/14 08:35
L1409481-02	STATE HWY_3168 DUP	EASTHAM MA	05/05/14 08:40
L1409481-03	ALSTON AVE_085	EASTHAM MA	05/05/14 09:35
L1409481-04	ALSTON AVE_085 DUP	EASTHAM MA	05/05/14 09:40
L1409481-05	MEETINGHOUSE RD_350	EASTHAM MA	05/05/14 11:35
L1409481-06	MEETINGHOUSE RD_350 DUP	EASTHAM MA	05/05/14 11:40
L1409481-07	STARLIGHT LN_005	EASTHAM MA	05/05/14 12:40
L1409481-08	STARLIGHT LN_005 DUP	EASTHAM MA	05/05/14 12:45
L1409481-09	MEETINGHOUSE RD_205	EASTHAM MA	05/05/14 14:35
L1409481-10	MEETINGHOUSE RD_205 DUP	EASTHAM MA	05/05/14 14:40
L1409481-11	WHIDAH LN_003	EASTHAM MA	05/05/14 10:25
L1409481-12	WHIDAH LN_003 DUP	EASTHAM MA	05/05/14 10:30
L1409481-13	TRIP BLANK	EASTHAM MA	05/05/14 00:00

Project Name:	EASTHAM DW	**Lab Number:**	L1409481
Project Number:	2013-027	**Report Date:**	05/29/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409481
Report Date: 05/29/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name:	EASTHAM DW	**Lab Number:**	L1409481
Project Number:	2013-027	**Report Date:**	05/29/14

Case Narrative (continued)

Report Submission

This report replaces the report previously issued on May 14, 2014. This report has been reissued to report results to the MDL.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Semivolatile Organics

In reference to question I:

All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

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: 05/29/14

ORGANICS

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-01	Date Collected:	05/05/14 08:35
Client ID:	STATE HWY_3168	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/06/14 09:39
Analytical Date:	05/07/14 07:34		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.334		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-02	Date Collected:	05/05/14 08:40
Client ID:	STATE HWY_3168 DUP	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:07
Analytical Date:	05/14/14 05:36		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.350		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-03	Date Collected:	05/05/14 09:35
Client ID:	ALSTON AVE_085	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/06/14 09:39
Analytical Date:	05/07/14 09:16		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.236		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-04	Date Collected:	05/05/14 09:40
Client ID:	ALSTON AVE_085 DUP	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:07
Analytical Date:	05/14/14 06:24		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.210		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	22		15-110

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-05	Date Collected:	05/05/14 11:35
Client ID:	MEETINGHOUSE RD_350	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/06/14 09:39
Analytical Date:	05/07/14 10:01		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	1.23		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-06	Date Collected:	05/05/14 11:40
Client ID:	MEETINGHOUSE RD_350 DUP	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:07
Analytical Date:	05/14/14 07:12		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	1.24		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-07	Date Collected:	05/05/14 12:40
Client ID:	STARLIGHT LN_005	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/06/14 09:39
Analytical Date:	05/07/14 10:46		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.394		ug/l	0.147	0.0735	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	29		15-110

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-08	Date Collected:	05/05/14 12:45
Client ID:	STARLIGHT LN_005 DUP	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:07
Analytical Date:	05/14/14 08:00		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.362		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	21		15-110

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-09	Date Collected:	05/05/14 14:35
Client ID:	MEETINGHOUSE RD_205	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/06/14 09:39
Analytical Date:	05/07/14 11:30		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.310		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-10	Date Collected:	05/05/14 14:40
Client ID:	MEETINGHOUSE RD_205 DUP	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:07
Analytical Date:	05/14/14 08:48		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.319		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-11	Date Collected:	05/05/14 10:25
Client ID:	WHIDAH LN_003	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/06/14 09:39
Analytical Date:	05/07/14 12:15		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-13	Date Collected:	05/05/14 00:00
Client ID:	TRIP BLANK	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/06/14 09:39
Analytical Date:	05/07/14 13:00		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	29		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409481
Report Date: 05/29/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 05/07/14 05:20
Analyst: JS

Extraction Method: EPA 3510C
Extraction Date: 05/06/14 09:39

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01,03,05,07,09,11,13 Batch: WG687484-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	31		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409481
Report Date: 05/29/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 05/13/14 18:19
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 05/09/14 06:07

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 02,04,06,08,10 Batch: WG688389-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1409481

Report Date: 05/29/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s):	01,03,05,07,09,11,13	Batch:	WG687484-2	WG687484-3			
1,4-Dioxane	102		104		40-140	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	31		29		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1409481

Report Date: 05/29/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s):	02,04,06,08,10	Batch:	WG688389-2	WG688389-3			
1,4-Dioxane	105		106		40-140	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	22		27		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409481
Report Date: 05/29/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1409481-01A	Amber 500ml unpreserved	B	8	3.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-01B	Amber 500ml unpreserved	B	8	3.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-02A	Amber 500ml unpreserved	B	8	3.9	Y	Absent	-
L1409481-02B	Amber 500ml unpreserved	B	8	3.9	Y	Absent	-
L1409481-03A	Amber 500ml unpreserved	A	8	3.6	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-03B	Amber 500ml unpreserved	A	8	3.6	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-04A	Amber 500ml unpreserved	A	8	3.6	Y	Absent	-
L1409481-04B	Amber 500ml unpreserved	A	8	3.6	Y	Absent	-
L1409481-05A	Amber 500ml unpreserved	B	8	3.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-05B	Amber 500ml unpreserved	B	8	3.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-06A	Amber 500ml unpreserved	B	8	3.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-06B	Amber 500ml unpreserved	B	8	3.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-07A	Amber 500ml unpreserved	B	8	3.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-07B	Amber 500ml unpreserved	B	8	3.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-08A	Amber 500ml unpreserved	B	8	3.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-08B	Amber 500ml unpreserved	B	8	3.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-09A	Amber 500ml unpreserved	A	8	3.6	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-09B	Amber 500ml unpreserved	A	8	3.6	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-10A	Amber 500ml unpreserved	A	8	3.6	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-10B	Amber 500ml unpreserved	A	8	3.6	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-11A	Amber 500ml unpreserved	B	8	3.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-11B	Amber 500ml unpreserved	B	8	3.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-12A	Amber 500ml unpreserved	B	8	3.9	Y	Absent	HOLD(14)
L1409481-12B	Amber 500ml unpreserved	B	8	3.9	Y	Absent	HOLD(14)
L1409481-13A	Amber 500ml unpreserved	A	8	3.6	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-13B	Amber 500ml unpreserved	A	8	3.6	Y	Absent	A2-MCP-14DX-SIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409481
Report Date: 05/29/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1409481-13C	Amber 500ml unpreserved	A	8	3.6	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409481-13D	Amber 500ml unpreserved	A	8	3.6	Y	Absent	A2-MCP-14DX-SIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1409481
Project Number:	2013-027	**Report Date:**	05/29/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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

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

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1409481
Project Number:	2013-027	**Report Date:**	05/29/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1409481
Project Number:	2013-027	**Report Date:**	05/29/14

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised April 15, 2014

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 2

Date Rec'd in Lab: 5/5/14

ALPHA Job #: L1409481

ALPHA ANALYTICAL
World Class Chemistry

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

Project Information

Project Name: Eastham DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Managemen

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:
email results to lflynn@esm-inc.com and aboyd@esm-inc.com

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
8270 - MCP	0.15 ug/l for 1,4 dioxane, GW-1

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS

1,4 DIOXANE BY 8270

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

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270	TOTAL # BOTTLES
09481. 01	STATE HWY_3168	5/5/14	0835	W	EC	☒	2
02	STATE HWY_3168 DUP	5/5/14	0840	W	EC	☒	2
03	ALSTON AVE_085	5/5/14	0935	W	EC	☒	2
04	ALSTON AVE_085 DUP	5/5/14	0940	W	EC	☒	2
05	MEETINGHOUSE RD_350	5/5/14	1135	W	EC	☒	2
06	MEETINGHOUSE RD_350 DUP	5/5/14	1140	W	EC	☒	2
07	STARLIGHT LN_005	5/5/14	1240	W	EC	☒	2
08	STARLIGHT LN_005 DUP	5/5/14	1245	W	EC	☒	2
09	MEETINGHOUSE RD_205	5/5/14	1435	W	EC	☒	2
10	MEETINGHOUSE RD_205 DUP	5/5/14	1440	W	EC	☒	2
	Container Type					A	
	Preservative					A	

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
	5/5/14 1630		5/5/14 16:30

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.

CHAIN OF CUSTODY

PAGE 2 OF 2

ALPHA ANALYTICAL — WORCESTER, MASSACHUSETTS

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: 5/5/14

ALPHA Job #: L1409481

Client Information

Client: Environmental Strategies & Managemen
Address: 273 West Main Street
Norton, MA 02703
Phone: 508-226-1800
Fax: 508-226-1811
Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Eastham DW
Project Location: Eastham MA
Project #: 2013-027
Project Manager: Lisa Flynn
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:
email results to lflynn@esm-inc.com and aboyd@esm-inc.com

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
8270 - MCP	0.15 ug/l for 1,4 dioxane, GW-1

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

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

ANALYSIS

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

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270	TOTAL # BOTTLES
09481. 11	WHIDAH LN_003	5/5/14	1025	W	EC	☒	2
12	WHIDAH LN_003 dup	5/5/14	1030	W	EC	☒	2
13	TRIP BLANK					☐	4
						☐	
						☐	
						☐	
						☐	
						☐	
						☐	
						☐	

Container Type	A	-	-	-	-	-	-	-	-	-	-	-	
Preservative	A	-	-	-	-	-	-	-	-	-	-	-	

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
	5/5/14 1630		5/5/14 16:30

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.

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1409598	5/6/2014	drinking water	Yes	No	Yes	Yes	No	Usable

Sample ID	Date	Lab ID	Matrix	Analysis	Sample ID	Date	Lab ID	Matrix	Analysis
Old Orchard Rd_180	5/6/2014	L1409598-1	DW	8270, 524.2, As	Schoolhouse Rd_200 Dup	5/6/2014	L1409598-6	DW	8270
Alston Ave_225	5/6/2014	L1409598-2	DW	8270	Eldia Way_009	5/6/2014	L1409598-7	DW	8270
Alston Ave_225 Dup	5/6/2014	L1409598-3	DW	8270	Eldia Way_009 Dup	5/6/2014	L1409598-8	DW	8270
Meetinghouse Rd_100	5/6/2014	L1409598-4	DW	8270, 524.2, As	Trip Blank	5/6/2014	L1409598-9	DW	8270
Schoolhouse Rd_200	5/6/2014	L1409598-5	DW	8270					

Lab presumptive certainty was not achieved because the proper field QC was not delivered (duplicate analytical samples and metals matrix spike) and the analytical methods specified in the CAM protocol were not followed for volatile organics and metals (524.2 and 3200.8 are non-CAM methods). Drinking water methodology was used instead.

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS) LCS duplicate, sample duplicate, and matrix spike results were reviewed.

This report was deemed usable by Angela Boyd on 6/4/14.

ANALYTICAL REPORT

Lab Number:	L1409598
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	2013-027
Report Date:	05/20/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1409598-01	OLD ORCHARD RD_180	EASTHAM MA	05/06/14 08:35
L1409598-02	ALSTON AVE_225	EASTHAM MA	05/06/14 09:25
L1409598-03	ALSTON AVE_225 DUP	EASTHAM MA	05/06/14 09:30
L1409598-04	MEETINGHOUSE RD_100	EASTHAM MA	05/06/14 11:45
L1409598-05	SCHOOLHOUSE RD_200	EASTHAM MA	05/06/14 13:00
L1409598-06	SCHOOLHOUSE RD_200 DUP	EASTHAM MA	05/06/14 13:05
L1409598-07	ELDIA WAY_009	EASTHAM MA	05/06/14 14:20
L1409598-08	ELDIA WAY_009 DUP	EASTHAM MA	05/06/14 14:25
L1409598-09	TRIP BLANK	EASTHAM MA	05/06/14 00:00

Project Name:	EASTHAM DW	**Lab Number:**	L1409598
Project Number:	2013-027	**Report Date:**	05/20/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	NO
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	NO
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name:	EASTHAM DW	**Lab Number:**	L1409598
Project Number:	2013-027	**Report Date:**	05/20/14

Case Narrative (continued)

Report Submission

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Sample Receipt

In reference to question A:

L1409598-01 and -04: The proper field QC samples were not delivered with drinking water samples.

Volatile Organics

In reference to question B:

At the client's request, the analytical method specified in the CAM protocol was not followed.

In reference to question I:

All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

Metals

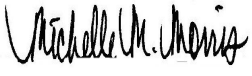
In reference to question B:

At the client's request, the analytical method specified in the CAM protocol was not followed.

In reference to question I:

All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

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:  Michelle M. Morris

Title: Technical Director/Representative Date: 05/20/14

ORGANICS

VOLATILES

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID: L1409598-01
Client ID: OLD ORCHARD RD_180
Sample Location: EASTHAM MA
Matrix: Drinking Water
Analytical Method: 16,524.2
Analytical Date: 05/07/14 14:22
Analyst: GT

Date Collected: 05/06/14 08:35
Date Received: 05/06/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	0.40	J	ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1409598

Project Number: 2013-027 **Report Date:** 05/20/14

SAMPLE RESULTS

Lab ID: L1409598-01 Date Collected: 05/06/14 08:35

Client ID: OLD ORCHARD RD_180 Date Received: 05/06/14

Sample Location: EASTHAM MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	101		80-120
4-Bromofluorobenzene	89		80-120

Project Name: EASTHAM DW **Lab Number:** L1409598

Project Number: 2013-027 **Report Date:** 05/20/14

SAMPLE RESULTS

Lab ID:	L1409598-04	Date Collected:	05/06/14 11:45
Client ID:	MEETINGHOUSE RD_100	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water		
Analytical Method:	16,524.2		
Analytical Date:	05/07/14 14:55		
Analyst:	GT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	0.52		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1409598

Project Number: 2013-027 **Report Date:** 05/20/14

SAMPLE RESULTS

Lab ID: L1409598-04 Date Collected: 05/06/14 11:45

Client ID: MEETINGHOUSE RD_100 Date Received: 05/06/14

Sample Location: EASTHAM MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	99		80-120
4-Bromofluorobenzene	88		80-120

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1409598
Report Date: 05/20/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 05/07/14 12:34
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,04 Batch: WG687577-10					
Methylene chloride	ND		ug/l	0.50	0.15
1,1-Dichloroethane	ND		ug/l	0.50	0.09
Chloroform	ND		ug/l	0.50	0.05
Carbon tetrachloride	ND		ug/l	0.50	0.10
1,2-Dichloropropane	ND		ug/l	0.50	0.09
Dibromochloromethane	ND		ug/l	0.50	0.08
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12
Tetrachloroethene	ND		ug/l	0.50	0.09
Chlorobenzene	ND		ug/l	0.50	0.08
Trichlorofluoromethane	ND		ug/l	0.50	0.11
1,2-Dichloroethane	ND		ug/l	0.50	0.08
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08
Bromodichloromethane	ND		ug/l	0.50	0.05
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10
Bromoform	ND		ug/l	0.50	0.09
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09
Benzene	ND		ug/l	0.50	0.09
Toluene	ND		ug/l	0.50	0.12
Ethylbenzene	ND		ug/l	0.50	0.06
p/m-Xylene	ND		ug/l	0.50	0.12
Chloromethane	ND		ug/l	0.50	0.15
Bromomethane	ND		ug/l	0.50	0.13
Vinyl chloride	ND		ug/l	0.50	0.08
Chloroethane	ND		ug/l	0.50	0.12
1,1-Dichloroethene	ND		ug/l	0.50	0.06
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11
Trichloroethene	ND		ug/l	0.50	0.09
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1409598
Report Date: 05/20/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 05/07/14 12:34
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,04 Batch: WG687577-10					
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05
Styrene	ND		ug/l	0.50	0.06
o-Xylene	ND		ug/l	0.50	0.09
1,1-Dichloropropene	ND		ug/l	0.50	0.11
2,2-Dichloropropane	ND		ug/l	0.50	0.11
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11
Bromochloromethane	ND		ug/l	0.50	0.10
n-Butylbenzene	ND		ug/l	0.50	0.06
Dichlorodifluoromethane	ND		ug/l	0.50	0.10
Hexachlorobutadiene	ND		ug/l	0.50	0.11
Isopropylbenzene	ND		ug/l	0.50	0.08
p-Isopropyltoluene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.50	0.06
n-Propylbenzene	ND		ug/l	0.50	0.08
sec-Butylbenzene	ND		ug/l	0.50	0.06
tert-Butylbenzene	ND		ug/l	0.50	0.09
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10
Bromobenzene	ND		ug/l	0.50	0.09
o-Chlorotoluene	ND		ug/l	0.50	0.10
p-Chlorotoluene	ND		ug/l	0.50	0.08
Dibromomethane	ND		ug/l	0.50	0.09
1,2-Dibromoethane	ND		ug/l	0.50	0.06
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16
1,3-Dichloropropane	ND		ug/l	0.50	0.11
Methyl tert butyl ether	ND		ug/l	0.50	0.06
Xylenes, Total[1]	ND		ug/l	0.50	0.09

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 05/07/14 12:34
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01,04 Batch: WG687577-10					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	104		80-120
4-Bromofluorobenzene	89		80-120

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04 Batch: WG687577-9								
Methylene chloride	116		-		70-130	-		20
1,1-Dichloroethane	111		-		70-130	-		20
Chloroform	106		-		70-130	-		20
Carbon tetrachloride	83		-		70-130	-		20
1,2-Dichloropropane	96		-		70-130	-		20
Dibromochloromethane	79		-		70-130	-		20
1,1,2-Trichloroethane	95		-		70-130	-		20
Tetrachloroethene	102		-		70-130	-		20
Chlorobenzene	100		-		70-130	-		20
Trichlorofluoromethane	122		-		70-130	-		20
1,2-Dichloroethane	89		-		70-130	-		20
1,1,1-Trichloroethane	104		-		70-130	-		20
Bromodichloromethane	76		-		70-130	-		20
trans-1,3-Dichloropropene	72		-		70-130	-		20
cis-1,3-Dichloropropene	82		-		70-130	-		20
Bromoform	73		-		70-130	-		20
1,1,2,2-Tetrachloroethane	93		-		70-130	-		20
Benzene	98		-		70-130	-		20
Toluene	97		-		70-130	-		20
Ethylbenzene	97		-		70-130	-		20
p/m-Xylene	99		-		70-130	-		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04 Batch: WG687577-9								
Chloromethane	124		-		70-130	-		20
Bromomethane	97		-		70-130	-		20
Vinyl chloride	124		-		70-130	-		20
Chloroethane	117		-		70-130	-		20
1,1-Dichloroethene	120		-		70-130	-		20
trans-1,2-Dichloroethene	118		-		70-130	-		20
cis-1,2-Dichloroethene	110		-		70-130	-		20
Trichloroethene	95		-		70-130	-		20
1,2-Dichlorobenzene	100		-		70-130	-		20
1,3-Dichlorobenzene	97		-		70-130	-		20
1,4-Dichlorobenzene	98		-		70-130	-		20
Styrene	96		-		70-130	-		20
o-Xylene	94		-		70-130	-		20
1,1-Dichloropropene	93		-		70-130	-		20
2,2-Dichloropropane	102		-		70-130	-		20
1,1,1,2-Tetrachloroethane	84		-		70-130	-		20
1,2,3-Trichloropropane	108		-		70-130	-		20
Bromochloromethane	110		-		70-130	-		20
n-Butylbenzene	90		-		70-130	-		20
Dichlorodifluoromethane	112		-		70-130	-		20
Hexachlorobutadiene	90		-		70-130	-		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04 Batch: WG687577-9								
Isopropylbenzene	98		-		70-130	-		20
p-Isopropyltoluene	95		-		70-130	-		20
Naphthalene	92		-		70-130	-		20
n-Propylbenzene	97		-		70-130	-		20
sec-Butylbenzene	96		-		70-130	-		20
tert-Butylbenzene	96		-		70-130	-		20
1,2,3-Trichlorobenzene	97		-		70-130	-		20
1,2,4-Trichlorobenzene	95		-		70-130	-		20
1,2,4-Trimethylbenzene	94		-		70-130	-		20
1,3,5-Trimethylbenzene	93		-		70-130	-		20
Bromobenzene	100		-		70-130	-		20
o-Chlorotoluene	101		-		70-130	-		20
p-Chlorotoluene	91		-		70-130	-		20
Dibromomethane	96		-		70-130	-		20
1,2-Dibromoethane	94		-		70-130	-		20
1,2-Dibromo-3-chloropropane	74		-		70-130	-		20
1,3-Dichloropropane	97		-		70-130	-		20
Methyl tert butyl ether	115		-		70-130	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1409598

Report Date: 05/20/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04 Batch: WG687577-9								

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichlorobenzene-d4	101				80-120
4-Bromofluorobenzene	96				80-120

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG687577-4 QC Sample: L1409244-04 Client ID: MS Sample												
Methylene chloride	ND	4	4.0	101		-	-		70-130	-		20
1,1-Dichloroethane	ND	4	4.0	101		-	-		70-130	-		20
Chloroform	ND	4	4.1	103		-	-		70-130	-		20
Carbon tetrachloride	ND	4	4.1	103		-	-		70-130	-		20
1,2-Dichloropropane	ND	4	3.7	93		-	-		70-130	-		20
Dibromochloromethane	ND	4	3.5	88		-	-		70-130	-		20
1,1,2-Trichloroethane	ND	4	3.8	95		-	-		70-130	-		20
Tetrachloroethene	ND	4	4.3	109		-	-		70-130	-		20
Chlorobenzene	ND	4	4.1	103		-	-		70-130	-		20
Trichlorofluoromethane	ND	4	4.7	119		-	-		70-130	-		20
1,2-Dichloroethane	ND	4	3.8	94		-	-		70-130	-		20
1,1,1-Trichloroethane	ND	4	4.2	106		-	-		70-130	-		20
Bromodichloromethane	ND	4	3.6	89		-	-		70-130	-		20
trans-1,3-Dichloropropene	ND	4	3.4	85		-	-		70-130	-		20
cis-1,3-Dichloropropene	ND	4	3.6	91		-	-		70-130	-		20
Bromoform	ND	4	3.2	81		-	-		70-130	-		20
1,1,2,2-Tetrachloroethane	ND	4	3.5	88		-	-		70-130	-		20
Benzene	ND	4	3.9	97		-	-		70-130	-		20
Toluene	ND	4	3.9	99		-	-		70-130	-		20
Ethylbenzene	ND	4	4.1	102		-	-		70-130	-		20
p/m-Xylene	ND	8	8.1	101		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG687577-4 QC Sample: L1409244-04 Client ID: MS Sample												
Chloromethane	ND	4	4.4	109		-	-		70-130	-		20
Bromomethane	ND	4	4.0	99		-	-		70-130	-		20
Vinyl chloride	ND	4	4.3	107		-	-		70-130	-		20
Chloroethane	ND	4	4.3	108		-	-		70-130	-		20
1,1-Dichloroethene	ND	4	4.5	113		-	-		70-130	-		20
trans-1,2-Dichloroethene	ND	4	4.2	105		-	-		70-130	-		20
cis-1,2-Dichloroethene	ND	4	4.3	107		-	-		70-130	-		20
Trichloroethene	ND	4	3.9	98		-	-		70-130	-		20
1,2-Dichlorobenzene	ND	4	4.1	103		-	-		70-130	-		20
1,3-Dichlorobenzene	ND	4	4.2	104		-	-		70-130	-		20
1,4-Dichlorobenzene	ND	4	4.1	103		-	-		70-130	-		20
Styrene	ND	4	3.9	98		-	-		70-130	-		20
o-Xylene	ND	4	4.0	100		-	-		70-130	-		20
1,1-Dichloropropene	ND	4	4.1	103		-	-		70-130	-		20
2,2-Dichloropropane	ND	4	3.9	97		-	-		70-130	-		20
1,1,1,2-Tetrachloroethane	ND	4	3.9	97		-	-		70-130	-		20
1,2,3-Trichloropropane	ND	4	3.8	95		-	-		70-130	-		20
Bromochloromethane	ND	4	4.1	102		-	-		70-130	-		20
n-Butylbenzene	ND	4	3.8	95		-	-		70-130	-		20
Dichlorodifluoromethane	ND	4	4.6	114		-	-		70-130	-		20
Hexachlorobutadiene	ND	4	4.1	102		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG687577-4 QC Sample: L1409244-04 Client ID: MS Sample												
Isopropylbenzene	ND	4	4.1	104		-	-		70-130	-		20
p-Isopropyltoluene	ND	4	4.1	102		-	-		70-130	-		20
Naphthalene	ND	4	3.4	86		-	-		70-130	-		20
n-Propylbenzene	ND	4	4.1	103		-	-		70-130	-		20
sec-Butylbenzene	ND	4	4.1	103		-	-		70-130	-		20
tert-Butylbenzene	ND	4	4.2	105		-	-		70-130	-		20
1,2,3-Trichlorobenzene	ND	4	3.8	95		-	-		70-130	-		20
1,2,4-Trichlorobenzene	ND	4	3.9	98		-	-		70-130	-		20
1,2,4-Trimethylbenzene	ND	4	4.0	101		-	-		70-130	-		20
1,3,5-Trimethylbenzene	ND	4	4.0	100		-	-		70-130	-		20
Bromobenzene	ND	4	4.2	105		-	-		70-130	-		20
o-Chlorotoluene	ND	4	4.1	102		-	-		70-130	-		20
p-Chlorotoluene	ND	4	4.1	102		-	-		70-130	-		20
Dibromomethane	ND	4	3.8	96		-	-		70-130	-		20
1,2-Dibromoethane	ND	4	3.9	97		-	-		70-130	-		20
1,2-Dibromo-3-chloropropane	ND	4	3.0	75		-	-		70-130	-		20
1,3-Dichloropropane	ND	4	3.9	96		-	-		70-130	-		20
Methyl tert butyl ether	ND	4	4.0	99		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG687577-4 QC Sample: L1409244-04 Client ID: MS Sample												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	101				80-120
4-Bromofluorobenzene	99				80-120

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG687577-3 QC Sample: L1409244-02 Client ID: DUP Sample						
Methylene chloride	ND	ND	ug/l	NC		20
1,1-Dichloroethane	ND	ND	ug/l	NC		20
Chloroform	ND	ND	ug/l	NC		20
Carbon tetrachloride	ND	ND	ug/l	NC		20
1,2-Dichloropropane	ND	ND	ug/l	NC		20
Dibromochloromethane	ND	ND	ug/l	NC		20
1,1,2-Trichloroethane	ND	ND	ug/l	NC		20
Tetrachloroethene	ND	ND	ug/l	NC		20
Chlorobenzene	ND	ND	ug/l	NC		20
Trichlorofluoromethane	ND	ND	ug/l	NC		20
1,2-Dichloroethane	ND	ND	ug/l	NC		20
1,1,1-Trichloroethane	ND	ND	ug/l	NC		20
Bromodichloromethane	ND	ND	ug/l	NC		20
trans-1,3-Dichloropropene	ND	ND	ug/l	NC		20
cis-1,3-Dichloropropene	ND	ND	ug/l	NC		20
Bromoform	ND	ND	ug/l	NC		20
1,1,2,2-Tetrachloroethane	ND	ND	ug/l	NC		20
Benzene	ND	ND	ug/l	NC		20
Toluene	ND	ND	ug/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG687577-3 QC Sample: L1409244-02 Client ID: DUP Sample					
Ethylbenzene	ND	ND	ug/l	NC	20
p/m-Xylene	ND	ND	ug/l	NC	20
Chloromethane	ND	ND	ug/l	NC	20
Bromomethane	ND	ND	ug/l	NC	20
Vinyl chloride	ND	ND	ug/l	NC	20
Chloroethane	ND	ND	ug/l	NC	20
1,1-Dichloroethene	ND	ND	ug/l	NC	20
trans-1,2-Dichloroethene	ND	ND	ug/l	NC	20
cis-1,2-Dichloroethene	ND	ND	ug/l	NC	20
Trichloroethene	ND	ND	ug/l	NC	20
1,2-Dichlorobenzene	ND	ND	ug/l	NC	20
1,3-Dichlorobenzene	ND	ND	ug/l	NC	20
1,4-Dichlorobenzene	ND	ND	ug/l	NC	20
Styrene	ND	ND	ug/l	NC	20
o-Xylene	ND	ND	ug/l	NC	20
1,1-Dichloropropene	ND	ND	ug/l	NC	20
2,2-Dichloropropane	ND	ND	ug/l	NC	20
1,1,1,2-Tetrachloroethane	ND	ND	ug/l	NC	20
1,2,3-Trichloropropane	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG687577-3 QC Sample: L1409244-02 Client ID: DUP Sample					
Bromochloromethane	ND	ND	ug/l	NC	20
n-Butylbenzene	ND	ND	ug/l	NC	20
Dichlorodifluoromethane	ND	ND	ug/l	NC	20
Hexachlorobutadiene	ND	ND	ug/l	NC	20
Isopropylbenzene	ND	ND	ug/l	NC	20
p-Isopropyltoluene	ND	ND	ug/l	NC	20
Naphthalene	ND	ND	ug/l	NC	20
n-Propylbenzene	ND	ND	ug/l	NC	20
sec-Butylbenzene	ND	ND	ug/l	NC	20
tert-Butylbenzene	ND	ND	ug/l	NC	20
1,2,3-Trichlorobenzene	ND	ND	ug/l	NC	20
1,2,4-Trichlorobenzene	ND	ND	ug/l	NC	20
1,2,4-Trimethylbenzene	ND	ND	ug/l	NC	20
1,3,5-Trimethylbenzene	ND	ND	ug/l	NC	20
Bromobenzene	ND	ND	ug/l	NC	20
o-Chlorotoluene	ND	ND	ug/l	NC	20
p-Chlorotoluene	ND	ND	ug/l	NC	20
Dibromomethane	ND	ND	ug/l	NC	20
1,2-Dibromoethane	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG687577-3 QC Sample: L1409244-02 Client ID: DUP Sample					
1,2-Dibromo-3-chloropropane	ND	ND	ug/l	NC	20
1,3-Dichloropropane	ND	ND	ug/l	NC	20
Methyl tert butyl ether	ND	ND	ug/l	NC	20
Xylene (Total)[1]	ND	ND	ug/l	NC	20

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	97		102		80-120
4-Bromofluorobenzene	98		95		80-120

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID:	L1409598-01	Date Collected:	05/06/14 08:35
Client ID:	OLD ORCHARD RD_180	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 03:46		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.527		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	19		15-110

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID:	L1409598-02	Date Collected:	05/06/14 09:25
Client ID:	ALSTON AVE_225	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 04:31		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.350		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	22		15-110

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID:	L1409598-03	Date Collected:	05/06/14 09:30
Client ID:	ALSTON AVE_225 DUP	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 14:30		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.365		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID:	L1409598-04	Date Collected:	05/06/14 11:45
Client ID:	MEETINGHOUSE RD_100	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 05:15		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	1.90		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	19		15-110

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID:	L1409598-05	Date Collected:	05/06/14 13:00
Client ID:	SCHOOLHOUSE RD_200	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 06:00		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.105	J	ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID:	L1409598-07	Date Collected:	05/06/14 14:20
Client ID:	ELDIA WAY_009	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 06:45		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.309		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	22		15-110

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID:	L1409598-08	Date Collected:	05/06/14 14:25
Client ID:	ELDIA WAY_009 DUP	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 15:20		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.284		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	22		15-110

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID:	L1409598-09	Date Collected:	05/06/14 00:00
Client ID:	TRIP BLANK	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 07:30		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.153	0.0765	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 05/08/14 01:32
Analyst: JS

Extraction Method: EPA 3510C
Extraction Date: 05/07/14 07:52

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01-02,04-05,07,09 Batch: WG687784-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	21		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 05/14/14 10:24
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 05/13/14 20:18

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 03,08 Batch: WG689324-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	25		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1409598

Report Date: 05/20/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s):	01-02,04-05,07,09	Batch:	WG687784-2	WG687784-3			
1,4-Dioxane	102		106		40-140	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	27		18		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1409598

Report Date: 05/20/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 03,08 Batch: WG689324-2 WG689324-3								
1,4-Dioxane	105		108		40-140	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	23		26		15-110

METALS

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID: L1409598-01
Client ID: OLD ORCHARD RD_180
Sample Location: EASTHAM MA
Matrix: Drinking Water

Date Collected: 05/06/14 08:35
Date Received: 05/06/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	0.00034	J	mg/l	0.00100	0.00020	1	05/08/14 08:06	05/09/14 22:40	EPA 3005A	3,200.8	BM

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID: L1409598-04
Client ID: MEETINGHOUSE RD_100
Sample Location: EASTHAM MA
Matrix: Drinking Water
Date Collected: 05/06/14 11:45
Date Received: 05/06/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	ND		mg/l	0.00100	0.00020	1	05/08/14 08:06	05/09/14 22:46	EPA 3005A	3,200.8	BM

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1409598
Report Date: 05/20/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01,04 Batch: WG688105-1										
Arsenic, Total	ND		mg/l	0.00100	0.00020	1	05/08/14 08:06	05/09/14 21:12	3,200.8	BM

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1409598

Report Date: 05/20/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01,04 Batch: WG688105-2								
Arsenic, Total	101		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG688105-4 QC Sample: L1409718-02 Client ID: MS Sample												
Arsenic, Total	0.00123J	0.12	0.1196	100		-	-		70-130	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01,04 QC Batch ID: WG688105-3 QC Sample: L1409718-02 Client ID: DUP Sample						
Arsenic, Total	0.00123J	0.00110J	mg/l	NC		20

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information	Custody Seal
Cooler	
A	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1409598-01A	Amber 500ml unpreserved	A	8	4.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409598-01B	Amber 500ml unpreserved	A	8	4.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409598-01C	Vial Ascorbic Acid/HCl preserved	C	N/A	3.0	Y	Absent	524.2(14)
L1409598-01D	Vial Ascorbic Acid/HCl preserved	C	N/A	3.0	Y	Absent	524.2(14)
L1409598-01E	Plastic 250ml HNO3 preserved	C	<2	3.0	Y	Absent	AS-2008T(180)
L1409598-02A	Amber 500ml unpreserved	C	8	3.0	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409598-02B	Amber 500ml unpreserved	C	8	3.0	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409598-03A	Amber 1000ml unpreserved	C	8	3.0	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409598-03B	Amber 1000ml unpreserved	C	8	3.0	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409598-04A	Amber 500ml unpreserved	A	8	4.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409598-04B	Amber 500ml unpreserved	A	8	4.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409598-04C	Vial Ascorbic Acid/HCl preserved	C	N/A	3.0	Y	Absent	524.2(14)
L1409598-04D	Vial Ascorbic Acid/HCl preserved	C	N/A	3.0	Y	Absent	524.2(14)
L1409598-04E	Plastic 250ml HNO3 preserved	C	<2	3.0	Y	Absent	AS-2008T(180)
L1409598-05A	Amber 500ml unpreserved	A	8	4.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409598-05B	Amber 500ml unpreserved	A	8	4.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409598-06A	Amber 500ml unpreserved	A	8	4.1	Y	Absent	HOLD(14)
L1409598-06B	Amber 500ml unpreserved	A	8	4.1	Y	Absent	HOLD(14)
L1409598-07A	Amber 500ml unpreserved	A	8	4.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409598-07B	Amber 500ml unpreserved	B	8	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409598-08A	Amber 500ml unpreserved	B	8	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409598-08B	Amber 500ml unpreserved	B	8	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409598-09A	Amber 500ml unpreserved	B	8	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409598-09B	Amber 500ml unpreserved	B	8	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409598
Report Date: 05/20/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1409598-10A	Amber 500ml unpreserved	B	8	5.2	Y	Absent	-
L1409598-10B	Amber 500ml unpreserved	B	8	5.2	Y	Absent	-
L1409598-11A	Amber 500ml unpreserved	B	8	5.2	Y	Absent	-
L1409598-11B	Amber 500ml unpreserved	B	8	5.2	Y	Absent	-
L1409598-12A	Amber 500ml unpreserved	B	8	5.2	Y	Absent	-
L1409598-12B	Amber 500ml unpreserved	B	8	5.2	Y	Absent	-
L1409598-13A	Amber 500ml unpreserved	B	8	5.2	Y	Absent	-
L1409598-13B	Amber 500ml unpreserved	B	8	5.2	Y	Absent	-
L1409598-14A	Amber 500ml unpreserved	A	8	4.1	Y	Absent	-
L1409598-14B	Amber 500ml unpreserved	A	8	4.1	Y	Absent	-
L1409598-15A	Amber 500ml unpreserved	A	8	4.1	Y	Absent	-
L1409598-15B	Amber 500ml unpreserved	A	8	4.1	Y	Absent	-
L1409598-16A	Amber 500ml unpreserved	B	8	5.2	Y	Absent	-
L1409598-16B	Amber 500ml unpreserved	B	8	5.2	Y	Absent	-
L1409598-17A	Amber 500ml unpreserved	B	8	5.2	Y	Absent	-
L1409598-17B	Amber 500ml unpreserved	B	8	5.2	Y	Absent	-
L1409598-18A	Amber 500ml unpreserved	C	8	3.0	Y	Absent	-
L1409598-18B	Amber 500ml unpreserved	A	8	4.1	Y	Absent	-
L1409598-19A	Amber 500ml unpreserved	A	8	4.1	Y	Absent	-
L1409598-19B	Amber 500ml unpreserved	A	8	4.1	Y	Absent	-
L1409598-20A	Amber 500ml unpreserved	A	8	4.1	Y	Absent	-
L1409598-20B	Amber 500ml unpreserved	A	8	4.1	Y	Absent	-

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1409598
Project Number:	2013-027	**Report Date:**	05/20/14

GLOSSARY

Acronyms

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

Footnotes

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

Terms

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.
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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1409598
Project Number:	2013-027	**Report Date:**	05/20/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1409598
Project Number:	2013-027	**Report Date:**	05/20/14

REFERENCES

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

16 Methods for the Determination of Organic Compounds in Drinking Water - Supplement II. EPA/600/R-92/129, August 1992.

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised April 15, 2014

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — World Class Chemistry

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: 5/6/14

ALPHA Job #: L1409598

Project Information

Project Name: Eastham DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Managemen

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: 5/13/14 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
8270 - MCP	0.15 ug/l for 1,4 dioxane, GW-1

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:
email results to lflynn@esm-inc.com and aboyd@esm-inc.com

ANALYSIS

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

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	524.2 VOC												Sample Specific Comments	TOTAL # BOTTLES
0958.01	OLD ORCHARD RD_180	5/6/2014	0835	W	EC	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐		5
02	ALSTON AVE_225	5/6/2014	0925	W	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
03	ALSTON AVE_225 DUP	5/6/2014	0930	W	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
04	MEETINGHOUSE RD_100	5/6/2014	1145	W	EC	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐		5
05	SCHOOLHOUSE RD_200	5/6/2014	1300	W	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
06	SCHOOLHOUSE RD_200 DUP	5/6/2014	1305	W	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
07	ELDIA WAY_009	5/6/2014	1420	W	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
08	ELDIA WAY_009 DUP	5/6/2014	1425	W	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
09	TRIP BLANK			W		☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
				‖		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
					Container Type	A	V	P	-	-	-	-	-	-	-	-	-		
					Preservative	A	I	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
	5/6/14 1905		5/6/14 17:05
	5/6/14 18:15		5/6/14 18:15

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.

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — World Class Chemistry

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: 5/6/14

ALPHA Job #: L1409598

Client Information

Client: Environmental Strategies & Managemen
Address: 273 West Main Street
Norton, MA 02703
Phone: 508-226-1800
Fax: 508-226-1811
Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Eastham DW
Project Location: Eastham MA
Project #: 2013-027
Project Manager: Lisa Flynn
ALPHA Quote #:

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
8270 - MCP	0.15 ug/l for 1,4 dioxane, GW-1

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:
email results to lflynn@esm-inc.com and aboyd@esm-inc.com

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	1,4 DIOXANE BY 8270	524.2 VOC	TOTAL As	Sample Specific Comments	TOTAL # BOTTLES
09598.01	OLD ORCHARD RD_180	5/6/2014	0835	W	EC	☒	☒	☒		5
02	ALSTON AVE_225	5/6/2014	0925	W	EC	☒	☐	☐		2
03	ALSTON AVE_225 DUP	5/6/2014	0930	W	EC	☒	☐	☐		2
04	MEETINGHOUSE RD_100	5/6/2014	1145	W	EC	☒	☒	☒		5
05	SCHOOLHOUSE RD_200	5/6/2014	1300	W	EC	☒	☐	☐		2
06	SCHOOLHOUSE RD_200 DUP	5/6/2014	1305	W	EC	☒	☐	☐		2
07	ELDIA WAY_009	5/6/2014	1420	W	EC	☒	☐	☐		2
08	ELDIA WAY_009 DUP	5/6/2014	1425	W	EC	☒	☐	☐		2
09	TRIP BLANK			W		☒	☐	☐		2
				‼		☐	☐	☐		

Container Type	A	V	P
Preservative	A	I	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
	5/6/14 1705		5/6/14 17:05

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.

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
World Class Chemistry

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: 5/6/14

ALPHA Job #: L1409598

Client Information

Client: Environmental Strategies & Managemen
Address: 273 West Main Street
Norton, MA 02703
Phone: 508-226-1800
Fax: 508-226-1811
Email: lflynn@esm-inc.com
☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Eastham DW
Project Location: Eastham MA
Project #: 2013-027
Project Manager: Lisa Flynn
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)
Due Date: 5/13/14 Time:

Other Project Specific Requirements/Comments/Detection Limits:
email results to lflynn@esm-inc.com and aboyd@esm-inc.com

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
8270 - MCP	0.15 ug/l for 1,4 dioxane, GW-1

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

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

ANALYSIS

[redacted]
[redacted]
TOTAL As

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

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials														TOTAL # BOTTLES
09598.01	OLD ORCHARD RD_180	5/6/2014	0835	W	EC	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐		5
02	ALSTON AVE_225	5/6/2014	0925	W	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
03	ALSTON AVE_225 DUP	5/6/2014	0930	W	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
04	MEETINGHOUSE RD_100	5/6/2014	1145	W	EC	☒	☒	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐		5
05	SCHOOLHOUSE RD_200	5/6/2014	1300	W	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
06	SCHOOLHOUSE RD_200 DUP	5/6/2014	1305	W	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
07	ELDIA WAY_009	5/6/2014	1420	W	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
08	ELDIA WAY_009 DUP	5/6/2014	1425	W	EC	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
09	TRIP BLANK			W		☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		2
				‖		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
					Container Type	A	V	P	-	-	-	-	-	-	-	-	-		
					Preservative	A	I	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
	5/6/14 1705	(AAL)	5/6/14 17:05
	5/7/14 11:14		5/7/14 1122
	5/7/14 1200		5/7/14 1205

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.

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1409738	5/7/2014	drinking water	Yes	Yes	Yes	Yes	No	CAM Compliant - Usable

Sample ID	Date	Lab ID	Matrix	Analysis	Sample ID	Date	Lab ID	Matrix	Analysis
Schoolhouse Rd_300	5/7/2014	L1409738-1	DW	8270	Eldia Way_004 Dup	5/7/2014	L1409738-6	DW	8270
Schoolhouse Rd_300 Dup	5/7/2014	L1409738-2	DW	8270	Trip Blank	5/7/2014	L1409738-7	DW	8270
Eldia Way_011	5/7/2014	L1409738-3	DW	8270					
Eldia Way_011 Dup	5/7/2014	L1409738-4	DW	8270					
Eldia Way_004	5/7/2014	L1409738-5	DW	8270					

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS), & LCS duplicate results were reviewed.

This report was deemed usable by Angela Boyd on 6/4/14.

ANALYTICAL REPORT

Lab Number:	L1409738
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	2013-027
Report Date:	05/29/14

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Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409738
Report Date: 05/29/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1409738-01	SCHOOLHOUSE RD_300	EASTHAM, MA	05/07/14 08:30
L1409738-02	SCHOOLHOUSE RD_300 DUP	EASTHAM, MA	05/07/14 08:35
L1409738-03	ELDIA WAY_011	EASTHAM, MA	05/07/14 09:50
L1409738-04	ELDIA WAY_011 DUP	EASTHAM, MA	05/07/14 09:55
L1409738-05	ELDIA WAY_004	EASTHAM, MA	05/07/14 12:05
L1409738-06	ELDIA WAY_004 DUP	EASTHAM, MA	05/07/14 12:10
L1409738-07	TRIP BLANK	EASTHAM, MA	05/07/14 00:00

Project Name:	EASTHAM DW	**Lab Number:**	L1409738
Project Number:	2013-027	**Report Date:**	05/29/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409738
Report Date: 05/29/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name:	EASTHAM DW	**Lab Number:**	L1409738
Project Number:	2013-027	**Report Date:**	05/29/14

Case Narrative (continued)

Report Submission

This report replaces the report previously issued on May 15, 2014. This report has been reissued to report results to the MDL.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Semivolatile Organics

In reference to question I:

All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

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: 05/29/14

ORGANICS

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1409738
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409738-01	Date Collected:	05/07/14 08:30
Client ID:	SCHOOLHOUSE RD_300	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:07
Analytical Date:	05/13/14 20:43		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.168		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1409738
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409738-02	Date Collected:	05/07/14 08:35
Client ID:	SCHOOLHOUSE RD_300 DUP	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/14/14 17:00
Analytical Date:	05/15/14 14:08		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.177		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	30		15-110

Project Name: EASTHAM DW
Lab Number: L1409738
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409738-03	Date Collected:	05/07/14 09:50
Client ID:	ELDIA WAY_011	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:07
Analytical Date:	05/13/14 21:31		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	3.58		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: EASTHAM DW
Lab Number: L1409738
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409738-04	Date Collected:	05/07/14 09:55
Client ID:	ELDIA WAY_011 DUP	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/14/14 17:00
Analytical Date:	05/15/14 14:56		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	3.61		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1409738
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409738-05	Date Collected:	05/07/14 12:05
Client ID:	ELDIA WAY_004	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:07
Analytical Date:	05/13/14 22:19		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.451		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	27		15-110

Project Name: EASTHAM DW
Lab Number: L1409738
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409738-06	Date Collected:	05/07/14 12:10
Client ID:	ELDIA WAY_004 DUP	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/14/14 17:00
Analytical Date:	05/15/14 15:44		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.449		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Project Name: EASTHAM DW
Lab Number: L1409738
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409738-07	Date Collected:	05/07/14 00:00
Client ID:	TRIP BLANK	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:07
Analytical Date:	05/13/14 23:07		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409738
Report Date: 05/29/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 05/13/14 18:19
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 05/09/14 06:07

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01,03,05,07 Batch: WG688389-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409738
Report Date: 05/29/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 05/15/14 11:43
Analyst: CM

Extraction Method: EPA 3510C
Extraction Date: 05/14/14 17:00

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 02,04,06 Batch: WG689599-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	35		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1409738

Report Date: 05/29/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 01,03,05,07 Batch: WG688389-2 WG688389-3								
1,4-Dioxane	105		106		40-140	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	22		27		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1409738

Report Date: 05/29/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 02,04,06 Batch: WG689599-2 WG689599-3								
1,4-Dioxane	106		106		40-140	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	33		31		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409738
Report Date: 05/29/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1409738-01A	Amber 500ml unpreserved	A	7	4.0	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409738-01B	Amber 500ml unpreserved	A	7	4.0	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409738-02A	Amber 500ml unpreserved	A	7	4.0	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409738-02B	Amber 500ml unpreserved	A	7	4.0	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409738-03A	Amber 500ml unpreserved	B	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409738-03B	Amber 500ml unpreserved	B	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409738-04A	Amber 500ml unpreserved	B	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409738-04B	Amber 500ml unpreserved	B	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409738-05A	Amber 500ml unpreserved	B	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409738-05B	Amber 500ml unpreserved	B	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409738-06A	Amber 500ml unpreserved	B	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409738-06B	Amber 500ml unpreserved	B	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409738-07A	Amber 500ml unpreserved	B	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409738-07B	Amber 500ml unpreserved	B	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409738-08A	Amber 500ml unpreserved	A	7	4.0	Y	Absent	-
L1409738-08B	Amber 500ml unpreserved	A	7	4.0	Y	Absent	-
L1409738-09A	Amber 500ml unpreserved	A	7	4.0	Y	Absent	-
L1409738-09B	Amber 500ml unpreserved	A	7	4.0	Y	Absent	-
L1409738-10A	Amber 500ml unpreserved	A	7	4.0	Y	Absent	-
L1409738-10B	Amber 500ml unpreserved	A	7	4.0	Y	Absent	-
L1409738-11A	Amber 500ml unpreserved	A	7	4.0	Y	Absent	-
L1409738-11B	Amber 500ml unpreserved	A	7	4.0	Y	Absent	-
L1409738-12A	Amber 500ml unpreserved	A	7	4.0	Y	Absent	-
L1409738-12B	Amber 500ml unpreserved	A	7	4.0	Y	Absent	-
L1409738-13A	Amber 500ml unpreserved	A	7	4.0	Y	Absent	-
L1409738-13B	Amber 500ml unpreserved	A	7	4.0	Y	Absent	-

*Values in parentheses indicate holding time in days

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409738
Report Date: 05/29/14

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1409738-14A	Amber 500ml unpreserved	B	7	3.3	Y	Absent	-
L1409738-14B	Amber 500ml unpreserved	B	7	3.3	Y	Absent	-
L1409738-15A	Amber 500ml unpreserved	B	7	3.3	Y	Absent	-
L1409738-15B	Amber 500ml unpreserved	B	7	3.3	Y	Absent	-
L1409738-16A	Amber 500ml unpreserved	A	7	4.0	Y	Absent	-
L1409738-16B	Amber 500ml unpreserved	A	7	4.0	Y	Absent	-

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1409738
Project Number:	2013-027	**Report Date:**	05/29/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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

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

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1409738
Project Number:	2013-027	**Report Date:**	05/29/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1409738
Project Number:	2013-027	**Report Date:**	05/29/14

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised April 15, 2014

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL — Work Class Chemistry

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:

ALPHA Job #: L1409738

Project Information

Project Name: Eastham DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Managemen

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: lflynn@esm-inc.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
8270 - MCP	0.15 ug/l for 1,4 dioxane, GW-1

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:
email results to lflynn@esm-inc.com and aboyd@esm-inc.com

ANALYSIS

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

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270	Sample Specific Comments	# Bottles
09738-01	SCHOOLHOUSE RD_300	5/7/14	0830	W	EC	☒		2
-02	SCHOOLHOUSE RD_300 DUP	5/7/14	0835	W	EC	☒		2
-03	ELDIA WAY_011	5/7/14	0950	W	EC	☒		2
-04	ELDIA WAY_011 DUP	5/7/14	0955	W	EC	☒		2
-05	ELDIA WAY_004	5/7/14	1205	W	EC	☒		2
-06	ELDIA WAY_004 DUP	5/7/14	1210	W	EC	☒		2
~~-~~	~~STARLIGHT LN_045~~	~~5/7/14~~		~~W~~		~~☒~~	EC	~~2~~
~~-~~	~~STARLIGHT LN_045 DUP~~	~~5/7/14~~		~~W~~		~~☒~~	EC	~~2~~
-07	TRIP BLANK	5/7/14		W		☒		2
						☐		

Container Type	A	-	-	-	-	-	-	-	-	-	-	-
Preservative	A	-	-	-	-	-	-	-	-	-	-	-

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
	5/7/14 1620		5/7/14 16:20

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.

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1409822	5/6/2014	drinking water	Yes	Yes	Yes	Yes	No	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis	Sample ID	Date	Lab ID	Matrix	Analysis
Knowles St_045	5/6/2014	L1409822-1	DW	8270	Knowles St_030	5/6/2014	L1409822-7	DW	8270
Knowles St_045 Dup	5/6/2014	L1409822-2	DW	8270	Knowles St_030 Dup	5/6/2014	L1409822-8	DW	8270
Glacier Hills Rd_020	5/6/2014	L1409822-3	DW	8270	Old Orchard Rd_310	5/6/2014	L1409822-9	DW	8270
Glacier Hills Rd_020 Dup	5/6/2014	L1409822-4	DW	Not Analyzed	Old Orchard Rd_310 Dup	5/6/2014	L1409822-10	DW	8270
Selah Circle_004	5/6/2014	L1409822-5	DW	8270	Trip Blank	5/6/2014	L1409822-11	DW	8270
Selah Circle_004 Dup	5/6/2014	L1409822-6	DW	Not Analyzed					

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS), & LCS duplicate results were reviewed.

This report was deemed usable by Angela Boyd on 6/4/14.

ANALYTICAL REPORT

Lab Number:	L1409822
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	2013-027
Report Date:	05/29/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409822
Report Date: 05/29/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1409822-01	KNOWLES ST_045	EASTHAM MA	05/06/14 08:30
L1409822-02	KNOWLES ST_045 DUP	EASTHAM MA	05/06/14 08:35
L1409822-03	GLACIER HILLS RD_020	EASTHAM MA	05/06/14 09:20
L1409822-04	GLACIER HILLS RD_020 DUP	EASTHAM MA	05/06/14 09:25
L1409822-05	SELAH CIRCLE_004	EASTHAM MA	05/06/14 13:00
L1409822-06	SELAH CIRCLE_004 DUP	EASTHAM MA	05/06/14 13:05
L1409822-07	KNOWLES ST_030	EASTHAM MA	05/06/14 09:50
L1409822-08	KNOWLES ST_030 DUP	EASTHAM MA	05/06/14 09:55
L1409822-09	OLD ORCHARD RD_310	EASTHAM MA	05/06/14 14:30
L1409822-10	OLD ORCHARD RD_310 DUP	EASTHAM MA	05/06/14 14:35
L1409822-11	TRIP BLANK	EASTHAM MA	05/06/14 00:00

Project Name:	EASTHAM DW	**Lab Number:**	L1409822
Project Number:	2013-027	**Report Date:**	05/29/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409822
Report Date: 05/29/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name:	EASTHAM DW	**Lab Number:**	L1409822
Project Number:	2013-027	**Report Date:**	05/29/14

Case Narrative (continued)

Report Submission

This report replaces the report previously issued on May 14, 2014. This report has been reissued to report results to the MDL.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Semivolatile Organics

In reference to question I:

All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

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: 05/29/14

ORGANICS

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1409822
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409822-01	Date Collected:	05/06/14 08:30
Client ID:	KNOWLES ST_045	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 08:14		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	2.22		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: EASTHAM DW
Lab Number: L1409822
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409822-02	Date Collected:	05/06/14 08:35
Client ID:	KNOWLES ST_045 DUP	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 15:33
Analytical Date:	05/13/14 02:30		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	2.38		ug/l	0.147	0.0735	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	30		15-110

Project Name: EASTHAM DW
Lab Number: L1409822
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409822-03	Date Collected:	05/06/14 09:20
Client ID:	GLACIER HILLS RD_020	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 10:24		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	16		15-110

Project Name: EASTHAM DW
Lab Number: L1409822
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409822-05	Date Collected:	05/06/14 13:00
Client ID:	SELAH CIRCLE_004	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 11:09		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.143	0.0714	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	25		15-110

Project Name: EASTHAM DW
Lab Number: L1409822
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409822-07	Date Collected:	05/06/14 09:50
Client ID:	KNOWLES ST_030	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 11:53		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	4.79		ug/l	0.143	0.0714	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	21		15-110

Project Name: EASTHAM DW
Lab Number: L1409822
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409822-08	Date Collected:	05/06/14 09:55
Client ID:	KNOWLES ST_030 DUP	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 15:33
Analytical Date:	05/13/14 03:15		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	4.92		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	30		15-110

Project Name: EASTHAM DW
Lab Number: L1409822
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409822-09	Date Collected:	05/06/14 14:30
Client ID:	OLD ORCHARD RD_310	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 12:38		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.431		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: EASTHAM DW
Lab Number: L1409822
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409822-10	Date Collected:	05/06/14 14:35
Client ID:	OLD ORCHARD RD_310 DUP	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 15:33
Analytical Date:	05/13/14 04:00		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.433		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	31		15-110

Project Name: EASTHAM DW
Lab Number: L1409822
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409822-11	Date Collected:	05/06/14 00:00
Client ID:	TRIP BLANK	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 13:23		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.153	0.0765	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409822
Report Date: 05/29/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 05/08/14 01:32
Analyst: JS

Extraction Method: EPA 3510C
Extraction Date: 05/07/14 07:52

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01,03,05,07,09,11 Batch: WG687784-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	21		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409822
Report Date: 05/29/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 05/13/14 00:15
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 05/12/14 10:00

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 02,08,10 Batch: WG688792-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	21		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1409822

Report Date: 05/29/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s):	01,03,05,07,09,11	Batch:	WG687784-2	WG687784-3			
1,4-Dioxane	102		106		40-140	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	27		18		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1409822

Report Date: 05/29/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 02,08,10 Batch: WG688792-2 WG688792-3								
1,4-Dioxane	108		108		40-140	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	23		22		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409822
Report Date: 05/29/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent
B	Absent
C	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1409822-01A	Amber 500ml unpreserved	B	8	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-01B	Amber 500ml unpreserved	B	8	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-02A	Amber 1000ml unpreserved	B	8	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-02B	Amber 1000ml unpreserved	B	8	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-03A	Amber 500ml unpreserved	B	8	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-03B	Amber 500ml unpreserved	B	8	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-04A	Amber 500ml unpreserved	B	8	5.2	Y	Absent	HOLD(14)
L1409822-04B	Amber 500ml unpreserved	B	8	5.2	Y	Absent	HOLD(14)
L1409822-05A	Amber 500ml unpreserved	A	8	4.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-05B	Amber 500ml unpreserved	A	8	4.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-06A	Amber 500ml unpreserved	A	8	4.1	Y	Absent	HOLD(14)
L1409822-06B	Amber 500ml unpreserved	A	8	4.1	Y	Absent	HOLD(14)
L1409822-07A	Amber 500ml unpreserved	B	8	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-07B	Amber 500ml unpreserved	B	8	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-08A	Amber 500ml unpreserved	B	8	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-08B	Amber 500ml unpreserved	B	8	5.2	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-09A	Amber 500ml unpreserved	C	8	3.0	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-09B	Amber 500ml unpreserved	A	8	4.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-10A	Amber 500ml unpreserved	A	8	4.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-10B	Amber 500ml unpreserved	A	8	4.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-11A	Amber 500ml unpreserved	A	8	4.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-11B	Amber 500ml unpreserved	A	8	4.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-11C	Amber 1000ml unpreserved	A	8	4.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409822-11D	Amber 1000ml unpreserved	A	8	4.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1409822
Project Number:	2013-027	**Report Date:**	05/29/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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

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

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1409822
Project Number:	2013-027	**Report Date:**	05/29/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised April 15, 2014

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

L1409822

CHAIN OF CUSTODY

PAGE 1 OF 2

ALPHA ANALYTICAL — World Class Chemistry

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: 5/6/14

ALPHA Job #: ~~L1409578~~ RL 5/16/14

Client Information

Client: Environmental Strategies & Managemen
Address: 273 West Main Street
Norton, MA 02703
Phone: 508-226-1800
Fax: 508-226-1811
Email: lflynn@esm-inc.com
☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Eastham DW
Project Location: Eastham MA
Project #: 2013-027
Project Manager: Lisa Flynn
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)
Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:
email results to lflynn@esm-inc.com and aboyd@esm-inc.com

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
8270 - MCP	0.15 ug/l for 1,4 dioxane, GW-1

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

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

ANALYSIS

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

ALPHA Lab ID (Lab Use Only) ~~L1409578~~	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270	Sample Specific Comments	TOTAL # BOTTLES
01 ~~01~~	KNOWLES ST_045	5/6/2014	0830	W	DB	☒		2
02	KNOWLES ST_045 DUP	5/6/2014	0835	W	DB	☒		2
03	GLACIER HILLS RD_020	5/6/2014	0920	W	DB	☒		2
04	GLACIER HILLS RD_020 DUP	5/6/2014	0925	W	DB	☒		2
~~05~~	~~SCHOOLHOUSE RD_345~~	~~5/6/2014~~		W		☒		2
~~06~~	~~SCHOOLHOUSE RD_345 DUP~~	~~5/6/2014~~		W		☒		2
05	SELAH CIRCLE_004	5/6/2014	1300	W	DB	☒		2
06	SELAH CIRCLE_004 DUP	5/6/2014	1305	W	DB	☒		2
07	KNOWLES ST_030	5/6/2014	0950	W	DB	☒		2
08	KNOWLES ST_030 DUP	5/6/2014	0955	W	DB	☒		2
					Container Type	A		
					Preservative	A		

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
	5/6/14 1705		5/6/14 17:05

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.

L1409822

CHAIN OF CUSTODY

PAGE 2 OF 2

Date Rec'd in Lab: 5/6/14

ALPHA Job #: L1409598 KL 5/8/14

ALPHA ANALYTICAL
World Class Chemistry

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

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
8270 - MCP	0.15 ug/l for 1,4 dioxane, GW-1

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

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

Client Information

Client: Environmental Strategies & Managemen
Address: 273 West Main Street
Norton, MA 02703
Phone: 508-226-1800
Fax: 508-226-1811
Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Eastham DW
Project Location: Eastham MA
Project #: 2013-027
Project Manager: Lisa Flynn
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)
Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:
email results to lflynn@esm-inc.com and aboyd@esm-inc.com

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270	SAMPLE HANDLING	TOTAL # BOTTLES
09598-1	OLD ORCHARD RD_310	5/6/2014	1430	W	DB	☒		2
-1	OLD ORCHARD RD_310 DUP	5/6/2014	1435	W	DB	☒		2
-10	TRIP BLANK					☒		4

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

Sample Specific Comments

Container Type	A	-	-	-	-	-	-	-	-	-	-	-	
Preservative	A	-	-	-	-	-	-	-	-	-	-	-	

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
	5/6/14 1705		5/6/14 17:05

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.

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1409836	5/7/2014	drinking water	Yes	Yes	Yes	Yes	No	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis	Sample ID	Date	Lab ID	Matrix	Analysis
Cedar Ln_025	5/7/2014	L1409836-1	DW	8270	Schoolhouse Rd_345	5/7/2014	L1409836-7	DW	8270
Cedar Ln_025 Dup	5/7/2014	L1409836-2	DW	Not Analyzed	Schoolhouse Rd_345 Dup	5/7/2014	L1409836-8	DW	Not Analyzed
Cedar Ln_035	5/7/2014	L1409836-3	DW	8270	Trip Blank	5/7/2014	L1409836-9	DW	8270
Cedar Ln_035 Dup	5/7/2014	L1409836-4	DW	Not Analyzed					
Cedar Ln_020	5/7/2014	L1409836-5	DW	8270					
Cedar Ln_020 Dup	5/7/2014	L1409836-6	DW	Not Analyzed					

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS), & LCS duplicate results were reviewed.

This report was deemed usable by Angela Boyd on 6/4/14.

ANALYTICAL REPORT

Lab Number:	L1409836
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	2013-027
Report Date:	05/29/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409836
Report Date: 05/29/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1409836-01	CEDAR LN_025	EASTHAM, MA	05/07/14 13:45
L1409836-02	CEDAR LN_025 DUP	EASTHAM, MA	05/07/14 13:50
L1409836-03	CEDAR LN_035	EASTHAM, MA	05/07/14 14:15
L1409836-04	CEDAR LN_035 DUP	EASTHAM, MA	05/07/14 14:20
L1409836-05	CEDAR LN_020	EASTHAM, MA	05/07/14 14:55
L1409836-06	CEDAR LN_020 DUP	EASTHAM, MA	05/07/14 15:00
L1409836-07	SCHOOLHOUSE RD_345	EASTHAM, MA	05/07/14 11:30
L1409836-08	SCHOOLHOUSE RD_345 DUP	EASTHAM, MA	05/07/14 11:35
L1409836-09	TRIP BLANK	EASTHAM, MA	05/07/14 00:00

Project Name:	EASTHAM DW	**Lab Number:**	L1409836
Project Number:	2013-027	**Report Date:**	05/29/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409836
Report Date: 05/29/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name:	EASTHAM DW	**Lab Number:**	L1409836
Project Number:	2013-027	**Report Date:**	05/29/14

Case Narrative (continued)

Report Submission

This report replaces the report previously issued on May 14, 2014. This report has been reissued to report results to the MDL.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Semivolatile Organics

In reference to question I:

All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

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: 05/29/14

ORGANICS

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1409836
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409836-01	Date Collected:	05/07/14 13:45
Client ID:	CEDAR LN_025	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:08
Analytical Date:	05/13/14 23:55		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	27		15-110

Project Name: EASTHAM DW
Lab Number: L1409836
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409836-03	Date Collected:	05/07/14 14:15
Client ID:	CEDAR LN_035	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:08
Analytical Date:	05/14/14 09:36		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Project Name: EASTHAM DW
Lab Number: L1409836
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409836-05	Date Collected:	05/07/14 14:55
Client ID:	CEDAR LN_020	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:08
Analytical Date:	05/14/14 03:13		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1409836
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409836-07	Date Collected:	05/07/14 11:30
Client ID:	SCHOOLHOUSE RD_345	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:10
Analytical Date:	05/14/14 04:00		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.153	0.0765	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	25		15-110

Project Name: EASTHAM DW
Lab Number: L1409836
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409836-09	Date Collected:	05/07/14 00:00
Client ID:	TRIP BLANK	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:10
Analytical Date:	05/14/14 04:48		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.147	0.0735	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	25		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409836
Report Date: 05/29/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 05/13/14 18:19
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 05/09/14 06:07

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01,03,05,07,09 Batch: WG688389-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1409836

Report Date: 05/29/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s):	01,03,05,07,09	Batch:	WG688389-2	WG688389-3			
1,4-Dioxane	105		106		40-140	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	22		27		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409836
Report Date: 05/29/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1409836-01A	Amber 500ml unpreserved	A	7	4.0	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409836-01B	Amber 500ml unpreserved	A	7	4.0	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409836-02A	Amber 500ml unpreserved	A	7	4.0	Y	Absent	HOLD(14)
L1409836-02B	Amber 500ml unpreserved	A	7	4.0	Y	Absent	HOLD(14)
L1409836-03A	Amber 500ml unpreserved	A	7	4.0	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409836-03B	Amber 500ml unpreserved	A	7	4.0	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409836-04A	Amber 500ml unpreserved	A	7	4.0	Y	Absent	HOLD(14)
L1409836-04B	Amber 500ml unpreserved	A	7	4.0	Y	Absent	HOLD(14)
L1409836-05A	Amber 500ml unpreserved	A	7	4.0	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409836-05B	Amber 500ml unpreserved	A	7	4.0	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409836-06A	Amber 500ml unpreserved	A	7	4.0	Y	Absent	HOLD(14)
L1409836-06B	Amber 500ml unpreserved	A	7	4.0	Y	Absent	HOLD(14)
L1409836-07A	Amber 500ml unpreserved	B	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409836-07B	Amber 500ml unpreserved	B	7	3.3	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409836-08A	Amber 500ml unpreserved	B	7	3.3	Y	Absent	HOLD(14)
L1409836-08B	Amber 500ml unpreserved	B	7	3.3	Y	Absent	HOLD(14)
L1409836-09A	Amber 500ml unpreserved	A	7	4.0	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409836-09B	Amber 500ml unpreserved	A	7	4.0	Y	Absent	A2-MCP-14DX-SIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1409836
Project Number:	2013-027	**Report Date:**	05/29/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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

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

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1409836
Project Number:	2013-027	**Report Date:**	05/29/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1409836
Report Date: 05/29/14

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised April 15, 2014

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

L1409836

CHAIN OF CUSTODY

PAGE 1 OF 1

Date Rec'd in Lab:

ALPHA Job #: ~~L1409836~~ KL 5/8/14

ALPHA ANALYTICAL — World Class Chemistry

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

Report Information — Data Deliverables: ☐ FAX ☒ EMAIL ☒ ADEx ☐ Add'l Deliverables

Billing Information: ☐ Same as Client info PO #:

Client Information
Client: Environmental Strategies & Managemen
Address: 273 West Main Street
Norton, MA 02703
Phone: 508-226-1800
Fax: 508-226-1811
Email: lflynn@esm-inc.com
☐ These samples have been Previously analyzed by Alpha

Project Information
Project Name: Eastham DW
Project Location: Eastham MA
Project #: 2013-027
Project Manager: Lisa Flynn
ALPHA Quote #:

Turn-Around Time
☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)
Due Date: Time:

Regulatory Requirements/Report Limits

State/Fed Program	Criteria
8270 - MCP	0.15 ug/l for 1,4 dioxane, GW-1

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:
email results to lflynn@esm-inc.com and aboyd@esm-inc.com

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	1,4 DIOXANE BY 8270	Sample Specific Comments	TOTAL # BOTTLES
01	CEDAR LN_025	5/7/14	1345	W	EC	☒		2
02	CEDAR LN_025 DUP	5/7/14	1350	W	EC	☒		2
03	CEDAR LN_035	5/7/14	1415	W	EC	☒		2
04	CEDAR LN_035 DUP	5/7/14	1420	W	EC	☒		2
05	CEDAR LN_020	5/7/14	1455	W	EC	☒		2
06	CEDAR LN_020 DUP	5/7/14	1500	W	EC	☒		2
07	SCHOOLHOUSE RD_345	5/7/14	1130	W	EC	☒		2
08	SCHOOLHOUSE RD_345 DUP	5/7/14	1135	W	EC	☒		2
09	Trip Blank	5/7/14		W		☒		2
						☐		

Container Type	A	-	-	-	-	-	-	-	-	-	-	-	-
Preservative	A	-	-	-	-	-	-	-	-	-	-	-	-

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
	5/7/14 1620		5/9/14 10:20

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.

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1409877	5/8/2014	drinking water	Yes	Yes	Yes	Yes	No	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis	Sample ID	Date	Lab ID	Matrix	Analysis
Knowles St_025	5/8/2014	L1409877-1	DW	8270	State Hwy_3200 Dup	5/8/2014	L1409877-8	DW	8270
Knowles St_025 Dup	5/8/2014	L1409877-2	DW	8270	Knowles St_075	5/8/2014	L1409877-9	DW	8270
Chipman St_060	5/8/2014	L1409877-3	DW	8270	Knowles St_075 Dup	5/8/2014	L1409877-10	DW	Not Analyzed
Chipman St_060 Dup	5/8/2014	L1409877-4	DW	8270	Meetinghouse Rd_370	5/8/2014	L1409877-11	DW	8270
Fairview Ave_005	5/8/2014	L1409877-5	DW	8270	Meetinghouse Rd_370 Dup	5/8/2014	L1409877-12	DW	8270
Fairview Ave_005 Dup	5/8/2014	L1409877-6	DW	Not Analyzed	Trip Blank	5/8/2014	L1409877-13	DW	8270
State Hwy_3200	5/8/2014	L1409877-7	DW	8270					

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS), & LCS duplicate results were reviewed.

This report was deemed usable by Angela Boyd on 6/4/14.

ANALYTICAL REPORT

Lab Number:	L1409877
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	Not Specified
Project Number:	2013-027
Report Date:	05/29/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: Not Specified
Project Number: 2013-027

Lab Number: L1409877
Report Date: 05/29/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1409877-01	KNOWLES ST_025	Not Specified	05/08/14 08:35
L1409877-02	KNOWLES ST_025 DUP	Not Specified	05/08/14 08:40
L1409877-03	CHIPMAN ST_060	Not Specified	05/08/14 10:00
L1409877-04	CHIPMAN ST_060 DUP	Not Specified	05/08/14 10:05
L1409877-05	FAIRVIEW AVE_005	Not Specified	05/08/14 11:30
L1409877-06	FAIRVIEW AVE_005 DUP	Not Specified	05/08/14 11:35
L1409877-07	STATE HWY_3200	Not Specified	05/08/14 13:00
L1409877-08	STATE HWY_3200 DUP	Not Specified	05/08/14 13:05
L1409877-09	KNOWLES ST_075	Not Specified	05/08/14 07:55
L1409877-10	KNOWLES ST_075 DUP	Not Specified	05/08/14 08:00
L1409877-11	MEETINGHOUSE RD_370	Not Specified	05/08/14 11:55
L1409877-12	MEETINGHOUSE RD_370 DUP	Not Specified	05/08/14 12:00
L1409877-13	TRIP BLANK	Not Specified	05/08/14 00:00

Project Name: Not Specified **Lab Number:** L1409877

Project Number: 2013-027 **Report Date:** 05/29/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: Not Specified
Project Number: 2013-027

Lab Number: L1409877
Report Date: 05/29/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name:	Not Specified	**Lab Number:**	L1409877
Project Number:	2013-027	**Report Date:**	05/29/14

Case Narrative (continued)

Report Submission

This report replaces the report previously issued on May 15, 2014. This report has been reissued to report results to the MDL.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Semivolatile Organics

In reference to question I:

All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

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: 05/29/14

ORGANICS

SEMIVOLATILES

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-01	Date Collected:	05/08/14 08:35
Client ID:	KNOWLES ST_025	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 09:15		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	3.72		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-02	Date Collected:	05/08/14 08:40
Client ID:	KNOWLES ST_025 DUP	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 16:08		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	3.58		ug/l	0.136	0.0682	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	21		15-110

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-03	Date Collected:	05/08/14 10:00
Client ID:	CHIPMAN ST_060	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 10:00		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.382		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: Not Specified
Lab Number: L1409877
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-04	Date Collected:	05/08/14 10:05
Client ID:	CHIPMAN ST_060 DUP	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 16:56		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.341		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	33		15-110

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-05	Date Collected:	05/08/14 11:30
Client ID:	FAIRVIEW AVE_005	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 12:10		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	20		15-110

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-07	Date Collected:	05/08/14 13:00
Client ID:	STATE HWY_3200	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 12:55		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.424		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	25		15-110

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-08	Date Collected:	05/08/14 13:05
Client ID:	STATE HWY_3200 DUP	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 17:44		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.418		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	29		15-110

Project Name: Not Specified
Lab Number: L1409877
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-09	Date Collected:	05/08/14 07:55
Client ID:	KNOWLES ST_075	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 13:40		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	29		15-110

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-11	Date Collected:	05/08/14 11:55
Client ID:	MEETINGHOUSE RD_370	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 14:25		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.339		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	29		15-110

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-12	Date Collected:	05/08/14 12:00
Client ID:	MEETINGHOUSE RD_370 DUP	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 18:32		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.316		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	34		15-110

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-13	Date Collected:	05/08/14 00:00
Client ID:	TRIP BLANK	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 15:10		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	30		15-110

Project Name: Not Specified
Project Number: 2013-027

Lab Number: L1409877
Report Date: 05/29/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 05/13/14 00:15
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 05/12/14 10:00

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01,03,05,07,09,11,13 Batch: WG688792-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	21		15-110

Project Name: Not Specified
Project Number: 2013-027

Lab Number: L1409877
Report Date: 05/29/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 05/14/14 10:24
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 05/13/14 20:18

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 02,04,08,12 Batch: WG689324-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	25		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: Not Specified

Project Number: 2013-027

Lab Number: L1409877

Report Date: 05/29/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s):	01,03,05,07,09,11,13	Batch:	WG688792-2	WG688792-3			
1,4-Dioxane	108		108		40-140	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	23		22		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: Not Specified

Project Number: 2013-027

Lab Number: L1409877

Report Date: 05/29/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 02,04,08,12 Batch: WG689324-2 WG689324-3								
1,4-Dioxane	105		108		40-140	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	23		26		15-110

Project Name: Not Specified
Project Number: 2013-027

Lab Number: L1409877
Report Date: 05/29/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1409877-01A	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-01B	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-02A	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-02B	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-03A	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-03B	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-04A	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-04B	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-05A	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-05B	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-06A	Amber 500ml unpreserved	A	7	4.9	Y	Absent	HOLD(14)
L1409877-06B	Amber 500ml unpreserved	A	7	4.9	Y	Absent	HOLD(14)
L1409877-07A	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-07B	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-08A	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-08B	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-09A	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-09B	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-10A	Amber 500ml unpreserved	A	7	4.9	Y	Absent	HOLD(14)
L1409877-10B	Amber 500ml unpreserved	A	7	4.9	Y	Absent	HOLD(14)
L1409877-11A	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-11B	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-12A	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-12B	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-13A	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409877-13B	Amber 500ml unpreserved	A	7	4.9	Y	Absent	A2-MCP-14DX-SIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	Not Specified	**Lab Number:**	L1409877
Project Number:	2013-027	**Report Date:**	05/29/14

GLOSSARY

Acronyms

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

Footnotes

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

Terms

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

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

Data Qualifiers

A	- Spectra identified as "Aldol Condensation Product".
B	- The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	Not Specified	**Lab Number:**	L1409877
Project Number:	2013-027	**Report Date:**	05/29/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised April 15, 2014

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 2

ALPHA ANALYTICAL
World Class Chemistry

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:

ALPHA Job #: L1409877

Client Information

Client: Environmental Strategies & Managemen

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Eastham DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:
email results to lflynn@esm-inc.com and aboyd@esm-inc.com

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
8270 - MCP	0.15 ug/l for 1,4 dioxane, GW-1

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS

1,4 DIOXANE BY 8270

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

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270	Sample Specific Comments	TOTAL # BOTTLES
09677 01	KNOWLES ST_025	5/8/14	0835	W	EC	☒		2
02	KNOWLES ST_025 DUP	5/8/14	0840	W	EC	☒		2
03	CHIPMAN ST_060	5/8/14	1000	W	EC	☒		2
04	CHIPMAN ST_060 DUP	5/8/14	1005	W	EC	☒		2
05	FAIRVIEW AVE_005	5/8/14	1130	W	EC	☒		2
06	FAIRVIEW AVE_005 DUP	5/8/14	1135	W	EC	☒		2
07	STATE HWY_3200	5/8/14	1300	W	EC	☒		2
08	STATE HWY_3200 DUP	5/8/14	1305	W	EC	☒		2
09	KNOWLES ST_075	5/8/14	0755	W	EC	☐		2
10	KNOWLES ST_075 DUP	5/8/14	0800	W	EC	☐		2

Container Type	A	-	-	-	-	-	-	-	-	-	-	-
Preservative	A	-	-	-	-	-	-	-	-	-	-	-

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	5/8/14 1503		5/8/14 15:03

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

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

CHAIN OF CUSTODY

PAGE 2 OF 2

ALPHA ANALYTICAL — World Class Chemistry

Date Rec'd in Lab:

ALPHA Job #: L1409877

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193

Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Client Information

Client: Environmental Strategies & Managemen

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Eastham DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:
email results to lflynn@esm-inc.com and aboyd@esm-inc.com

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
8270 - MCP	0.15 ug/l for 1,4 dioxane, GW-1

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS

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

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270	TOTAL # BOTTLES
09677 -71	MEETINGHOUSE RD_370	5/8/14	1155	W		☒	2
-72	MEETINGHOUSE RD_370 DUP	5/8/14	1200	W		☒	2
-73	TRIP BLANK			W		☒	2
				W		☒	
				W		☒	
				W		☒	
				W		☒	
				W		☒	
		"		W		☒	
				W		☒	

Container Type	A	-	-	-	-	-	-	-	-	-	-	-
Preservative	A	-	-	-	-	-	-	-	-	-	-	-

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	5/8/14 1503		5/8/14 15:03

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

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

CHAIN OF CUSTODY

PAGE 1 OF 2

ALPHA ANALYTICAL
World Class Chemistry

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:

ALPHA Job #: L1409877

Client Information

Client: Environmental Strategies & Managemen

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Eastham DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:
email results to lflynn@esm-inc.com and aboyd@esm-inc.com

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
8270 - MCP	0.15 ug/l for 1,4 dioxane, GW-1

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

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	1,4 DIOXANE BY 8270	Sample Specific Comments	TOTAL # BOTTLES
09677 01	KNOWLES ST_025	5/8/14	0835	W	EC	☒		2
02	KNOWLES ST_025 DUP	5/8/14	0840	W	EC	☒		2
03	CHIPMAN ST_060	5/8/14	1000	W	EC	☒		2
04	CHIPMAN ST_060 DUP	5/8/14	1005	W	EC	☒		2
05	FAIRVIEW AVE_005	5/8/14	1130	W	EC	☒		2
06	FAIRVIEW AVE_005 DUP	5/8/14	1135	W	EC	☒		2
07	STATE HWY_3200	5/8/14	1300	W	EC	☒		2
08	STATE HWY_3200 DUP	5/8/14	1305	W	EC	☒		2
09	KNOWLES ST_075	5/8/14	0755	W	EC	☒		2
10	KNOWLES ST_075 DUP	5/8/14	0800	W	EC	☒		2

Container Type	A	-	-	-	-	-	-	-	-	-	-	-
Preservative	A	-	-	-	-	-	-	-	-	-	-	-

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	5/8/14 1503		5/8/14 15:03

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

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

CHAIN OF CUSTODY

PAGE 2 OF 2

ALPHA ANALYTICAL — World Class Chemistry

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:

ALPHA Job #: L1409877

Client Information

Client: Environmental Strategies & Managemen

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Eastham DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:
email results to lflynn@esm-inc.com and aboyd@esm-inc.com

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
8270 - MCP	0.15 ug/l for 1,4 dioxane, GW-1

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS

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

TOTAL # BOTTLES

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270												TOTAL # BOTTLES
09677 -01	MEETINGHOUSE RD_370	5/8/14	1155	W		☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
-02	MEETINGHOUSE RD_370 DUP	5/8/14	1200	W		☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
-03	TRIP BLANK			W		☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	2
				W		☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
				W		☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
				W		☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
				W		☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
				W		☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
				W		☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
		"		W		☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
				W		☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	

Container Type	A	-	-	-	-	-	-	-	-	-	-	-
Preservative	A	-	-	-	-	-	-	-	-	-	-	-

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	5/8/14 1503		5/8/14 15:03

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

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

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1409991	5/9/2014	drinking water	Yes	Yes	Yes	Yes	No	Usable

Sample ID	Date	Lab ID	Matrix	Analysis
Eldia Way_006	5/9/2014	L1409991-1	DW	8270
Eldia Way_006 Dup	5/9/2014	L1409991-2	DW	Not Analyzed
Meetinghouse Rd_225	5/9/2014	L1409991-3	DW	8270
Meetinghouse Rd_225 Dup	5/9/2014	L1409991-4	DW	8270
Eldia Way_013	5/9/2014	L1409991-5	DW	8270
Eldia Way_013 Dup	5/9/2014	L1409991-6	DW	8270
Meetinghouse Rd_165	5/9/2014	L1409991-7	DW	8270
Meetinghouse Rd_165 Dup	5/9/2014	L1409991-8	DW	8270
Meetinghouse Rear_190	5/9/2014	L1409991-9	DW	8270
Meetinghouse Rear_190 Dup	5/9/2014	L1409991-10	DW	Not Analyzed
Trip Blank	5/9/2014	L1409991-11	DW	8270

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS) and LCS duplicate results were reviewed.

This report was deemed usable by Angela Boyd on 6/4/14.

ANALYTICAL REPORT

Lab Number:	L1409991
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	2013-027
Report Date:	05/29/14

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Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409991
Report Date: 05/29/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1409991-01	ELDIA WAY_006	EASTHAM, MA	05/09/14 08:15
L1409991-02	ELDIA WAY_006 DUP	EASTHAM, MA	05/09/14 08:20
L1409991-03	MEETINGHOUSE RD_225	EASTHAM, MA	05/09/14 10:00
L1409991-04	MEETINGHOUSE RD_225 DUP	EASTHAM, MA	05/09/14 10:05
L1409991-05	ELDIA WAY_013	EASTHAM, MA	05/09/14 11:40
L1409991-06	ELDIA WAY_013 DUP	EASTHAM, MA	05/09/14 11:45
L1409991-07	MEETINGHOUSE RD_165	EASTHAM, MA	05/09/14 12:50
L1409991-08	MEETINGHOUSE RD_165 DUP	EASTHAM, MA	05/09/14 12:55
L1409991-09	MEETINGHOUSE REAR_190	EASTHAM, MA	05/09/14 14:10
L1409991-10	MEETINGHOUSE REAR_190 DUP	EASTHAM, MA	05/09/14 14:15
L1409991-11	TRIP BLANK	EASTHAM, MA	05/09/14 00:00

Project Name:	EASTHAM DW	**Lab Number:**	L1409991
Project Number:	2013-027	**Report Date:**	05/29/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409991
Report Date: 05/29/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name:	EASTHAM DW	**Lab Number:**	L1409991
Project Number:	2013-027	**Report Date:**	05/29/14

Case Narrative (continued)

Report Submission

This report replaces the report previously issued on May 15, 2014. This report has been reissued to report results to the MDL.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Semivolatile Organics

In reference to question I:

All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

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: 05/29/14

ORGANICS

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1409991
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409991-01	Date Collected:	05/09/14 08:15
Client ID:	ELDIA WAY_006	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 04:45		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.110	J	ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	17		15-110

Project Name: EASTHAM DW
Lab Number: L1409991
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409991-03	Date Collected:	05/09/14 10:00
Client ID:	MEETINGHOUSE RD_225	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 05:30		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.196		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: EASTHAM DW
Lab Number: L1409991
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409991-04	Date Collected:	05/09/14 10:05
Client ID:	MEETINGHOUSE RD_225 DUP	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 19:20		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.178		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	32		15-110

Project Name: EASTHAM DW
Lab Number: L1409991
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409991-05	Date Collected:	05/09/14 11:40
Client ID:	ELDIA WAY_013	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 06:15		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.660		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	22		15-110

Project Name: EASTHAM DW
Lab Number: L1409991
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409991-06	Date Collected:	05/09/14 11:45
Client ID:	ELDIA WAY_013 DUP	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 20:08		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.659		ug/l	0.147	0.0735	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	34		15-110

Project Name: EASTHAM DW
Lab Number: L1409991
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409991-07	Date Collected:	05/09/14 12:50
Client ID:	MEETINGHOUSE RD_165	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 20:57		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.746		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	31		15-110

Project Name: EASTHAM DW
Lab Number: L1409991
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409991-08	Date Collected:	05/09/14 12:55
Client ID:	MEETINGHOUSE RD_165 DUP	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 21:45		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.748		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	35		15-110

Project Name: EASTHAM DW
Lab Number: L1409991
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409991-09	Date Collected:	05/09/14 14:10
Client ID:	MEETINGHOUSE REAR_190	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 07:45		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	30		15-110

Project Name: EASTHAM DW
Lab Number: L1409991
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409991-11	Date Collected:	05/09/14 00:00
Client ID:	TRIP BLANK	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 08:30		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.153	0.0765	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	18		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409991
Report Date: 05/29/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 05/13/14 00:15
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 05/12/14 10:00

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01,03,05,09,11 Batch: WG688792-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	21		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409991
Report Date: 05/29/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 05/14/14 10:24
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 05/13/14 20:18

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 04,06-08 Batch: WG689324-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	25		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1409991

Report Date: 05/29/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s): 01,03,05,09,11		Batch: WG688792-2 WG688792-3					
1,4-Dioxane	108		108		40-140	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	23		22		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1409991

Report Date: 05/29/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 04,06-08 Batch: WG689324-2 WG689324-3								
1,4-Dioxane	105		108		40-140	3		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	23		26		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409991
Report Date: 05/29/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1409991-01A	Amber 500ml unpreserved	B	7	3.5	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-01B	Amber 500ml unpreserved	B	7	3.5	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-02A	Amber 500ml unpreserved	B	7	3.5	Y	Absent	HOLD(14)
L1409991-02B	Amber 500ml unpreserved	B	7	3.5	Y	Absent	HOLD(14)
L1409991-03A	Amber 500ml unpreserved	A	7	3.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-03B	Amber 500ml unpreserved	A	7	3.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-04A	Amber 500ml unpreserved	A	7	3.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-04B	Amber 500ml unpreserved	A	7	3.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-05A	Amber 500ml unpreserved	A	7	3.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-05B	Amber 500ml unpreserved	A	7	3.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-06A	Amber 500ml unpreserved	A	7	3.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-06B	Amber 500ml unpreserved	A	7	3.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-07A	Amber 500ml unpreserved	A	7	3.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-07B	Amber 500ml unpreserved	A	7	3.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-08A	Amber 500ml unpreserved	A	7	3.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-08B	Amber 500ml unpreserved	A	7	3.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-09A	Amber 500ml unpreserved	A	7	3.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-09B	Amber 500ml unpreserved	A	7	3.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-10A	Amber 500ml unpreserved	A	7	3.1	Y	Absent	HOLD(14)
L1409991-10B	Amber 500ml unpreserved	A	7	3.1	Y	Absent	HOLD(14)
L1409991-11A	Amber 500ml unpreserved	B	7	3.5	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-11B	Amber 500ml unpreserved	B	7	3.5	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-11C	Amber 500ml unpreserved	A	7	3.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409991-11D	Amber 500ml unpreserved	A	7	3.1	Y	Absent	A2-MCP-14DX-SIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1409991
Project Number:	2013-027	**Report Date:**	05/29/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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

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

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1409991
Project Number:	2013-027	**Report Date:**	05/29/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised April 15, 2014

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 2

ALPHA ANALYTICAL — Work Class Chemistry

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:

ALPHA Job #: L1409991

Client Information

Client: Environmental Strategies & Managemen

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Eastham DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:

email results to lflynn@esm-inc.com and aboyd@esm-inc.com

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
8270 - MCP	0.15 ug/l for 1,4 dioxane, GW-1

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

☒ Yes ☐ No Are MCP Analytical Methods Required?

☐ Yes ☐ No Are CT RCP (Reasonable Confidence Protocols) Required?

ANALYSIS

1,4 DIOXANE BY 8270

SAMPLE HANDLING

Filtration
☐ Done
☐ Not Needed
☐ Lab to do

Preservation
☐ Lab to do

(Please specify below)

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270	TOTAL # BOTTLES
09991 01	ELDIA WAY_006	5/9/14	0815	W	EC	☒	2
02	ELDIA WAY_006 DUP	5/9/14	0820	W	EC	☒	2
03	MEETINGHOUSE RD_225	5/9/14	1000	W	EC	☒	2
04	MEETINGHOUSE RD_225 DUP	5/9/14	1005	W	EC	☒	2
05	ELDIA WAY_013	5/9/14	1140	W	EC	☒	2
06	ELDIA WAY_013 DUP	5/9/14	1145	W	EC	☒	2
07	MEETINGHOUSE RD_165	5/9/14	1250	W	EC	☒	2
08	MEETINGHOUSE RD_165 DUP	5/9/14	1255	W	EC	☒	2
						☐	
						☐	

Container Type	A	-	-	-	-	-	-	-	-	-	-	-
Preservative	A	-	-	-	-	-	-	-	-	-	-	-

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	5/9/14 1525		5/9/14 15:25

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

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

CHAIN OF CUSTODY

PAGE 2 OF 2

ALPHA ANALYTICAL
World Class Chemistry

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:

ALPHA Job #: L1409991

Client Information

Client: Environmental Strategies & Managemen
Address: 273 West Main Street
Norton, MA 02703
Phone: 508-226-1800
Fax: 508-226-1811
Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Project Information

Project Name: Eastham DW
Project Location: Eastham MA
Project #: 2013-027
Project Manager: Lisa Flynn
ALPHA Quote #:

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Other Project Specific Requirements/Comments/Detection Limits:
email results to lflynn@esm-inc.com and aboyd@esm-inc.com

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
8270 - MCP	0.15 ug/l for 1,4 dioxane, GW-1

MCP PRESUMPTIVE CERTAINTY-CT REASONABLE CONFIDENCE PROTOCOLS

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

ANALYSIS

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

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270	Sample Specific Comments	TOTAL # BOTTLES
09	MEETINGHOUSE REAR_190	5/9/14	1410	W		☒		2
10	MEETINGHOUSE REAR_190 DUP	5/9/14	1415	W		☒		2
11	TRIP BLANK					☒		2
						☐		
						☐		
						☐		
						☐		
						☐		
						☐		
						☐		

Container Type	A	-	-	-	-	-	-	-	-	-	-	-	
Preservative	A	-	-	-	-	-	-	-	-	-	-	-	

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	5/9/14 1525		5/9/14 15:25

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

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

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1410006	5/9/2014	drinking water	Yes	No	Yes	Yes	No	Usable

Sample ID	Date	Lab ID	Matrix	Analysis
Alston Ave_200	5/9/2014	L1410006-1	DW	8270, 524.2, As

Lab presumptive certainty was not achieved because the proper field QC was not delivered (duplicate analytical samples and metals matrix spike) and the analytical methods specified in the CAM protocol were not followed for volatile organics and metals (524.2 and 3200.8 are non-CAM methods). Drinking water methodology was used instead.

All QAQC data, including surrogate, method blank, laboratory control sample (LCS), LCS duplicate, sample duplicate, and matrix spike results were reviewed.

This report was deemed usable by Angela Boyd on 6/4/14.

ANALYTICAL REPORT

Lab Number:	L1410006
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	2013-027
Report Date:	05/22/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), USDA (Permit #P330-11-00109), US Army Corps of Engineers.

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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1410006
Report Date: 05/22/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1410006-01	ALSTON AVE_200	EASTHAM, MA	05/09/14 10:35

Project Name:	EASTHAM DW	**Lab Number:**	L1410006
Project Number:	2013-027	**Report Date:**	05/22/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	NO
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	NO
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	NO

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1410006
Report Date: 05/22/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name:	EASTHAM DW	**Lab Number:**	L1410006
Project Number:	2013-027	**Report Date:**	05/22/14

Case Narrative (continued)

Report Submission

This report replaces the report issued on May 16, 2014. The report format has been corrected.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

MCP Related Narratives

Sample Receipt

In reference to question A:

The proper field QC samples were not delivered with drinking water samples.

Volatile Organics

In reference to question B:

At the client's request, the analytical method specified in the CAM protocol was not followed.

Semivolatile Organics by SIM

In reference to question I:

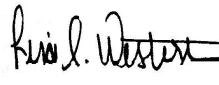
All samples were analyzed for a subset of MCP compounds per the Chain of Custody.

Metals

In reference to question B:

At the client's request, the analytical method specified in the CAM protocol was not followed.

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:  Lisa Westerlind

Title: Technical Director/Representative Date: 05/22/14

ORGANICS

VOLATILES

Project Name: EASTHAM DW **Lab Number:** L1410006

Project Number: 2013-027 **Report Date:** 05/22/14

SAMPLE RESULTS

Lab ID:	L1410006-01	Date Collected:	05/09/14 10:35
Client ID:	ALSTON AVE_200	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water		
Analytical Method:	16,524.2		
Analytical Date:	05/13/14 13:07		
Analyst:	GT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	ND		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1410006

Project Number: 2013-027 **Report Date:** 05/22/14

SAMPLE RESULTS

Lab ID: L1410006-01 Date Collected: 05/09/14 10:35

Client ID: ALSTON AVE_200 Date Received: 05/09/14

Sample Location: EASTHAM, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	96		80-120
4-Bromofluorobenzene	91		80-120

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1410006
Report Date: 05/22/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 05/13/14 12:00
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG687577-12					
Methylene chloride	0.43	J	ug/l	0.50	0.15
1,1-Dichloroethane	ND		ug/l	0.50	0.09
Chloroform	ND		ug/l	0.50	0.05
Carbon tetrachloride	ND		ug/l	0.50	0.10
1,2-Dichloropropane	ND		ug/l	0.50	0.09
Dibromochloromethane	ND		ug/l	0.50	0.08
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12
Tetrachloroethene	ND		ug/l	0.50	0.09
Chlorobenzene	ND		ug/l	0.50	0.08
Trichlorofluoromethane	ND		ug/l	0.50	0.11
1,2-Dichloroethane	ND		ug/l	0.50	0.08
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08
Bromodichloromethane	ND		ug/l	0.50	0.05
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10
Bromoform	ND		ug/l	0.50	0.09
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09
Benzene	ND		ug/l	0.50	0.09
Toluene	ND		ug/l	0.50	0.12
Ethylbenzene	ND		ug/l	0.50	0.06
p/m-Xylene	ND		ug/l	0.50	0.12
Chloromethane	ND		ug/l	0.50	0.15
Bromomethane	ND		ug/l	0.50	0.13
Vinyl chloride	ND		ug/l	0.50	0.08
Chloroethane	ND		ug/l	0.50	0.12
1,1-Dichloroethene	ND		ug/l	0.50	0.06
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11
Trichloroethene	ND		ug/l	0.50	0.09
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1410006
Report Date: 05/22/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 05/13/14 12:00
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG687577-12					
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05
Styrene	ND		ug/l	0.50	0.06
o-Xylene	ND		ug/l	0.50	0.09
1,1-Dichloropropene	ND		ug/l	0.50	0.11
2,2-Dichloropropane	ND		ug/l	0.50	0.11
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11
Bromochloromethane	ND		ug/l	0.50	0.10
n-Butylbenzene	ND		ug/l	0.50	0.06
Dichlorodifluoromethane	ND		ug/l	0.50	0.10
Hexachlorobutadiene	ND		ug/l	0.50	0.11
Isopropylbenzene	ND		ug/l	0.50	0.08
p-Isopropyltoluene	ND		ug/l	0.50	0.07
Naphthalene	ND		ug/l	0.50	0.06
n-Propylbenzene	ND		ug/l	0.50	0.08
sec-Butylbenzene	ND		ug/l	0.50	0.06
tert-Butylbenzene	ND		ug/l	0.50	0.09
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10
Bromobenzene	ND		ug/l	0.50	0.09
o-Chlorotoluene	ND		ug/l	0.50	0.10
p-Chlorotoluene	ND		ug/l	0.50	0.08
Dibromomethane	ND		ug/l	0.50	0.09
1,2-Dibromoethane	ND		ug/l	0.50	0.06
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16
1,3-Dichloropropane	ND		ug/l	0.50	0.11
Methyl tert butyl ether	ND		ug/l	0.50	0.06
Xylenes, Total[1]	ND		ug/l	0.50	0.09

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1410006
Report Date: 05/22/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 16,524.2
Analytical Date: 05/13/14 12:00
Analyst: GT

Parameter	Result	Qualifier	Units	RL	MDL
Volatile Organics by GC/MS - Westborough Lab for sample(s): 01 Batch: WG687577-12					

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	101		80-120
4-Bromofluorobenzene	91		80-120

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1410006

Report Date: 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG687577-11								
Methylene chloride	123		-		70-130	-		20
1,1-Dichloroethane	108		-		70-130	-		20
Chloroform	108		-		70-130	-		20
Carbon tetrachloride	88		-		70-130	-		20
1,2-Dichloropropane	90		-		70-130	-		20
Dibromochloromethane	84		-		70-130	-		20
1,1,2-Trichloroethane	93		-		70-130	-		20
Tetrachloroethene	96		-		70-130	-		20
Chlorobenzene	94		-		70-130	-		20
Trichlorofluoromethane	118		-		70-130	-		20
1,2-Dichloroethane	93		-		70-130	-		20
1,1,1-Trichloroethane	100		-		70-130	-		20
Bromodichloromethane	83		-		70-130	-		20
trans-1,3-Dichloropropene	77		-		70-130	-		20
cis-1,3-Dichloropropene	84		-		70-130	-		20
Bromoform	81		-		70-130	-		20
1,1,2,2-Tetrachloroethane	88		-		70-130	-		20
Benzene	96		-		70-130	-		20
Toluene	90		-		70-130	-		20
Ethylbenzene	91		-		70-130	-		20
p/m-Xylene	93		-		70-130	-		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1410006
Report Date: 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG687577-11								
Chloromethane	117		-		70-130	-		20
Bromomethane	110		-		70-130	-		20
Vinyl chloride	118		-		70-130	-		20
Chloroethane	113		-		70-130	-		20
1,1-Dichloroethene	117		-		70-130	-		20
trans-1,2-Dichloroethene	114		-		70-130	-		20
cis-1,2-Dichloroethene	107		-		70-130	-		20
Trichloroethene	90		-		70-130	-		20
1,2-Dichlorobenzene	98		-		70-130	-		20
1,3-Dichlorobenzene	96		-		70-130	-		20
1,4-Dichlorobenzene	100		-		70-130	-		20
Styrene	85		-		70-130	-		20
o-Xylene	89		-		70-130	-		20
1,1-Dichloropropene	104		-		70-130	-		20
2,2-Dichloropropane	99		-		70-130	-		20
1,1,1,2-Tetrachloroethane	86		-		70-130	-		20
1,2,3-Trichloropropane	93		-		70-130	-		20
Bromochloromethane	108		-		70-130	-		20
n-Butylbenzene	90		-		70-130	-		20
Dichlorodifluoromethane	105		-		70-130	-		20
Hexachlorobutadiene	91		-		70-130	-		20

Lab Control Sample Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1410006
Report Date: 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG687577-11								
Isopropylbenzene	91		-		70-130	-		20
p-Isopropyltoluene	87		-		70-130	-		20
Naphthalene	93		-		70-130	-		20
n-Propylbenzene	90		-		70-130	-		20
sec-Butylbenzene	90		-		70-130	-		20
tert-Butylbenzene	92		-		70-130	-		20
1,2,3-Trichlorobenzene	100		-		70-130	-		20
1,2,4-Trichlorobenzene	98		-		70-130	-		20
1,2,4-Trimethylbenzene	88		-		70-130	-		20
1,3,5-Trimethylbenzene	88		-		70-130	-		20
Bromobenzene	95		-		70-130	-		20
o-Chlorotoluene	92		-		70-130	-		20
p-Chlorotoluene	92		-		70-130	-		20
Dibromomethane	97		-		70-130	-		20
1,2-Dibromoethane	92		-		70-130	-		20
1,2-Dibromo-3-chloropropane	84		-		70-130	-		20
1,3-Dichloropropane	98		-		70-130	-		20
Methyl tert butyl ether	108		-		70-130	-		20

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1410006

Report Date: 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits

Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 Batch: WG687577-11

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,2-Dichlorobenzene-d4	100				80-120
4-Bromofluorobenzene	92				80-120

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1410006
Report Date: 05/22/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG687577-4 QC Sample: L1409244-04 Client ID: MS Sample												
Methylene chloride	ND	4	4.0	101		-	-		70-130	-		20
1,1-Dichloroethane	ND	4	4.0	101		-	-		70-130	-		20
Chloroform	ND	4	4.1	103		-	-		70-130	-		20
Carbon tetrachloride	ND	4	4.1	103		-	-		70-130	-		20
1,2-Dichloropropane	ND	4	3.7	93		-	-		70-130	-		20
Dibromochloromethane	ND	4	3.5	88		-	-		70-130	-		20
1,1,2-Trichloroethane	ND	4	3.8	95		-	-		70-130	-		20
Tetrachloroethene	ND	4	4.3	109		-	-		70-130	-		20
Chlorobenzene	ND	4	4.1	103		-	-		70-130	-		20
Trichlorofluoromethane	ND	4	4.7	119		-	-		70-130	-		20
1,2-Dichloroethane	ND	4	3.8	94		-	-		70-130	-		20
1,1,1-Trichloroethane	ND	4	4.2	106		-	-		70-130	-		20
Bromodichloromethane	ND	4	3.6	89		-	-		70-130	-		20
trans-1,3-Dichloropropene	ND	4	3.4	85		-	-		70-130	-		20
cis-1,3-Dichloropropene	ND	4	3.6	91		-	-		70-130	-		20
Bromoform	ND	4	3.2	81		-	-		70-130	-		20
1,1,2,2-Tetrachloroethane	ND	4	3.5	88		-	-		70-130	-		20
Benzene	ND	4	3.9	97		-	-		70-130	-		20
Toluene	ND	4	3.9	99		-	-		70-130	-		20
Ethylbenzene	ND	4	4.1	102		-	-		70-130	-		20
p/m-Xylene	ND	8	8.1	101		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1410006
Report Date: 05/22/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG687577-4 QC Sample: L1409244-04 Client ID: MS Sample												
Chloromethane	ND	4	4.4	109		-	-		70-130	-		20
Bromomethane	ND	4	4.0	99		-	-		70-130	-		20
Vinyl chloride	ND	4	4.3	107		-	-		70-130	-		20
Chloroethane	ND	4	4.3	108		-	-		70-130	-		20
1,1-Dichloroethene	ND	4	4.5	113		-	-		70-130	-		20
trans-1,2-Dichloroethene	ND	4	4.2	105		-	-		70-130	-		20
cis-1,2-Dichloroethene	ND	4	4.3	107		-	-		70-130	-		20
Trichloroethene	ND	4	3.9	98		-	-		70-130	-		20
1,2-Dichlorobenzene	ND	4	4.1	103		-	-		70-130	-		20
1,3-Dichlorobenzene	ND	4	4.2	104		-	-		70-130	-		20
1,4-Dichlorobenzene	ND	4	4.1	103		-	-		70-130	-		20
Styrene	ND	4	3.9	98		-	-		70-130	-		20
o-Xylene	ND	4	4.0	100		-	-		70-130	-		20
1,1-Dichloropropene	ND	4	4.1	103		-	-		70-130	-		20
2,2-Dichloropropane	ND	4	3.9	97		-	-		70-130	-		20
1,1,1,2-Tetrachloroethane	ND	4	3.9	97		-	-		70-130	-		20
1,2,3-Trichloropropane	ND	4	3.8	95		-	-		70-130	-		20
Bromochloromethane	ND	4	4.1	102		-	-		70-130	-		20
n-Butylbenzene	ND	4	3.8	95		-	-		70-130	-		20
Dichlorodifluoromethane	ND	4	4.6	114		-	-		70-130	-		20
Hexachlorobutadiene	ND	4	4.1	102		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1410006
Report Date: 05/22/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG687577-4 QC Sample: L1409244-04 Client ID: MS Sample												
Isopropylbenzene	ND	4	4.1	104		-	-		70-130	-		20
p-Isopropyltoluene	ND	4	4.1	102		-	-		70-130	-		20
Naphthalene	ND	4	3.4	86		-	-		70-130	-		20
n-Propylbenzene	ND	4	4.1	103		-	-		70-130	-		20
sec-Butylbenzene	ND	4	4.1	103		-	-		70-130	-		20
tert-Butylbenzene	ND	4	4.2	105		-	-		70-130	-		20
1,2,3-Trichlorobenzene	ND	4	3.8	95		-	-		70-130	-		20
1,2,4-Trichlorobenzene	ND	4	3.9	98		-	-		70-130	-		20
1,2,4-Trimethylbenzene	ND	4	4.0	101		-	-		70-130	-		20
1,3,5-Trimethylbenzene	ND	4	4.0	100		-	-		70-130	-		20
Bromobenzene	ND	4	4.2	105		-	-		70-130	-		20
o-Chlorotoluene	ND	4	4.1	102		-	-		70-130	-		20
p-Chlorotoluene	ND	4	4.1	102		-	-		70-130	-		20
Dibromomethane	ND	4	3.8	96		-	-		70-130	-		20
1,2-Dibromoethane	ND	4	3.9	97		-	-		70-130	-		20
1,2-Dibromo-3-chloropropane	ND	4	3.0	75		-	-		70-130	-		20
1,3-Dichloropropane	ND	4	3.9	96		-	-		70-130	-		20
Methyl tert butyl ether	ND	4	4.0	99		-	-		70-130	-		20

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1410006
Report Date: 05/22/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG687577-4 QC Sample: L1409244-04 Client ID: MS Sample												

Surrogate	MS % Recovery	MS Qualifier	MSD % Recovery	MSD Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	101				80-120
4-Bromofluorobenzene	99				80-120

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1410006
Report Date: 05/22/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG687577-3 QC Sample: L1409244-02 Client ID: DUP Sample						
Methylene chloride	ND	ND	ug/l	NC		20
1,1-Dichloroethane	ND	ND	ug/l	NC		20
Chloroform	ND	ND	ug/l	NC		20
Carbon tetrachloride	ND	ND	ug/l	NC		20
1,2-Dichloropropane	ND	ND	ug/l	NC		20
Dibromochloromethane	ND	ND	ug/l	NC		20
1,1,2-Trichloroethane	ND	ND	ug/l	NC		20
Tetrachloroethene	ND	ND	ug/l	NC		20
Chlorobenzene	ND	ND	ug/l	NC		20
Trichlorofluoromethane	ND	ND	ug/l	NC		20
1,2-Dichloroethane	ND	ND	ug/l	NC		20
1,1,1-Trichloroethane	ND	ND	ug/l	NC		20
Bromodichloromethane	ND	ND	ug/l	NC		20
trans-1,3-Dichloropropene	ND	ND	ug/l	NC		20
cis-1,3-Dichloropropene	ND	ND	ug/l	NC		20
Bromoform	ND	ND	ug/l	NC		20
1,1,2,2-Tetrachloroethane	ND	ND	ug/l	NC		20
Benzene	ND	ND	ug/l	NC		20
Toluene	ND	ND	ug/l	NC		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1410006
Report Date: 05/22/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG687577-3 QC Sample: L1409244-02 Client ID: DUP Sample					
Ethylbenzene	ND	ND	ug/l	NC	20
p/m-Xylene	ND	ND	ug/l	NC	20
Chloromethane	ND	ND	ug/l	NC	20
Bromomethane	ND	ND	ug/l	NC	20
Vinyl chloride	ND	ND	ug/l	NC	20
Chloroethane	ND	ND	ug/l	NC	20
1,1-Dichloroethene	ND	ND	ug/l	NC	20
trans-1,2-Dichloroethene	ND	ND	ug/l	NC	20
cis-1,2-Dichloroethene	ND	ND	ug/l	NC	20
Trichloroethene	ND	ND	ug/l	NC	20
1,2-Dichlorobenzene	ND	ND	ug/l	NC	20
1,3-Dichlorobenzene	ND	ND	ug/l	NC	20
1,4-Dichlorobenzene	ND	ND	ug/l	NC	20
Styrene	ND	ND	ug/l	NC	20
o-Xylene	ND	ND	ug/l	NC	20
1,1-Dichloropropene	ND	ND	ug/l	NC	20
2,2-Dichloropropane	ND	ND	ug/l	NC	20
1,1,1,2-Tetrachloroethane	ND	ND	ug/l	NC	20
1,2,3-Trichloropropane	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1410006
Report Date: 05/22/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG687577-3 QC Sample: L1409244-02 Client ID: DUP Sample					
Bromochloromethane	ND	ND	ug/l	NC	20
n-Butylbenzene	ND	ND	ug/l	NC	20
Dichlorodifluoromethane	ND	ND	ug/l	NC	20
Hexachlorobutadiene	ND	ND	ug/l	NC	20
Isopropylbenzene	ND	ND	ug/l	NC	20
p-Isopropyltoluene	ND	ND	ug/l	NC	20
Naphthalene	ND	ND	ug/l	NC	20
n-Propylbenzene	ND	ND	ug/l	NC	20
sec-Butylbenzene	ND	ND	ug/l	NC	20
tert-Butylbenzene	ND	ND	ug/l	NC	20
1,2,3-Trichlorobenzene	ND	ND	ug/l	NC	20
1,2,4-Trichlorobenzene	ND	ND	ug/l	NC	20
1,2,4-Trimethylbenzene	ND	ND	ug/l	NC	20
1,3,5-Trimethylbenzene	ND	ND	ug/l	NC	20
Bromobenzene	ND	ND	ug/l	NC	20
o-Chlorotoluene	ND	ND	ug/l	NC	20
p-Chlorotoluene	ND	ND	ug/l	NC	20
Dibromomethane	ND	ND	ug/l	NC	20
1,2-Dibromoethane	ND	ND	ug/l	NC	20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1410006
Report Date: 05/22/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	RPD Limits
Volatile Organics by GC/MS - Westborough Lab Associated sample(s): 01 QC Batch ID: WG687577-3 QC Sample: L1409244-02 Client ID: DUP Sample					
1,2-Dibromo-3-chloropropane	ND	ND	ug/l	NC	20
1,3-Dichloropropane	ND	ND	ug/l	NC	20
Methyl tert butyl ether	ND	ND	ug/l	NC	20
Xylene (Total)[1]	ND	ND	ug/l	NC	20

Surrogate	%Recovery	Qualifier	%Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	97		102		80-120
4-Bromofluorobenzene	98		95		80-120

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1410006
Project Number: 2013-027
Report Date: 05/22/14

SAMPLE RESULTS

Lab ID:	L1410006-01	Date Collected:	05/09/14 10:35
Client ID:	ALSTON AVE_200	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 15:55		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	31		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1410006
Report Date: 05/22/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 05/13/14 00:15
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 05/12/14 10:00

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01 Batch: WG688792-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	21		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1410006

Report Date: 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 01 Batch: WG688792-2 WG688792-3								
1,4-Dioxane	108		108		40-140	0		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	23		22		15-110

METALS

Project Name: EASTHAM DW
Lab Number: L1410006
Project Number: 2013-027
Report Date: 05/22/14

SAMPLE RESULTS

Lab ID: L1410006-01
Client ID: ALSTON AVE_200
Sample Location: EASTHAM, MA
Matrix: Drinking Water
Date Collected: 05/09/14 10:35
Date Received: 05/09/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	0.00044	J	mg/l	0.00100	0.00020	1	05/15/14 08:53	05/15/14 14:48	EPA 3005A	3,200.8	BM

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1410006
Report Date: 05/22/14

Method Blank Analysis
Batch Quality Control

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Analytical Method	Analyst
Total Metals - Westborough Lab for sample(s): 01 Batch: WG689762-1										
Arsenic, Total	ND		mg/l	0.00100	0.00020	1	05/15/14 08:53	05/15/14 14:35	3,200.8	BM

Prep Information

Digestion Method: EPA 3005A

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1410006

Report Date: 05/22/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 Batch: WG689762-2								
Arsenic, Total	99		-		85-115	-		

Matrix Spike Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1410006
Report Date: 05/22/14

Parameter	Native Sample	MS Added	MS Found	MS %Recovery	Qual	MSD Found	MSD %Recovery	Qual	Recovery Limits	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG689762-4 QC Sample: L1410006-01 Client ID: ALSTON AVE_200												
Arsenic, Total	0.00044J	0.12	0.1201	100		-	-		70-130	-		20

Lab Duplicate Analysis
Batch Quality Control

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1410006
Report Date: 05/22/14

Parameter	Native Sample	Duplicate Sample	Units	RPD	Qual	RPD Limits
Total Metals - Westborough Lab Associated sample(s): 01 QC Batch ID: WG689762-3 QC Sample: L1410006-01 Client ID: ALSTON AVE_200						
Arsenic, Total	0.00044J	0.00034J	mg/l	NC		20

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1410006
Report Date: 05/22/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1410006-01A	Amber 500ml unpreserved	B	7	3.5	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1410006-01B	Amber 500ml unpreserved	B	7	3.5	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1410006-01C	Vial Ascorbic Acid/HCl preserved	B	N/A	3.5	Y	Absent	524.2(14)
L1410006-01D	Vial Ascorbic Acid/HCl preserved	B	N/A	3.5	Y	Absent	524.2(14)
L1410006-01E	Vial Ascorbic Acid/HCl preserved	B	N/A	3.5	Y	Absent	524.2(14)
L1410006-01F	Vial Ascorbic Acid/HCl preserved	B	N/A	3.5	Y	Absent	524.2(14)
L1410006-01G	Plastic 500ml HNO3 preserved	B	<2	3.5	Y	Absent	AS-2008T(180)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1410006
Project Number:	2013-027	**Report Date:**	05/22/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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

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

Data Qualifiers

A - Spectra identified as "Aldol Condensation Product".

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

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1410006
Project Number:	2013-027	**Report Date:**	05/22/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1410006
Project Number:	2013-027	**Report Date:**	05/22/14

REFERENCES

3 Methods for the Determination of Metals in Environmental Samples, Supplement I. EPA/600/R-94/111. May 1994.

16 Methods for the Determination of Organic Compounds in Drinking Water - Supplement II. EPA/600/R-92/129, August 1992.

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised April 15, 2014

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
World Class Chemistry

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:

ALPHA Job #: L1410006

Project Information

Project Name: Eastham DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Report Information — Data Deliverables

☐ FAX ☒ EMAIL

☒ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Client Information

Client: Environmental Strategies & Managemen

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Regulatory Requirements/Report Limits

State/Fed Program	Criteria
8270 - MCP	0.15 ug/l for 1,4 dioxane, GW-1

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:
email results to lflynn@esm-inc.com and aboyd@esm-inc.com

ANALYSIS

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270	524.2 VOC	TOTAL As	Sample Specific Comments
10060 01	ALSTON AVE_200	5/9/14	1035	W	EC	☒	☒	☒	
				W		☒	☐	☐	
				W		☒	☐	☐	
				W		☒	☐	☐	
				W		☒	☐	☐	
				W		☒	☐	☐	
				W		☒	☐	☐	
				W		☒	☐	☐	
				W		☒	☐	☐	
				W		☒	☐	☐	

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

TOTAL # BOTTLES

Container Type	-	-	-	-	-	-	-	-	-	-	-	-		
Preservative	-	-	-	-	-	-	-	-	-	-	-	-		

PLEASE ANSWER QUESTIONS ABOVE!

IS YOUR PROJECT MA MCP *or* CT RCP?

Relinquished By:	Date/Time	Received By:	Date/Time
	5/9/14 1525		5/9/14 15:12

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

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

CHAIN OF CUSTODY

PAGE 1 OF 1

ALPHA ANALYTICAL
World Class Chemistry

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:

ALPHA Job #: L1410006

Project Information

Project Name: Eastham DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Report Information Data Deliverables

☐ FAX ☒ EMAIL

☒ ADEx ☐ Add'l Deliverables

Billing Information

☐ Same as Client info PO #:

Client Information

Client: Environmental Strategies & Managemen

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: lflynn@esm-inc.com

☐ These samples have been Previously analyzed by Alpha

Turn-Around Time

☒ Standard ☐ Rush (ONLY IF PRE-APPROVED)

Due Date: Time:

Regulatory Requirements/Report Limits

State/Fed Program	Criteria
8270 - MCP	0.15 ug/l for 1,4 dioxane, GW-1

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:
email results to lflynn@esm-inc.com and aboyd@esm-inc.com

ANALYSIS

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

TOTAL # BOTTLES

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE	524.2 VOC	TOTAL As										
10060 01	ALSTON AVE_200	5/9/14	1035	W	EC	☒	☒	☒										
				W		☒	☐	☐										
				W		☒	☐	☐										
				W		☒	☐	☐										
				W		☒	☐	☐										
				W		☒	☐	☐										
				W		☒	☐	☐										
				W		☒	☐	☐										
				W		☒	☐	☐										
				W		☒	☐	☐										
				W		☒	☐	☐										
						Container Type	-	-	-	-	-	-	-	-	-	-	-	-
						Preservative	-	-	-	-	-	-	-	-	-	-	-	-

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
	5/9/14 1525		5/9/14 1517
	5/9/14 1740		5/9/14 1717
	5-9-14 18:33		5/9/14 1853

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.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING



ANALYTICAL REPORT

TestAmerica Laboratories, Inc.
TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

TestAmerica Job ID: 480-55476-1
Client Project/Site: Eastham Landfill

For:
Environmental Strategies and Management
273 West Main Street
Norton, Massachusetts 02766

Attn: Doug Heely

Authorized for release by:
3/7/2014 8:47:58 AM
Rich Emerich, Analyst V
rich.emerich@testamericainc.com

Designee for

Steve Hartmann, Service Center Manager
(413)572-4000
steve.hartmann@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

Visit us at: www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Job ID: 480-55476-1

Laboratory: TestAmerica Buffalo

Narrative

Receipt

The samples were received on 3/5/2014 at 2:00 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 2.8º C.

Receipt Notes and Exceptions

The following samples were cancelled by the client on 3/4/2014: ALSTON AVE_285 (480-55476-2), ALSTON AVE_285_DUP (480-55476-4), Belmont Springs (480-55476-10), Belmont Springs Dup (480-55476-12), MEETINGHOUSE RD_100 (480-55476-3), MEETINGHOUSE RD_100_DUP (480-55476-5), Poland Springs (480-55476-9) and Poland Springs Dup (480-55476-11).

GC/MS Semi VOA

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

Organic Prep

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

Detection Summary

Client: Environmental Strategies and Management
Project/Site: Eastham Landfill

TestAmerica Job ID: 480-55476-1

Client Sample ID: Trip Blank — Lab Sample ID: 480-55476-1

No Detections.

Client Sample ID: PTC_Alston Ave_255 Eff — Lab Sample ID: 480-55476-6

No Detections.

Client Sample ID: PTC_Alston Ave_255 Mid — Lab Sample ID: 480-55476-7

No Detections.

Client Sample ID: PTC_Alston Ave_255 Inf — Lab Sample ID: 480-55476-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,4-Dioxane	1.7		0.20	0.040	ug/L	1		522 MOD	Total/NA

This Detection Summary does not include radiochemical test results.

Client: Environmental Strategies and Management
Project/Site: Eastham Landfill

TestAmerica Job ID: 480-55476-1

Client Sample ID: Trip Blank
Date Collected: 03/03/14 00:00
Date Received: 03/05/14 02:00

Lab Sample ID: 480-55476-1
Matrix: Water

Method: 522 MOD - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.040	ug/L		03/05/14 10:56	03/05/14 17:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*92*		*70 - 130*	*03/05/14 10:56*	*03/05/14 17:36*	*1*

Client: Environmental Strategies and Management
Project/Site: Eastham Landfill

TestAmerica Job ID: 480-55476-1

Client Sample ID: PTC_Alston Ave_255 Eff
Date Collected: 03/03/14 10:00
Date Received: 03/05/14 02:00

Lab Sample ID: 480-55476-6
Matrix: Water

Method: 522 MOD - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.040	ug/L		03/05/14 10:56	03/05/14 17:52	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*89*		*70 - 130*	*03/05/14 10:56*	*03/05/14 17:52*	*1*

Client: Environmental Strategies and Management
Project/Site: Eastham Landfill

TestAmerica Job ID: 480-55476-1

Client Sample ID: PTC_Alston Ave_255 Mid
Date Collected: 03/03/14 10:05
Date Received: 03/05/14 02:00

Lab Sample ID: 480-55476-7
Matrix: Water

Method: 522 MOD - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.040	ug/L		03/05/14 10:56	03/05/14 18:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*84*		*70 - 130*	*03/05/14 10:56*	*03/05/14 18:08*	*1*

Client: Environmental Strategies and Management
Project/Site: Eastham Landfill

TestAmerica Job ID: 480-55476-1

Client Sample ID: PTC_Alston Ave_255 Inf
Date Collected: 03/03/14 10:10
Date Received: 03/05/14 02:00

Lab Sample ID: 480-55476-8
Matrix: Water

Method: 522 MOD - 1,4 Dioxane (GC/MS SIM)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	1.7		0.20	0.040	ug/L		03/05/14 10:56	03/05/14 18:24	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*82*		*70 - 130*	*03/05/14 10:56*	*03/05/14 18:24*	*1*

Surrogate Summary

Client: Environmental Strategies and Management
Project/Site: Eastham Landfill

TestAmerica Job ID: 480-55476-1

Method: 522 MOD - 1,4 Dioxane (GC/MS SIM)

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

		Percent Surrogate Recovery (Acceptance Limits)								
Lab Sample ID	Client Sample ID	14DD8 (70-130)								
480-55476-1	Trip Blank	92								
480-55476-6	PTC_Alston Ave_255 Eff	89								
480-55476-7	PTC_Alston Ave_255 Mid	84								
480-55476-8	PTC_Alston Ave_255 Inf	82								
LCS 200-69151/2-A	Lab Control Sample	93								
MB 200-69151/1-A	Method Blank	91								

Surrogate Legend

14DD8 = 1,4-Dioxane-d8 (Surr)

Method: 522 MOD - 1,4 Dioxane (GC/MS SIM)

Lab Sample ID: MB 200-69151/1-A
Matrix: Water
Analysis Batch: 69157

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 69151

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,4-Dioxane	ND		0.20	0.040	ug/L		03/05/14 10:56	03/05/14 14:53	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,4-Dioxane-d8 (Surr)	*91*		*70 - 130*	*03/05/14 10:56*	*03/05/14 14:53*	*1*

Lab Sample ID: LCS 200-69151/2-A
Matrix: Water
Analysis Batch: 69157

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 69151

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
1,4-Dioxane			8.00	6.89		ug/L		86	70 - 130		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,4-Dioxane-d8 (Surr)	*93*		*70 - 130*

QC Association Summary

Client: Environmental Strategies and Management
Project/Site: Eastham Landfill

TestAmerica Job ID: 480-55476-1

GC/MS Semi VOA

Prep Batch: 69151

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-55476-1	Trip Blank	Total/NA	Water	3535A	
480-55476-6	PTC_Alston Ave_255 Eff	Total/NA	Water	3535A	
480-55476-7	PTC_Alston Ave_255 Mid	Total/NA	Water	3535A	
480-55476-8	PTC_Alston Ave_255 Inf	Total/NA	Water	3535A	
LCS 200-69151/2-A	Lab Control Sample	Total/NA	Water	3535A	
MB 200-69151/1-A	Method Blank	Total/NA	Water	3535A	

Analysis Batch: 69157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-55476-1	Trip Blank	Total/NA	Water	522 MOD	69151
480-55476-6	PTC_Alston Ave_255 Eff	Total/NA	Water	522 MOD	69151
480-55476-7	PTC_Alston Ave_255 Mid	Total/NA	Water	522 MOD	69151
480-55476-8	PTC_Alston Ave_255 Inf	Total/NA	Water	522 MOD	69151
LCS 200-69151/2-A	Lab Control Sample	Total/NA	Water	522 MOD	69151
MB 200-69151/1-A	Method Blank	Total/NA	Water	522 MOD	69151

Lab Chronicle

Client: Environmental Strategies and Management
Project/Site: Eastham Landfill

TestAmerica Job ID: 480-55476-1

Client Sample ID: Trip Blank — Lab Sample ID: 480-55476-1

Date Collected: 03/03/14 00:00 — **Matrix: Water**
Date Received: 03/05/14 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			69151	03/05/14 10:56	EAN	TAL BUR
Total/NA	Analysis	522 MOD		1	69157	03/05/14 17:36	KHW	TAL BUR

Client Sample ID: PTC_Alston Ave_255 Eff — Lab Sample ID: 480-55476-6

Date Collected: 03/03/14 10:00 — **Matrix: Water**
Date Received: 03/05/14 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			69151	03/05/14 10:56	EAN	TAL BUR
Total/NA	Analysis	522 MOD		1	69157	03/05/14 17:52	KHW	TAL BUR

Client Sample ID: PTC_Alston Ave_255 Mid — Lab Sample ID: 480-55476-7

Date Collected: 03/03/14 10:05 — **Matrix: Water**
Date Received: 03/05/14 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			69151	03/05/14 10:56	EAN	TAL BUR
Total/NA	Analysis	522 MOD		1	69157	03/05/14 18:08	KHW	TAL BUR

Client Sample ID: PTC_Alston Ave_255 Inf — Lab Sample ID: 480-55476-8

Date Collected: 03/03/14 10:10 — **Matrix: Water**
Date Received: 03/05/14 02:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3535A			69151	03/05/14 10:56	EAN	TAL BUR
Total/NA	Analysis	522 MOD		1	69157	03/05/14 18:24	KHW	TAL BUR

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Certification Summary

Client: Environmental Strategies and Management
Project/Site: Eastham Landfill

TestAmerica Job ID: 480-55476-1

Laboratory: TestAmerica Buffalo

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Arkansas DEQ	State Program	6	88-0686	07-06-14
California	NELAP	9	1169CA	09-30-14
Connecticut	State Program	1	PH-0568	09-30-14
Florida	NELAP	4	E87672	06-30-14
Georgia	State Program	4	N/A	03-31-14 *
Illinois	NELAP	5	200003	09-30-14
Iowa	State Program	7	374	03-01-15
Kansas	NELAP	7	E-10187	04-01-14 *
Kentucky (DW)	State Program	4	90029	12-31-14
Kentucky (UST)	State Program	4	30	04-01-14 *
Louisiana	NELAP	6	02031	06-30-14
Maine	State Program	1	NY00044	12-04-14
Maryland	State Program	3	294	03-31-14 *
Massachusetts	State Program	1	M-NY044	06-30-14
Michigan	State Program	5	9937	04-01-14 *
Minnesota	NELAP	5	036-999-337	12-31-14
New Hampshire	NELAP	1	2337	11-17-14
New Jersey	NELAP	2	NY455	06-30-14
New York	NELAP	2	10026	03-31-14 *
North Dakota	State Program	8	R-176	03-31-14 *
Oklahoma	State Program	6	9421	08-31-14
Oregon	NELAP	10	NY200003	06-09-14
Pennsylvania	NELAP	3	68-00281	07-31-14
Rhode Island	State Program	1	LAO00328	12-30-14
Tennessee	State Program	4	TN02970	04-01-14 *
Texas	NELAP	6	T104704412-11-2	07-31-14
USDA	Federal		P330-11-00386	11-22-14
Virginia	NELAP	3	460185	09-14-14
West Virginia DEP	State Program	3	252	03-31-14 *
Wisconsin	State Program	5	998310390	08-31-14

Laboratory: TestAmerica Burlington

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Connecticut	State Program	1	PH-0751	09-30-15
DE Haz. Subst. Cleanup Act (HSCA)	State Program	3	NA	02-13-15
Florida	NELAP	4	E87467	06-30-14
L-A-B	DoD ELAP		L2336	02-26-17
Louisiana	NELAP	6	176292	06-30-14
Maine	State Program	1	VT00008	04-17-15
Minnesota	NELAP	5	050-999-436	12-31-14
New Hampshire	NELAP	1	2006	12-18-14
New Jersey	NELAP	2	VT972	06-30-14
New York	NELAP	2	10391	04-01-14 *
Pennsylvania	NELAP	3	68-00489	04-30-14 *
Rhode Island	State Program	1	LAO00298	12-30-14
US Fish & Wildlife	Federal		LE-058448-0	02-28-14 *
USDA	Federal		P330-11-00093	10-28-16
Vermont	State Program	1	VT-4000	12-31-14

* Expired certification is currently pending renewal and is considered valid.

Certification Summary

Client: Environmental Strategies and Management
Project/Site: Eastham Landfill

TestAmerica Job ID: 480-55476-1

Laboratory: TestAmerica Burlington (Continued)

All certifications held by this laboratory are listed. Not all certifications are applicable to this report.

Authority	Program	EPA Region	Certification ID	Expiration Date
Virginia	NELAP	3	460209	12-14-14

Method Summary

Client: Environmental Strategies and Management
Project/Site: Eastham Landfill

TestAmerica Job ID: 480-55476-1

Method	Method Description	Protocol	Laboratory
522 MOD	1,4 Dioxane (GC/MS SIM)	EPA	TAL BUR

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

TAL BUR = TestAmerica Burlington, 30 Community Drive, Suite 11, South Burlington, VT 05403, TEL (802)660-1990

Sample Summary

Client: Environmental Strategies and Management
Project/Site: Eastham Landfill

TestAmerica Job ID: 480-55476-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
480-55476-1	Trip Blank	Water	03/03/14 00:00	03/05/14 02:00
480-55476-6	PTC_Alston Ave_255 Eff	Water	03/03/14 10:00	03/05/14 02:00
480-55476-7	PTC_Alston Ave_255 Mid	Water	03/03/14 10:05	03/05/14 02:00
480-55476-8	PTC_Alston Ave_255 Inf	Water	03/03/14 10:10	03/05/14 02:00

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

480-55476 Chain of Custody

Client Information	Sampler: Evan Cuce	Lab PM: Hartm	COC No: 480-45798-12131.1
Client Contact: Lisa Flynn	Phone: 508-926-7963	E-Mail: steve	Page: Page ~~1 of 4~~ 1 of 2
Company: Environmental Strategies and Management			Job #:
Address: 273 West Main Street	Due Date Requested:		
City: Norton	TAT Requested (days):		
State, Zip: MA, 02766			
Phone:	PO #: Purchase Order not required		
Email: lflynn@esm-inc.com	WO #:		
Project Name: Eastham Landfill	Project #: 48007385		
Site:	SSOW#:		

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2SO3
G - Amchlor	S - H2SO4
H - Ascorbic Acid	T - TSP Dodecahydrate
I - Ice	U - Acetone
J - DI Water	V - MCAA
K - EDTA	W - ph 4-5
L - EDA	Z - other (specify)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	522_MOD - 1,4-Dioxane	524.2_Preserved - VOC's	200.8 - Arsenic	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	A	D		
Trip Blank				Water			X	X			
~~ALSTON AVE_255~~				~~Water~~			~~X~~				EC
ALSTON AVE_285	3/3/14	1045		Water			X	X	X		
MEETINGHOUSE RD_100	3/3/14	1135		Water			X	X	X		
~~OLD ORCHARD RD_180~~				~~Water~~			~~X~~	~~X~~	~~X~~		EC
ALSTON AVE_285_DUP	3/3/14	1045		Water							On hold
MEETINGHOUSE RD_100_DUP	3/3/14	1135		Water							On hold
~~OLD ORCHARD RD_180_DUP~~				~~Water~~							On hold EC
PTC11_Alston Ave_255 Eff	3/3/14	1000		water			X				
PTC11_Alston Ave_255 Mid	3/3/14	1005		water			X				
PTC11_Alston Ave_255 Inf	3/3/14	1010		water			X				

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:	
Relinquished by:	Date/Time: 3/3/14 1510	Company ESM	Received by: Allison Connell	Date/Time: 3/3/14 15:10	Company ESM		
Relinquished by: Allison Connell	Date/Time: ~~3/3/14 1510~~ 3/4/14 925	Company ESM	Received by:	Date/Time: 3/4/14 9:25	Company TAL		
Relinquished by:	Date/Time: 3/4/14 1600	Company TAL	Received by:	Date/Time: 3.5.14 0200	Company TAL		

Custody Seals Intact: △ Yes △ No | Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 2.8 #1

TestAmerica Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Phone (716) 691-2600 Fax (716) 691-7991

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Evan Cucé	Lab PM: Hartmann, Steve	Carrier Tracking No(s):	COC No: 480-45798-12131.1
Client Contact: Lisa Flynn	Phone: 508-926-7963	E-Mail: steve.hartmann@testamericainc.com		Page: Page ~~1 of 1~~ 2 of 2
Company: Environmental Strategies and Management				Job #:

Address: 273 West Main Street	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Norton	TAT Requested (days):		A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, M - Hexane, N - None, O - AsNaO2, P - Na2O4S, Q - Na2SO3, R - Na2S2SO3, S - H2SO4, T - TSP Dodecahydrate, U - Acetone, V - MCAA, W - ph 4-5, Z - other (specify)
State, Zip: MA, 02766			
Phone:	PO #: Purchase Order not required		
Email: lflynn@esm-inc.com	WO #:		Other:
Project Name: Eastham Landfill	Project #: 48007385		
Site:	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	522_MOD - 1,4-Dioxane	624.2_Preserved - VOC's	200.8 - Arsenic	Total Number of containers	Special Instructions/Note:
			Preservation Code:				A	A	D		
Poland Springs	3/3/14	1150		W			X				
Belmont Springs	3/3/14	1220		W			X				
Poland Springs Dup	3/3/14	1150		W							On hold
Belmont Springs Dup	3/3/14	1220		W							On hold

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
☐ Return To Client ☐ Disposal By Lab ☐ Archive For _____ Months

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
1		3/3/14 1510	ESM	Allison Cornell	3/3/14 1510	ESM
2	Allison Cornell	3/4/14 9:25	ESM		3/4/14 9:25	TAL
3		3/4/14 1600	TAL		3-5-14 0200	TAL

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 2.2 #1

Login Sample Receipt Checklist

Client: Environmental Strategies and Management

Job Number: 480-55476-1

Login Number: 55476

List Source: TestAmerica Buffalo

List Number: 1

Creator: Wienke, Robert K

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	N/A	
Chlorine Residual checked.	False	Lab to check

Login Sample Receipt Checklist

Client: Environmental Strategies and Management

Job Number: 480-55476-1

Login Number: 55476
List Number: 1
Creator: Lavigne, Scott M

List Source: TestAmerica Burlington
List Creation: 03/05/14 11:23 AM

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	Lab does not accept radioactive samples.
The cooler's custody seal, if present, is intact.	True	Not present
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	2.1C°/IR GUN ID 181. CF= -0.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	
Residual Chlorine Checked.	N/A	

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1406558	3/28/2014	drinking water	Yes	Yes	Yes	Yes	Yes	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
Alston Ave_265	3/28/2014	L1406558-01	DW	8270
Alston Ave_265 Dup	3/28/2014	L1406558-02	DW	8270
PTC-12_255 Alston Inf	3/28/2014	L1406558-03	DW	8270
PTC-12_255 Alston Mid	3/28/2014	L1406558-04	DW	8270
PTC-12_255 Alston Eff	3/28/2014	L1406558-05	DW	8270
Redberry Ln_045	3/28/2014	L1406558-06	DW	8270
Redberry Ln_045 Dup	3/28/2014	L1406558-07	DW	8270
Deepwood Dr_065	3/28/2014	L1406558-08	DW	8270
Deepwood Dr_065 Dup	3/28/2014	L1406558-09	DW	8270
Alson Ave _080	3/28/2014	L1406558-10	DW	8270
Alson Ave _080 Dup	3/28/2014	L1406558-11	DW	8270
Trip Blank	3/28/2014	L1406558-12	DW	8270

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS) and LCS duplicate results were reviewed.

This report was deemed usable by Angela Boyd on 4/7/14.

ANALYTICAL REPORT

Lab Number:	L1406558
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	2013-027
Report Date:	04/03/14

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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406558
Report Date: 04/03/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1406558-01	ALSTON AVE_265	EASTHAM, MA	03/28/14 09:05
L1406558-02	ALSTON AVE_265 DUP	EASTHAM, MA	03/28/14 09:05
L1406558-03	PTC-12_255 ALSTON INF	EASTHAM, MA	03/28/14 08:48
L1406558-04	PTC-12_255 ALSTON MID	EASTHAM, MA	03/28/14 08:46
L1406558-05	PTC-12_255 ALSTON EFF	EASTHAM, MA	03/28/14 08:44
L1406558-06	REDBERRY LN_045	EASTHAM, MA	03/28/14 10:20
L1406558-07	REDBERRY LN_045 DUP	EASTHAM, MA	03/28/14 10:20
L1406558-08	DEEPWOOD DR_065	EASTHAM, MA	03/28/14 12:35
L1406558-09	DEEPWOOD DR_065 DUP	EASTHAM, MA	03/28/14 12:35
L1406558-10	ALSTON AVE_080	EASTHAM, MA	03/28/14 14:15
L1406558-11	ALSTON AVE_080 DUP	EASTHAM, MA	03/28/14 14:15
L1406558-12	TRIP BLANK	EASTHAM, MA	03/28/14 00:00

Project Name: EASTHAM DW
Project Number: 2013-027
Lab Number: L1406558
Report Date: 04/03/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406558
Report Date: 04/03/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406558
Report Date: 04/03/14

Case Narrative (continued)

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: Elizabeth Porta

Title: Technical Director/Representative

Date: 04/03/14

ORGANICS

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1406558
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406558-01	Date Collected:	03/28/14 09:05
Client ID:	ALSTON AVE_265	Date Received:	03/28/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 13:15		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	25		15-110

Project Name: EASTHAM DW
Lab Number: L1406558
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406558-03	Date Collected:	03/28/14 08:48
Client ID:	PTC-12_255 ALSTON INF	Date Received:	03/28/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 14:10		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	2.06		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1406558
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406558-04	Date Collected:	03/28/14 08:46
Client ID:	PTC-12_255 ALSTON MID	Date Received:	03/28/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 14:54		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.127	J	ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	22		15-110

Project Name: EASTHAM DW
Lab Number: L1406558
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406558-05	Date Collected:	03/28/14 08:44
Client ID:	PTC-12_255 ALSTON EFF	Date Received:	03/28/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 15:39		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1406558
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406558-06	Date Collected:	03/28/14 10:20
Client ID:	REDBERRY LN_045	Date Received:	03/28/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 16:24		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.105	J	ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1406558
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406558-08	Date Collected:	03/28/14 12:35
Client ID:	DEEPWOOD DR_065	Date Received:	03/28/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 17:09		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.297		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1406558
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406558-09	Date Collected:	03/28/14 12:35
Client ID:	DEEPWOOD DR_065 DUP	Date Received:	03/28/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	04/03/14 07:23
Analytical Date:	04/03/14 15:23		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.336		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	30		15-110

Project Name: EASTHAM DW
Lab Number: L1406558
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406558-10	Date Collected:	03/28/14 14:15
Client ID:	ALSTON AVE_080	Date Received:	03/28/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/31/14 11:24
Analytical Date:	04/01/14 12:21		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	27		15-110

Project Name: EASTHAM DW
Lab Number: L1406558
Project Number: 2013-027
Report Date: 04/03/14

SAMPLE RESULTS

Lab ID:	L1406558-12	Date Collected:	03/28/14 00:00
Client ID:	TRIP BLANK	Date Received:	03/28/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	03/30/14 10:42
Analytical Date:	03/31/14 17:54		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.156	0.0781	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406558
Report Date: 04/03/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 03/31/14 01:21
Analyst: CM

Extraction Method: EPA 3510C
Extraction Date: 03/30/14 10:42

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01,03-06,08,12 Batch: WG678940-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406558
Report Date: 04/03/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 03/31/14 20:03
Analyst: CM

Extraction Method: EPA 3510C
Extraction Date: 03/31/14 11:24

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 10 Batch: WG679062-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	30		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406558
Report Date: 04/03/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 04/03/14 12:23
Analyst: CM

Extraction Method: EPA 3510C
Extraction Date: 04/03/14 07:23

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 09 Batch: WG679860-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	36		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1406558

Report Date: 04/03/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab	Associated sample(s):	01,03-06,08,12	Batch:	WG678940-2	WG678940-3			
1,4-Dioxane	102		104		40-140	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	28		31		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1406558

Report Date: 04/03/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 10 Batch: WG679062-2 WG679062-3								
1,4-Dioxane	101		105		40-140	4		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	28		26		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1406558

Report Date: 04/03/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 09 Batch: WG679860-2 WG679860-3								
1,4-Dioxane	104		106		40-140	2		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	34		37		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1406558
Report Date: 04/03/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information Custody Seal

Cooler	
A	Absent
B	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1406558-01A	Amber 500ml unpreserved	B	7	4.5	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-01B	Amber 500ml unpreserved	B	7	4.5	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-02A	Amber 500ml unpreserved	B	7	4.5	Y	Absent	HOLD(14)
L1406558-02B	Amber 500ml unpreserved	B	7	4.5	Y	Absent	HOLD(14)
L1406558-03A	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-03B	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-04A	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-04B	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-05A	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-05B	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-06A	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-06B	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-07A	Amber 500ml unpreserved	A	7	3.7	Y	Absent	HOLD(14)
L1406558-07B	Amber 500ml unpreserved	A	7	3.7	Y	Absent	HOLD(14)
L1406558-08A	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-08B	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-09A	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-09B	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-10A	Amber 1000ml unpreserved	B	7	4.5	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-10B	Amber 1000ml unpreserved	B	7	4.5	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-11A	Amber 1000ml unpreserved	B	7	4.5	Y	Absent	HOLD(14)
L1406558-11B	Amber 1000ml unpreserved	B	7	4.5	Y	Absent	HOLD(14)
L1406558-12A	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1406558-12B	Amber 500ml unpreserved	A	7	3.7	Y	Absent	A2-MCP-14DX-SIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1406558
Project Number:	2013-027	**Report Date:**	04/03/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1406558
Project Number:	2013-027	**Report Date:**	04/03/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1406558
Project Number:	2013-027	**Report Date:**	04/03/14

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised December 11, 2013

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 2

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:

ALPHA Job #: L1406558

Project Information

Project Name: Eastham DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: aboyd@esm-inc.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
8270-MCP CAM	0.15 UG/L FOR 1,4 DIOXANE, GW 1

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:

* please also email results to lflynn@esm-inc.com

Run duplicate samples (DUP) if 1,4 dioxane is detected above the RL (0.15 ug/L)

ANALYSIS

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

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270 SIM	Sample Specific Comments
01	ALSTON AVE_265	03/28/14	0905	W	MD	☒	
02	ALSTON AVE_265 DUP	03/28/14	0905	W	MD	☒	
03	PTC-12_255 Alston INF	03/28/14	0848	W	MD	☒	
04	PTC-12_255 Alston MID	03/28/14	0846	W	MD	☒	
05	PTC-12_255 Alston EFF	03/28/14	0844	W	MD	☒	
06	REDBERRY LN_045	03/28/14	1020	W	MD	☒	
07	REDBERRY LN_045 DUP	03/28/14	1020	W	MD	☒	
08	DEEPWOOD DR_065	3/28/14	1235	W	MD	☒	
09	DEEPWOOD DR_065 DUP	3/28/14	1235	W	MD	☒	
						☐	

Container Type	-	-	-	-	-	-	-	-	-	-	-	-
Preservative	-	-	-	-	-	-	-	-	-	-	-	-

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
	03/28/14		3/28/14 16:30

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.

CHAIN OF CUSTODY

PAGE 2 OF 2

ALPHA ANALYTICAL — World Class Chemistry

Date Rec'd in Lab:

ALPHA Job #: L1406558

Westborough, MA TEL: 508-898-9220 FAX: 508-898-9193

Mansfield, MA TEL: 508-822-9300 FAX: 508-822-3288

Project Information

Project Name: Eastham DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: aboyd@esm-inc.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
8270-MCP CAM	0.15 UG/L FOR 1,4 DIOXANE, GW 1

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:

* please also email results to lflynn@esm-inc.com

Run duplicate samples (DUP) if 1,4 dioxane is detected above the RL (0.15 ug/L)

ANALYSIS

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

TOTAL # BOTTLES

Sample Specific Comments

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270 SIM													Sample Specific Comments
70	ALSTON AVE_080	03/28/14	1415	W	MD	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
71	ALSTON AVE_080 DUP	03/28/14	1415	W	MD	☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
72	TRIP BLANK					☒	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
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						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
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						☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐		
Container Type						-	-	-	-	-	-	-	-	-	-	-	-		
Preservative						-	-	-	-	-	-	-	-	-	-	-	-		

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
	03/28/14		3/28/14 16:30

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.

ES&M QAQC Review Log

Lab	Project Number	Sample Date	Matrix	CAM Form Included?	Lab Presumptive Certainty?	QC Performance Standards Met?	Reporting Limits Achieved?	All Analytes Reported?	Data Usability Status
Alpha	L1409034	4/29/2014	drinking water	Yes	Yes	Yes	Yes	Yes	Usable - CAM Compliant

Sample ID	Date	Lab ID	Matrix	Analysis
trip blank	4/29/2014	L1409034-1	DW	8270
PTC-13_255 Alston Inf	4/29/2014	L1409034-2	DW	8270
PTC-13_255 Alston Mid	4/29/2014	L1409034-3	DW	8270
PTC-13_255 Alston Eff	4/29/2014	L1409034-4	DW	8270
PTC-14_255 Alston Mid	4/29/2014	L1409034-5	DW	8270
PTC-14_255 Alston Eff	4/29/2014	L1409034-6	DW	8270

All QAQC data, including surrogate, trip blank, method blank, laboratory control sample (LCS) and LCS duplicate results were reviewed.

This report was deemed usable by Angela Boyd on 5/6/14.

ANALYTICAL REPORT

Lab Number:	L1409034
Client:	Environmental Strategies & Mgmt. 273 West Main Street Norton, MA 02766
ATTN:	Lisa Flynn
Phone:	(508) 226-1800
Project Name:	EASTHAM DW
Project Number:	2013-027
Report Date:	05/05/14

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

Certifications & Approvals: NY (11627), CT (PH-0141), NH (2206), NJ NELAP (MA015), RI (LAO00299), PA (68-02089), LA NELAP (03090), FL (E87814), TX (T104704419), WA (C954), DOD (L2217.01), 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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409034
Report Date: 05/05/14

Alpha Sample ID	Client ID	Sample Location	Collection Date/Time
L1409034-01	TRIPBLANK	EASTHAM MA	04/29/14 00:00
L1409034-02	PTC-13_255 ALSTON INF	EASTHAM MA	04/29/14 09:00
L1409034-03	PTC-13_255 ALSTON MID	EASTHAM MA	04/29/14 09:05
L1409034-04	PTC-13_255 ALSTON EFF	EASTHAM MA	04/29/14 09:15
L1409034-05	PTC-14_255 ALSTON MID	EASTHAM MA	04/29/14 12:00
L1409034-06	PTC-14_255 ALSTON EFF	EASTHAM MA	04/29/14 12:05

Project Name:	EASTHAM DW	**Lab Number:**	L1409034
Project Number:	2013-027	**Report Date:**	05/05/14

MADEP MCP Response Action Analytical Report Certification

This form provides certifications for all samples performed by MCP methods. Please refer to the Sample Results and Container Information sections of this report for specification of MCP methods used for each analysis. The following questions pertain only to MCP Analytical Methods.

An affirmative response to questions A through F is required for "Presumptive Certainty" status		
A	Were all samples received in a condition consistent with those described on the Chain-of-Custody, properly preserved (including temperature) in the field or laboratory, and prepared/analyzed within method holding times?	YES
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	YES
C	Were all required corrective actions and analytical response actions specified in the selected CAM protocol(s) implemented for all identified performance standard non-conformances?	YES
D	Does the laboratory report comply with all the reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data?"	YES
E a.	VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	N/A
E b.	APH and TO-15 Methods only: Was the complete analyte list reported for each method?	N/A
F	Were all applicable CAM protocol QC and performance standard non-conformances identified and evaluated in a laboratory narrative (including all "No" responses to Questions A through E)?	YES

A response to questions G, H and I is required for "Presumptive Certainty" status		
G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocol(s)?	YES
H	Were all QC performance standards specified in the CAM protocol(s) achieved?	YES
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	YES

For any questions answered "No", please refer to the case narrative section on the following page(s).

Please note that sample matrix information is located in the Sample Results section of this report.

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409034
Report Date: 05/05/14

Case Narrative

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

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

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

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

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

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

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409034
Report Date: 05/05/14

Case Narrative (continued)

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: Elizabeth Porta

Title: Technical Director/Representative

Date: 05/05/14

ORGANICS

SEMIVOLATILES

Project Name: EASTHAM DW
Lab Number: L1409034
Project Number: 2013-027
Report Date: 05/05/14

SAMPLE RESULTS

Lab ID:	L1409034-01	Date Collected:	04/29/14 00:00
Client ID:	TRIPBLANK	Date Received:	04/29/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/01/14 09:15
Analytical Date:	05/02/14 03:21		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.148	0.0742	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Project Name: EASTHAM DW
Lab Number: L1409034
Project Number: 2013-027
Report Date: 05/05/14

SAMPLE RESULTS

Lab ID:	L1409034-02	Date Collected:	04/29/14 09:00
Client ID:	PTC-13_255 ALSTON INF	Date Received:	04/29/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/01/14 09:15
Analytical Date:	05/02/14 04:06		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	1.93		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	29		15-110

Project Name: EASTHAM DW
Lab Number: L1409034
Project Number: 2013-027
Report Date: 05/05/14

SAMPLE RESULTS

Lab ID:	L1409034-03	Date Collected:	04/29/14 09:05
Client ID:	PTC-13_255 ALSTON MID	Date Received:	04/29/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/01/14 09:15
Analytical Date:	05/02/14 04:51		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.264		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	30		15-110

Project Name: EASTHAM DW
Lab Number: L1409034
Project Number: 2013-027
Report Date: 05/05/14

SAMPLE RESULTS

Lab ID:	L1409034-04	Date Collected:	04/29/14 09:15
Client ID:	PTC-13_255 ALSTON EFF	Date Received:	04/29/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/01/14 09:15
Analytical Date:	05/02/14 05:36		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	31		15-110

Project Name: EASTHAM DW
Lab Number: L1409034
Project Number: 2013-027
Report Date: 05/05/14

SAMPLE RESULTS

Lab ID:	L1409034-05	Date Collected:	04/29/14 12:00
Client ID:	PTC-14_255 ALSTON MID	Date Received:	04/29/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/01/14 09:15
Analytical Date:	05/02/14 06:21		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	21		15-110

Project Name: EASTHAM DW
Lab Number: L1409034
Project Number: 2013-027
Report Date: 05/05/14

SAMPLE RESULTS

Lab ID:	L1409034-06	Date Collected:	04/29/14 12:05
Client ID:	PTC-14_255 ALSTON EFF	Date Received:	04/29/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/01/14 09:15
Analytical Date:	05/02/14 07:06		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	32		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409034
Report Date: 05/05/14

Method Blank Analysis
Batch Quality Control

Analytical Method: 97,8270D-SIM
Analytical Date: 05/02/14 01:05
Analyst: JT

Extraction Method: EPA 3510C
Extraction Date: 05/01/14 09:15

Parameter	Result	Qualifier	Units	RL	MDL
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab for sample(s): 01-06 Batch: WG686457-1					
1,4-Dioxane	ND		ug/l	0.150	0.0750

Surrogate	%Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	33		15-110

Lab Control Sample Analysis

Batch Quality Control

Project Name: EASTHAM DW

Project Number: 2013-027

Lab Number: L1409034

Report Date: 05/05/14

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab Associated sample(s): 01-06 Batch: WG686457-2 WG686457-3								
1,4-Dioxane	109		108		40-140	1		20

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
1,4-Dioxane-d8	34		33		15-110

Project Name: EASTHAM DW
Project Number: 2013-027

Lab Number: L1409034
Report Date: 05/05/14

Sample Receipt and Container Information

Were project specific reporting limits specified? YES

Reagent H2O Preserved Vials Frozen on: NA

Cooler Information **Custody Seal**

Cooler	
A	Absent

Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1409034-01A	Amber 500ml unpreserved	A	8	3.4	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409034-01B	Amber 500ml unpreserved	A	8	3.4	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409034-02A	Amber 500ml unpreserved	A	8	3.4	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409034-02B	Amber 500ml unpreserved	A	8	3.4	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409034-03A	Amber 500ml unpreserved	A	8	3.4	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409034-03B	Amber 500ml unpreserved	A	8	3.4	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409034-04A	Amber 500ml unpreserved	A	8	3.4	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409034-04B	Amber 500ml unpreserved	A	8	3.4	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409034-05A	Amber 500ml unpreserved	A	8	3.4	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409034-05B	Amber 500ml unpreserved	A	8	3.4	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409034-06A	Amber 500ml unpreserved	A	8	3.4	Y	Absent	A2-MCP-14DX-SIM-PPB(7)
L1409034-06B	Amber 500ml unpreserved	A	8	3.4	Y	Absent	A2-MCP-14DX-SIM-PPB(7)

*Values in parentheses indicate holding time in days

Project Name:	EASTHAM DW	**Lab Number:**	L1409034
Project Number:	2013-027	**Report Date:**	05/05/14

GLOSSARY

Acronyms

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NI - Not Ignitable.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

Footnotes

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

Terms

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.

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.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1409034
Project Number:	2013-027	**Report Date:**	05/05/14

Data Qualifiers

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. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs).

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Report Format: DU Report with 'J' Qualifiers

Project Name:	EASTHAM DW	**Lab Number:**	L1409034
Project Number:	2013-027	**Report Date:**	05/05/14

REFERENCES

97 EPA Test Methods (SW-846) with QC Requirements & Performance Standards for the Analysis of EPA SW-846 Methods under the Massachusetts Contingency Plan, WSC-CAM-IIA, IIB, IIIA, IIIB, IIIC, IIID, VA, VB, VC, VIA, VIB, VIIIA and VIIIB, July 2010.

LIMITATION OF LIABILITIES

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

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

Certification Information

Last revised April 15, 2014

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

Westborough Facility
EPA 524.2: Acetone, 2-Butanone (Methyl ethyl ketone (MEK)), Tert-butyl alcohol, 2-Hexanone, Tetrahydrofuran, 1,3,5-Trichlorobenzene, 4-Methyl-2-pentanone (MIBK), Carbon disulfide, Diethyl ether.
EPA 8260C: 1,2,4,5-Tetramethylbenzene, 4-Ethyltoluene, Iodomethane (methyl iodide), Methyl methacrylate, Azobenzene.
EPA 8330A/B: PETN, Picric Acid, Nitroglycerine, 2,6-DANT, 2,4-DANT.
EPA 8270D: 1-Methylnaphthalene, Dimethylnaphthalene,1,4-Diphenylhydrazine.
EPA 625: 4-Chloroaniline, 4-Methylphenol.
SM4500: Soil: Total Phosphorus, TKN, NO2, NO3.
EPA 9071: Total Petroleum Hydrocarbons, Oil & Grease.

Mansfield Facility
EPA 8270D: Biphenyl.
EPA 2540D: TSS
EPA TO-15: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 1-Methylnaphthalene.

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

Drinking Water
EPA 200.8: Sb,As,Ba,Be,Cd,Cr,Cu,Pb,Ni,Se,Tl; **EPA 200.7**: Ba,Be,Ca,Cd,Cr,Cu,Na; **EPA 245.1:** Mercury;
EPA 300.0: Nitrate-N, Fluoride, Sulfate; **EPA 353.2**: Nitrate-N, Nitrite-N; **SM4500NO3-F**: Nitrate-N, Nitrite-N; **SM4500F-C, SM4500CN-CE, EPA 180.1, SM2130B, SM4500Cl-D, SM2320B, SM2540C, SM4500H-B**
EPA 332: Perchlorate.
Microbiology: **SM9215B; SM9223-P/A, SM9223B-Colilert-QT, Enterolert-QT.**

Non-Potable Water
EPA 200.8: Al,Sb,As,Be,Cd,Cr,Cu,Pb,Mn,Ni,Se,Ag,Tl,Zn;
EPA 200.7: Al,Sb,As,Be,Cd,Ca,Cr,Co,Cu,Fe,Pb,Mg,Mn,Mo,Ni,K,Se,Ag,Na,Sr,Ti,Tl,V,Zn;
EPA 245.1, SM4500H,B, EPA 120.1, SM2510B, SM2540C, SM2340B, SM2320B, SM4500CL-E, SM4500F-BC, SM426C, SM4500NH3-BH, **EPA 350.1**: Ammonia-N, **LACHAT 10-107-06-1-B**: Ammonia-N, **SM4500NO3-F, EPA 353.2**: Nitrate-N**, SM4500NH3-BC-NES, EPA 351.1, SM4500P-E, SM4500P-B, E, SM5220D, EPA 410.4, SM5210B, SM5310C, SM4500CL-D, EPA 1664, SM14 510AC, EPA 420.1, SM4500-CN-CE, SM2540D.**
EPA 624: Volatile Halocarbons & Aromatics,
EPA 608: Chlordane, Toxaphene, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, delta-BHC, Dieldrin, DDD, DDE, DDT, Endosulfan I, Endosulfan II, Endosulfan sulfate, Endrin, Endrin Aldehyde, Heptachlor, Heptachlor Epoxide, PCBs
EPA 625: SVOC (Acid/Base/Neutral Extractables), **EPA 600/4-81-045**: PCB-Oil.
Microbiology: **SM9223B-Colilert-QT; Enterolert-QT, SM9222D-MF**.

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

CHAIN OF CUSTODY

PAGE 1 OF 1

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: 4/29/14

ALPHA Job #: L1409034

Project Information

Project Name: Eastham DW

Project Location: Eastham MA

Project #: 2013-027

Project Manager: Lisa Flynn

ALPHA Quote #:

Client Information

Client: Environmental Strategies & Mgmt

Address: 273 West Main Street

Norton, MA 02703

Phone: 508-226-1800

Fax: 508-226-1811

Email: aboyd@esm-inc.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
8270-MCP CAM	0.15 UG/L FOR 1,4 DIOXANE, GW 1

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:

* please also email results to lflynn@esm-inc.com

There are no duplicate samples

ANALYSIS

1,4 DIOXANE BY 8270 SIM

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

Sample Specific Comments

TOTAL # BOTTLES

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	1,4 DIOXANE BY 8270 SIM	TOTAL # BOTTLES
				W		☐	
L1409034.01	TRIPBLANK			W		☒	2
02	PTC-13_255 Alston INF	4/29/14	9:09	W	RDH	☒	2
03	PTC-13_255 Alston MID	4/29/14	9:05	W	RDH	☒	2
04	PTC-13_255 Alston EFF	4/29/14	9:15	W	RDH	☒	2
05	PTC-14_255 Alston MID	4/29/14	12:00	W	RDH	☒	2
06	PTC-14_255 Alston EFF	4/29/14	12:05	W	RDH	☒	2
						☐	
						☐	
						☐	

Container Type	A	-	-	-	-	-	-	-	-	-	-	-	
Preservative	A	-	-	-	-	-	-	-	-	-	-	-	

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
Rodney D Hamel	4/29/14 14:15		4/29/14 14:15

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.

Barnstable County Health Laboratory

ANALYTICAL REPORT FOR

nvironmental Strategies & Manage, Inc. (Landfi

Report Prepared for:

Environmental Strategies & Management, Inc.
Lisa Flyn, Re: Eastham Landfill
273 West Main Street
Norton, MA 02766

Order #: G1479881

No. of Samples: 4

Date Received: 5/19/2014

CERTIFICATE OF ANALYSIS

Barnstable County Health Laboratory (M-MA009)

Report Prepared For: Lisa Flyn, Re: Eastham Landfil
Environmental Strategies & Management, Inc.
273 West Main Street
Norton, MA 02766

Report Dated: 6/18/2014

Order No.: G1479881

Laboratory ID #: 1479881-01 **Description:** Water - Monitoring Well
Sample #:
Sample Location: MW 3I
Collected by: LKM
Collected: 05/19/2014
Received: 05/19/2014

Test Parameters

ITEM	RESULT	UNITS	RL	MCL	METHOD #	TESTED
COD	**20**	mg/L	5.0		HACH 8000	6/13/2014
Cyanide, Total	**ND**	mg/L	0.010		SM4500-CN-E	5/28/2014

Landfill Metals_Dissolved

ITEM	RESULT	UNITS	RL	MCL	METHOD #	TESTED
Arsenic	**0.041**	mg/L	0.0030	0.01	EPA 200.8	6/4/2014
Barium	**0.011**	mg/L	0.0030	2.0	EPA 200.8	6/4/2014
Cadmium	**ND**	mg/L	0.0030	0.005	EPA 200.8	6/4/2014
Chromium	**ND**	mg/L	0.0030	0.1	EPA 200.8	6/4/2014
Copper	**ND**	mg/L	0.003		EPA 200.8	6/4/2014
Iron	**64**	mg/L	0.10		EPA 200.8	6/4/2014
Lead	**ND**	mg/L	0.0030	0.015	EPA 200.8	6/4/2014
Manganese	**1.1**	mg/L	0.0030		EPA 200.8	6/4/2014
Mercury	**ND**	mg/L	0.0003	0.002	EPA 200.8	6/4/2014
Selenium	**ND**	mg/L	0.015	0.05	EPA 200.8	6/4/2014
Silver	**ND**	mg/L	0.002		EPA 200.7	6/10/2014
Zinc	**ND**	mg/L	0.06		EPA 200.8	6/4/2014

Landfill Inorganics_01

ITEM	RESULT	UNITS	RL	MCL	METHOD #	TESTED
Nitrate as Nitrogen	**ND**	mg/L	0.10	10	EPA 300.0	5/19/2014
Alkalinity	**200**	mg/L as CaCO	2.5	10	SM 2320B	5/19/2014
Chloride	**19**	mg/L	1.0	10	EPA 300.0	5/19/2014
Sulfate	**29**	mg/L	1.0	10	EPA 300.0	5/19/2014
Total Dissolved Solids	**300**	mg/L	7.0	10	SM 2540C	5/19/2014

ND = None Detected RL = Reporting Limit MCL = Maximum Contaminant Level

CERTIFICATE OF ANALYSIS

Barnstable County Health Laboratory (M-MA009)

Recipient:	Lisa Flyn, Re: Eastham Landfil Environmental Strategies & Management, Inc. 273 West Main Street Norton, MA 02766	**Matrix:**	Water - Monitoring Well
Order#:	G1479881	**Sampled:**	05/19/2014 11:45
Lab ID:	1479881-01	**Received:**	05/19/2014 16:13
Sample #:		**Collection Address:**	MW 3I
Method:	8260C	**Sample Location:**	
Comment:		**Description:**	Landfill
		Date Analyzed:	5/28/2014 @ 15:17
		Analyst:	yn
		Dilution Factor:	1

EPA 8260 - Volatile Organics by GC/MS + Ketones +

Parameter	Result ug/L	MCL ug/L	MDL ug/L	Parameter	Result ug/L	MCL ug/L	MDL ug/L
1,1,1,2-Tetrachloroethane	ND		1.0	Chloroethane	ND		1.0
1,1,1-Trichloroethane	ND		1.0	Chloroform	ND		1.0
1,1,2,2-Tetrachloroethane	ND		0.50	Chloromethane	ND		1.0
1,1,2-Trichloroethane	ND		1.0	cis-1,2-Dichloroethene	ND		1.0
1,1-Dichloroethane	ND		1.0	cis-1,3-Dichloropropene	ND		0.50
1,1-Dichloroethene	ND		1.0	Dibromochloromethane	ND		5.0
1,1-Dichloropropene	ND		1.0	Dibromomethane	ND		1.0
1,2,3-Trichlorobenzene	ND		1.0	Dichlorodifluoromethane	ND		1.0
1,2,3-Trichloropropane	ND		1.0	Ethylbenzene	ND		1.0
1,2,4-Trichlorobenzene	ND		1.0	Hexachlorobutadiene	ND		0.50
1,2,4-Trimethylbenzene	ND		1.0	Isopropylbenzene	ND		1.0
1,2-Dibromo-3-chloropropane	ND		0.50	Methylene chloride	ND		5.0
1,2-Dibromoethane (EDB)	ND		0.50	Methyl-tert-butyl ether	ND		1.0
1,2-Dichlorobenzene	ND		1.0	Naphthalene	ND		1.0
1,2-Dichloroethane	ND		1.0	n-Butylbenzene	ND		1.0
1,2-Dichloropropane	ND		1.0	n-Propylbenzene	ND		1.0
1,3,5-Trimethylbenzene	ND		1.0	p-Isopropyltoluene	ND		1.0
1,3-Dichlorobenzene	ND		1.0	sec-Butylbenzene	ND		1.0
1,3-Dichloropropane	ND		1.0	Styrene	ND		1.0
1,4-Dichlorobenzene	ND		1.0	tert-Butylbenzene	ND		1.0
2,2-Dichloropropane	ND		1.0	Tetrachloroethene	ND		1.0
2-Butanone	ND		5.0	Toluene	ND		1.0
2-Chlorotoluene	ND		1.0	Total xylenes	ND		1.0
2-Hexanone	ND		0.50	trans-1,2-Dichloroethene	ND		1.0
4-Chlorotoluene	ND		1.0	trans-1,3-Dichloropropene	ND		0.50
4-Methyl-2-pentanone	ND		5.0	Trichloroethene	ND		1.0
Acetone	ND		10	Trichlorofluoromethane	ND		1.0
Benzene	ND		1.0	Vinyl chloride	ND		1.0
Bromobenzene	ND		1.0				
Bromochloromethane	ND		1.0				
Bromodichloromethane	ND		1.0				
Bromoform	ND		1.0				
Bromomethane	ND		1.0				
Carbon tetrachloride	ND		1.0				
Chlorobenzene	ND		1.0				

Attached please find the laboratory certified parameter list.

Approved By: _____ 06/18/2014
(Lab Director)

ND = None Detected RL = Reporting Limit MCL = Maximum Contaminant Level

CERTIFICATE OF ANALYSIS

Barnstable County Health Laboratory (M-MA009)

Recipient:	Lisa Flyn, Re: Eastham Landfil Environmental Strategies & Management, Inc. 273 West Main Street Norton, MA 02766	**Matrix:**	Water - Monitoring Well
		Sampled:	05/19/2014 11:45
		Received:	05/19/2014 16:13
		Collection Address:	MW 3I
		Sample Location:	
Order#:	G1479881	**Description:**	Landfill
Lab ID:	1479881-01	**Date Analyzed:**	5/29/2014 @ 15:17
Sample #:		**Analyst:**	KK
Method:	8260C	**Dilution Factor:**	1
Comment:			

EPA 8260 - 1,4-Dioxan by GC/SIM MS

Parameter	Result ug/L	MCL ug/L	MDL ug/L	Parameter	Result ug/L	MCL ug/L	MDL ug/L
1,4-Dioxane	ND		1.0				

Attached please find the laboratory certified parameter list.

Approved By: _____ 06/18/2014
(Lab Director)

ND = None Detected RL = Reporting Limit MCL = Maximum Contaminant Level

CERTIFICATE OF ANALYSIS

Barnstable County Health Laboratory (M-MA009)

Report Prepared For: Report Dated: 6/18/2014

Lisa Flyn, Re: Eastham Landfil
Environmental Strategies & Management, Inc.
273 West Main Street
Norton, MA 02766

Order No.: G1479881

Laboratory ID #: 1479881-02 Description: Water - Monitoring Well

Sample #:

Sample Location: MW 3D

Collected by: LKM

Collected: 05/19/2014
Received: 05/19/2014

Test Parameters

ITEM	RESULT	UNITS	RL	MCL	METHOD #	TESTED
COD	**27**	mg/L	5.0		HACH 8000	6/13/2014
Cyanide, Total	**ND**	mg/L	0.010		SM4500-CN-E	5/28/2014

Landfill Metals_Dissolved

ITEM	RESULT	UNITS	RL	MCL	METHOD #	TESTED
Arsenic	**0.066**	mg/L	0.0030	0.01	EPA 200.8	6/4/2014
Barium	**0.082**	mg/L	0.0030	2.0	EPA 200.8	6/4/2014
Cadmium	**ND**	mg/L	0.0030	0.005	EPA 200.8	6/4/2014
Chromium	**ND**	mg/L	0.0030	0.1	EPA 200.8	6/4/2014
Copper	**ND**	mg/L	0.0030		EPA 200.8	6/4/2014
Iron	**31**	mg/L	0.10		EPA 200.8	6/4/2014
Lead	**ND**	mg/L	0.0030	0.015	EPA 200.8	6/4/2014
Manganese	**1.3**	mg/L	0.0030		EPA 200.8	6/4/2014
Mercury	**0.082**	mg/L	0.00030	0.002	EPA 200.8	6/4/2014
Selenium	**ND**	mg/L	0.015	0.05	EPA 200.8	6/4/2014
Silver	**ND**	mg/L	0.002		EPA 200.7	6/10/2014
Zinc	**ND**	mg/L	0.060		EPA 200.8	6/4/2014

Landfill Inorganics_01

ITEM	RESULT	UNITS	RL	MCL	METHOD #	TESTED
Nitrate as Nitrogen	**ND**	mg/L	0.10	10	EPA 300.0	5/19/2014
Alkalinity	**830**	mg/L as CaCO	2.5	10	SM 2320B	5/19/2014
Chloride	**80**	mg/L	1.0	10	EPA 300.0	5/19/2014
Sulfate	**51**	mg/L	1.0	10	EPA 300.0	5/19/2014
Total Dissolved Solids	**1,300**	mg/L	7.0	10	SM 2540C	5/19/2014

ND = None Detected RL = Reporting Limit MCL = Maximum Contaminant Level

CERTIFICATE OF ANALYSIS

Barnstable County Health Laboratory (M-MA009)

Recipient:	Lisa Flyn, Re: Eastham Landfil Environmental Strategies & Management, Inc. 273 West Main Street Norton, MA 02766	**Matrix:**	Water - Monitoring Well
		Sampled:	05/19/2014 11:45
		Received:	05/19/2014 16:13
		Collection Address:	MW 3D
		Sample Location:	
Order#:	G1479881	**Description:**	Landfill
Lab ID:	1479881-02	**Date Analyzed:**	5/28/2014 @ 15:17
Sample #:		**Analyst:**	yn
Method:	8260C	**Dilution Factor:**	1
Comment:			

EPA 8260 - Volatile Organics by GC/MS + Ketones +

Parameter	Result ug/L	MCL ug/L	MDL ug/L	Parameter	Result ug/L	MCL ug/L	MDL ug/L
1,1,1,2-Tetrachloroethane	ND		1.0	Chloroethane	ND		1.0
1,1,1-Trichloroethane	ND		1.0	Chloroform	ND		1.0
1,1,2,2-Tetrachloroethane	ND		0.50	Chloromethane	ND		1.0
1,1,2-Trichloroethane	ND		1.0	cis-1,2-Dichloroethene	1.1		1.0
1,1-Dichloroethane	ND		1.0	cis-1,3-Dichloropropene	ND		0.50
1,1-Dichloroethene	ND		1.0	Dibromochloromethane	ND		5.0
1,1-Dichloropropene	ND		1.0	Dibromomethane	ND		1.0
1,2,3-Trichlorobenzene	ND		1.0	Dichlorodifluoromethane	ND		1.0
1,2,3-Trichloropropane	ND		1.0	Ethylbenzene	ND		1.0
1,2,4-Trichlorobenzene	ND		1.0	Hexachlorobutadiene	ND		0.50
1,2,4-Trimethylbenzene	ND		1.0	Isopropylbenzene	ND		1.0
1,2-Dibromo-3-chloropropane	ND		0.50	Methylene chloride	ND		5.0
1,2-Dibromoethane (EDB)	ND		0.50	Methyl-tert-butyl ether	0.95		1.0
1,2-Dichlorobenzene	ND		1.0	Naphthalene	ND		1.0
1,2-Dichloroethane	ND		1.0	n-Butylbenzene	ND		1.0
1,2-Dichloropropane	ND		1.0	n-Propylbenzene	ND		1.0
1,3,5-Trimethylbenzene	ND		1.0	p-Isopropyltoluene	ND		1.0
1,3-Dichlorobenzene	ND		1.0	sec-Butylbenzene	ND		1.0
1,3-Dichloropropane	ND		1.0	Styrene	ND		1.0
1,4-Dichlorobenzene	ND		1.0	tert-Butylbenzene	ND		1.0
2,2-Dichloropropane	ND		1.0	Tetrachloroethene	ND		1.0
2-Butanone	ND		5.0	Toluene	ND		1.0
2-Chlorotoluene	ND		1.0	Total xylenes	ND		1.0
2-Hexanone	ND		0.50	trans-1,2-Dichloroethene	ND		1.0
4-Chlorotoluene	ND		1.0	trans-1,3-Dichloropropene	ND		0.50
4-Methyl-2-pentanone	ND		5.0	Trichloroethene	ND		1.0
Acetone	ND		10	Trichlorofluoromethane	ND		1.0
Benzene	0.79		1.0	Vinyl chloride	ND		1.0
Bromobenzene	ND		1.0				
Bromochloromethane	ND		1.0				
Bromodichloromethane	ND		1.0				
Bromoform	ND		1.0				
Bromomethane	ND		1.0				
Carbon tetrachloride	ND		1.0				
Chlorobenzene	1.3		1.0				

Attached please find the laboratory certified parameter list.

Approved By: _____ 06/18/2014
(Lab Director)

ND = None Detected RL = Reporting Limit MCL = Maximum Contaminant Level

CERTIFICATE OF ANALYSIS

Barnstable County Health Laboratory (M-MA009)

Recipient:	Lisa Flyn, Re: Eastham Landfil Environmental Strategies & Management, Inc. 273 West Main Street Norton, MA 02766	**Matrix:**	Water - Monitoring Well
		Sampled:	05/19/2014 11:45
		Received:	05/19/2014 16:13
		Collection Address:	MW 3D
		Sample Location:	
Order#:	G1479881	**Description:**	Landfill
Lab ID:	1479881-02	**Date Analyzed:**	5/29/2014 @ 15:17
Sample #:		**Analyst:**	KK
Method:	8260B	**Dilution Factor:**	1
Comment:			

EPA 8260 - 1,4-Dioxan by GC/SIM MS

Parameter	Result ug/L	MCL ug/L	MDL ug/L	Parameter	Result ug/L	MCL ug/L	MDL ug/L
1,4-Dioxane	13		1.0				

Attached please find the laboratory certified parameter list.

Approved By: _____
(Lab Director)
06/18/2014

ND = None Detected RL = Reporting Limit MCL = Maximum Contaminant Level

CERTIFICATE OF ANALYSIS

Barnstable County Health Laboratory (M-MA009)

Report Prepared For: Report Dated: 6/18/2014

Lisa Flyn, Re: Eastham Landfil
Environmental Strategies & Management, Inc.
273 West Main Street
Norton, MA 02766

Order No.: G1479881

Laboratory ID #: 1479881-03 Description: Water - Monitoring Well

Sample #:
Sample Location: BCH#13
Collected by: LKM

Collected: 05/19/2014
Received: 05/19/2014

Test Parameters

ITEM	RESULT	UNITS	RL	MCL	METHOD #	TESTED
COD	**41**	mg/L	5.0		HACH 8000	6/13/2014
Cyanide, Total	**ND**	mg/L	0.010		SM4500-CN-E	5/28/2014

Landfill Metals_Dissolved

ITEM	RESULT	UNITS	RL	MCL	METHOD #	TESTED
Arsenic	**0.071**	mg/L	0.0030	0.01	EPA 200.8	6/4/2014
Barium	**0.088**	mg/L	0.0030	2.0	EPA 200.8	6/4/2014
Cadmium	**ND**	mg/L	0.0030	0.005	EPA 200.8	6/4/2014
Chromium	**ND**	mg/L	0.0030	0.1	EPA 200.8	6/4/2014
Copper	**ND**	mg/L	0.0030		EPA 200.8	6/4/2014
Iron	**31**	mg/L	0.10		EPA 200.8	6/4/2014
Lead	**ND**	mg/L	0.0030	0.015	EPA 200.8	6/4/2014
Manganese	**1.4**	mg/L	0.0030		EPA 200.8	6/4/2014
Mercury	**ND**	mg/L	0.00030	0.002	EPA 200.8	6/4/2014
Selenium	**ND**	mg/L	0.015	0.05	EPA 200.8	6/4/2014
Silver	**ND**	mg/L	0.002		EPA 200.7	6/10/2014
Zinc	**ND**	mg/L	0.06		EPA 200.8	6/4/2014

Landfill Inorganics_01

ITEM	RESULT	UNITS	RL	MCL	METHOD #	TESTED
Nitrate as Nitrogen	**ND**	mg/L	0.10	10	EPA 300.0	5/19/2014
Alkalinity	**820**	mg/L as CaCO	2.5	10	SM 2320B	5/19/2014
Chloride	**81**	mg/L	1.0	10	EPA 300.0	5/19/2014
Sulfate	**52**	mg/L	1.0	10	EPA 300.0	5/19/2014
Total Dissolved Solids	**1,300**	mg/L	7.0	10	SM 2540C	5/19/2014

Attached please find the laboratory certified parameter list.

Approved By: _____
(Lab Director) 06/18/2014

ND = None Detected RL = Reporting Limit MCL = Maximum Contaminant Level

CERTIFICATE OF ANALYSIS

Barnstable County Health Laboratory (M-MA009)

Recipient:	Lisa Flyn, Re: Eastham Landfil Environmental Strategies & Management, Inc. 273 West Main Street Norton, MA 02766	**Matrix:**	Water - Monitoring Well
		Sampled:	05/19/2014 11:45
		Received:	05/19/2014 16:13
		Collection Address:	BCH#13
		Sample Location:	
Order#:	G1479881	**Description:**	Landfill
Lab ID:	1479881-03	**Date Analyzed:**	5/28/2014 @ 15:17
Sample #:		**Analyst:**	yn
Method:	8260C	**Dilution Factor:**	1
Comment:			

EPA 8260 - Volatile Organics by GC/MS + Ketones +

Parameter	Result ug/L	MCL ug/L	MDL ug/L	Parameter	Result ug/L	MCL ug/L	MDL ug/L
1,1,1,2-Tetrachloroethane	ND		1.0	Chloroethane	ND		1.0
1,1,1-Trichloroethane	ND		1.0	Chloroform	ND		1.0
1,1,2,2-Tetrachloroethane	ND		0.50	Chloromethane	ND		1.0
1,1,2-Trichloroethane	ND		1.0	cis-1,2-Dichloroethene	0.99		1.0
1,1-Dichloroethane	ND		1.0	cis-1,3-Dichloropropene	ND		0.50
1,1-Dichloroethene	ND		1.0	Dibromochloromethane	ND		5.0
1,1-Dichloropropene	ND		1.0	Dibromomethane	ND		1.0
1,2,3-Trichlorobenzene	ND		1.0	Dichlorodifluoromethane	ND		1.0
1,2,3-Trichloropropane	ND		1.0	Ethylbenzene	ND		1.0
1,2,4-Trichlorobenzene	ND		1.0	Hexachlorobutadiene	ND		0.50
1,2,4-Trimethylbenzene	ND		1.0	Isopropylbenzene	ND		1.0
1,2-Dibromo-3-chloropropane	ND		0.50	Methylene chloride	ND		5.0
1,2-Dibromoethane (EDB)	ND		0.50	Methyl-tert-butyl ether	0.90		1.0
1,2-Dichlorobenzene	ND		1.0	Naphthalene	ND		1.0
1,2-Dichloroethane	ND		1.0	n-Butylbenzene	ND		1.0
1,2-Dichloropropane	ND		1.0	n-Propylbenzene	ND		1.0
1,3,5-Trimethylbenzene	ND		1.0	p-Isopropyltoluene	ND		1.0
1,3-Dichlorobenzene	ND		1.0	sec-Butylbenzene	ND		1.0
1,3-Dichloropropane	ND		1.0	Styrene	ND		1.0
1,4-Dichlorobenzene	ND		1.0	tert-Butylbenzene	ND		1.0
2,2-Dichloropropane	ND		1.0	Tetrachloroethene	ND		1.0
2-Butanone	ND		5.0	Toluene	ND		1.0
2-Chlorotoluene	ND		1.0	Total xylenes	ND		1.0
2-Hexanone	ND		0.50	trans-1,2-Dichloroethene	ND		1.0
4-Chlorotoluene	ND		1.0	trans-1,3-Dichloropropene	ND		0.50
4-Methyl-2-pentanone	ND		5.0	Trichloroethene	ND		1.0
Acetone	ND		10	Trichlorofluoromethane	ND		1.0
Benzene	0.78		1.0	Vinyl chloride	ND		1.0
Bromobenzene	ND		1.0				
Bromochloromethane	ND		1.0				
Bromodichloromethane	ND		1.0				
Bromoform	ND		1.0				
Bromomethane	ND		1.0				
Carbon tetrachloride	ND		1.0				
Chlorobenzene	1.2		1.0				

Attached please find the laboratory certified parameter list.

Approved By: _____ 06/18/2014
(Lab Director)

ND = None Detected RL = Reporting Limit MCL = Maximum Contaminant Level

CERTIFICATE OF ANALYSIS

Barnstable County Health Laboratory (M-MA009)

Recipient:	Lisa Flyn, Re: Eastham Landfil Environmental Strategies & Management, Inc. 273 West Main Street Norton, MA 02766	**Matrix:**	Water - Monitoring Well
		Sampled:	05/19/2014 11:45
		Received:	05/19/2014 16:13
		Collection Address:	BCH#13
		Sample Location:	
Order#:	G1479881	**Description:**	Landfill
Lab ID:	1479881-03	**Date Analyzed:**	5/29/2014 @ 15:17
Sample #:		**Analyst:**	KK
Method:	8260B	**Dilution Factor:**	1
Comment:			

EPA 8260 - 1,4-Dioxan by GC/SIM MS

Parameter	Result ug/L	MCL ug/L	MDL ug/L	Parameter	Result ug/L	MCL ug/L	MDL ug/L
1,4-Dioxane	14		1.0				

Attached please find the laboratory certified parameter list.

Approved By: _____ 06/18/2014
(Lab Director)

ND = None Detected RL = Reporting Limit MCL = Maximum Contaminant Level

CERTIFICATE OF ANALYSIS

Barnstable County Health Laboratory (M-MA009)

Recipient:	Lisa Flyn, Re: Eastham Landfil Environmental Strategies & Management, Inc. 273 West Main Street Norton, MA 02766	**Matrix:**	Water - Monitoring Well
		Sampled:	05/19/2014 11:45
		Received:	05/19/2014 16:13
		Collection Address:	TRIP BLANKS
		Sample Location:	
Order#:	G1479881	**Description:**	Landfill
Lab ID:	1479881-04	**Date Analyzed:**	5/28/2014 @ 15:17
Sample #:		**Analyst:**	yn
Method:	8260C	**Dilution Factor:**	1
Comment:			

EPA 8260 - Volatile Organics by GC/MS + Ketones +

Parameter	Result ug/L	MCL ug/L	MDL ug/L	Parameter	Result ug/L	MCL ug/L	MDL ug/L
1,1,1,2-Tetrachloroethane	ND		1.0	Chloroethane	ND		1.0
1,1,1-Trichloroethane	ND		1.0	Chloroform	ND		1.0
1,1,2,2-Tetrachloroethane	ND		0.50	Chloromethane	ND		1.0
1,1,2-Trichloroethane	ND		1.0	cis-1,2-Dichloroethene	ND		1.0
1,1-Dichloroethane	ND		1.0	cis-1,3-Dichloropropene	ND		0.50
1,1-Dichloroethene	ND		1.0	Dibromochloromethane	ND		5.0
1,1-Dichloropropene	ND		1.0	Dibromomethane	ND		1.0
1,2,3-Trichlorobenzene	ND		1.0	Dichlorodifluoromethane	ND		1.0
1,2,3-Trichloropropane	ND		1.0	Ethylbenzene	ND		1.0
1,2,4-Trichlorobenzene	ND		1.0	Hexachlorobutadiene	ND		0.50
1,2,4-Trimethylbenzene	ND		1.0	Isopropylbenzene	ND		1.0
1,2-Dibromo-3-chloropropane	ND		0.50	Methylene chloride	ND		5.0
1,2-Dibromoethane (EDB)	ND		0.50	Methyl-tert-butyl ether	ND		1.0
1,2-Dichlorobenzene	ND		1.0	Naphthalene	ND		1.0
1,2-Dichloroethane	ND		1.0	n-Butylbenzene	ND		1.0
1,2-Dichloropropane	ND		1.0	n-Propylbenzene	ND		1.0
1,3,5-Trimethylbenzene	ND		1.0	p-Isopropyltoluene	ND		1.0
1,3-Dichlorobenzene	ND		1.0	sec-Butylbenzene	ND		1.0
1,3-Dichloropropane	ND		1.0	Styrene	ND		1.0
1,4-Dichlorobenzene	ND		1.0	tert-Butylbenzene	ND		1.0
2,2-Dichloropropane	ND		1.0	Tetrachloroethene	ND		1.0
2-Butanone	ND		5.0	Toluene	ND		1.0
2-Chlorotoluene	ND		1.0	Total xylenes	ND		1.0
2-Hexanone	ND		0.50	trans-1,2-Dichloroethene	ND		1.0
4-Chlorotoluene	ND		1.0	trans-1,3-Dichloropropene	ND		0.50
4-Methyl-2-pentanone	ND		5.0	Trichloroethene	ND		1.0
Acetone	ND		10	Trichlorofluoromethane	ND		1.0
Benzene	ND		1.0	Vinyl chloride	ND		1.0
Bromobenzene	ND		1.0				
Bromochloromethane	ND		1.0				
Bromodichloromethane	ND		1.0				
Bromoform	ND		1.0				
Bromomethane	ND		1.0				
Carbon tetrachloride	ND		1.0				
Chlorobenzene	ND		1.0				

Attached please find the laboratory certified parameter list.

Approved By: _____ 06/18/2014
(Lab Director)

ND = None Detected RL = Reporting Limit MCL = Maximum Contaminant Level

CERTIFICATE OF ANALYSIS

Barnstable County Health Laboratory (M-MA009)

Recipient:	Lisa Flyn, Re: Eastham Landfil Environmental Strategies & Management, Inc. 273 West Main Street Norton, MA 02766	**Matrix:**	Water - Monitoring Well
		Sampled:	05/19/2014 11:45
		Received:	05/19/2014 16:13
		Collection Address:	TRIP BLANKS
Order#:	G1479881	**Sample Location:**	
Lab ID:	1479881-04	**Description:**	Landfill
Sample #:		**Date Analyzed:**	5/29/2014 @ 15:17
Method:	8260B	**Analyst:**	KK
Comment:		**Dilution Factor:**	1

EPA 8260 - 1,4-Dioxan by GC/SIM MS

Parameter	Result ug/L	MCL ug/L	MDL ug/L	Parameter	Result ug/L	MCL ug/L	MDL ug/L
1,4-Dioxane	ND		1.0				

Attached please find the laboratory certified parameter list.

Approved By: _____ 06/18/2014
(Lab Director)

ND = None Detected RL = Reporting Limit MCL = Maximum Contaminant Level

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 7, 2014

Mark and Mary Manuelsan
23 School Street
Westborough MA 01581

Subject: Environmental Sampling Results
285 Alston Avenue, Eastham, MA

Dear Mr. and Mrs. Manuelsan;

On behalf of the Town of Eastham, this letter transmits to you the results of water samples collected from your 285 Alston Avenue property on March 14, 2014. The water samples were submitted for laboratory analysis of volatile organic compounds (VOCs), 1,4 dioxane, and arsenic. The concentration of 1,4 dioxane detected in the sample (0.636 micrograms per liter or µg/L) is above the bottled water action limit; therefore, you should continue using bottled water. The volatile organic compound, chloroform was detected at a concentration of 0.65 µg/L, well below the Massachusetts drinking water standard; and a very low estimated concentration of arsenic (0.43J ug/L) was detected below the laboratory reporting limit and the Massachusetts drinking water standard. Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, and a list of drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Mark and Mary Manuelsan

2. Street Address: 23 School Street

City/Town: Westborough MA Zip Code: 01581

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 285 Alston Avenue

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 4, 2014

Gregg M & Donna A Kamens
PO Box 847
Eastham, MA 02642

Subject: Environmental Sampling Results
15 Glacier Hills Road

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property during the week of March 10, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was not detected above the laboratory reporting limits. Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Gregg M & Donna A Kamens

2. Street Address: PO Box 847

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 15 Glacier Hills Road

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 4, 2014

Susan S Serkey
36 Clemens Court
Rocky Hill, CT 06067

Subject: **Environmental Sampling Results**
165 Glacier Hills Road

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property during the week of March 10, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was not detected above the laboratory reporting limits. Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Susan S Serkey

2. Street Address: 36 Clemens Court

City/Town: Rocky Hill, CT Zip Code: 06067

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 165 Glacier Hills Road

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 7, 2014

Susan Pellowe
175 Glacier Hills Rd
Eastham, MA 02642

Subject: Environmental Sampling Results
175 Glacier Hills Road

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property during the week of March 10, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was not detected above the laboratory reporting limits. Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Susan Pellowe

2. Street Address: 175 Glacier Hills Rd

City/Town: Eastham MA Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 175 Glacier Hills Rd

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 4, 2014

Janet Crump & Eliza Cooper
6062 Jesica Pl
Clarence Ctr, NY 14032

Subject: **Environmental Sampling Results**
205 Glacier Hills Road

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property during the week of March 10, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was not detected above the laboratory reporting limits. Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Janet Crump & Eliza Cooper

2. Street Address: 6062 Jesica Pl

City/Town: Clarence Ctr NY Zip Code: 14032

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 205 Glacier Hills Rd

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 7, 2014

Peter Hilgendorff Jr & Fishbon
49 East Shore Trail
Sparta, NJ 07871

Subject: Environmental Sampling Results
270 Glacier Hills Road

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property during the week of March 10, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was not detected above the laboratory reporting limits. Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Peter Hilgendorff Jr & Fishbon

2. Street Address: 49 East Shore Trail

City/Town: Sparta NJ Zip Code: 07871

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 270 Glacier Hills Rd

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 7, 2014

Paul R & Terri R Smith
20 Jason Dr
Eastham, MA 02642

Subject: Environmental Sampling Results
20 Jason Drive

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property during the week of March 10, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was not detected above the laboratory reporting limits. Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Paul R & Terri R Smith

2. Street Address: 20 Jason Dr

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 20 Jason Dr

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 7, 2014

Amato Family Trust Amato Peter J Ttee
30 Jason Dr
Eastham, MA 02642

Subject: Environmental Sampling Results
30 Jason Drive

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property during the week of March 10, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was not detected above the laboratory reporting limits. Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Amato Family Trust Amato Peter J Ttee

2. Street Address: 30 Jason Dr

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 30 Jason Dr

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 7, 2014

Jeffrey L Carlson
Box 284
Eastham, MA 02642

Subject: Environmental Sampling Results
100 Meetinghouse Road, Eastham, MA

Dear Mr. Carlson;

On behalf of the Town of Eastham, this letter transmits to you the results of water samples collected from your 100 Meetinghouse Road property on March 14, 2014. The water samples were submitted for laboratory analysis of volatile organic compounds (VOCs), 1,4 dioxane, and arsenic. The concentration of 1,4 dioxane detected in the sample (1.73 micrograms per liter or µg/L) is still above the bottled water action limit; therefore, you should continue using bottled water for consumptive purposes. A very low concentration of chloroform (0.67 µg/L) was detected well below the Massachusetts drinking water standard. A very low estimated concentration of arsenic was detected (0.32J µg/L) below the laboratory reporting limits and the Massachusetts drinking water standards. Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a list of drinking water standards, and a sample laboratory report diagram.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Jeffrey L Carlson

2. Street Address: Box 284

City/Town: Eastham, MA Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 100 Meetinghouse Road

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 7, 2014

Douglas Okane and Mark Okane
619 South Pearl Street
Denver, CO 80209

Subject: Environmental Sampling Results
180 Old Orchard Road, Eastham, MA

Dear Douglas Okane and Mark Okane;

On behalf of the Town of Eastham, this letter transmits to you the results of water samples collected from your 180 Old Orchard Road property on March 14, 2014. The water samples were submitted for laboratory analysis of volatile organic compounds (VOCs), 1,4 dioxane, and arsenic. 1,4 dioxane was detected in the sample at an estimated concentration of 0.0953 (J) micrograms per liter or µg/L. The Massachusetts "GW-1" drinking water standard is currently set at 3 µg/L; however, the Massachusetts Department of Environmental Protection is planning on lowering this standard to 0.3 µg/L in the near future. The Town of Eastham has elected to adopt this proposed standard as the new bottled water action limit. Even though the concentration detected in your drinking water sample is below 0.3 µg/L, it is advised that you continue to use bottled water for consumptive purposes. Methyl tert butyl ether and arsenic were detected at very low estimated concentrations below the reporting limits, and the Massachusetts drinking water standards.

Pages from the laboratory reports with these results are attached for your review, along with MassDEP-required form BWSC-123, a list of drinking water standards, and a sample laboratory report diagram. Also attached please find a fact sheet about 1,4 dioxane published by MassDEP.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Douglas Okane and Mark Okane

2. Street Address: 619 South Pearl Street

City/Town: Denver, CO Zip Code: 80209

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 180 Old Orchard Road

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 • Tel: (508) 226-1800 • Fax: (508) 226-1811

April 4, 2014

Michael W Kuchyt
49 Salt Pond Rd
Eastham, MA 02642

Subject: Environmental Sampling Results
49 Salt Pond Rd

On behalf of the Town of Eastham, this letter transmits to you the results of the water sample collected from the referenced property during the week of March 10, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. A very low concentration of 1,4-dioxane was detected in the primary sample at a concentration of 0.166 µg/L. Since the sampling protocol for this study includes the analysis of duplicate samples when 1,4 dioxane is detected above the laboratory detection limit of 0.15 µg/L, the duplicate sample was also analyzed. The concentration detected in this sample was 0.177 µg/L. Both concentrations are below the (proposed) Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, and a sample laboratory report diagram.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.

Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Michael W Kuchyt

2. Street Address: 49 Salt Pond Rd

City/Town: Eastham Zip Code: 07871

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 49 Salt Pond Rd

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 3, 2014

Ovila A & Rachel G Richer
PO Box 880
N Eastham, MA 02651

Subject: Environmental Sampling Results
690 Schoolhouse Road

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property during the week of March 10, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. Only an estimated concentration of 1,4 dioxane (0.105J micrograms per liter or µg/L) was detected. This concentration is well below the (proposed) Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L. Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Ovila A & Rachel G Richer

2. Street Address: PO Box 880

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 690 Schoolhouse Road

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 7, 2014

Eastham Historical Society Inc, Schoolhouse Museum
PO Box 8
Eastham, MA 02642

Subject: Environmental Sampling Results
25 Schoolhouse Road

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property during the week of March 10, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was not detected above the laboratory reporting limits. Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Eastham Historical Society Inc, Schoolhouse Mus.

2. Street Address: PO Box 8

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 25 Schoolhouse Road

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 4, 2014

Anthony & Sophia & Michelina & Ennino Martino
245 Washington Ave
St James, NY 11780

Subject: **Environmental Sampling Results**
3100A State Hwy

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property during the week of March 10, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was not detected above the laboratory reporting limits. Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 4, 2014

Matthew Mayer
3100A State Hwy
Eastham MA 02642

Subject: Environmental Sampling Results
3100A State Hwy

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from 3100A State Hwy during the week of March 10, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was not detected above the laboratory reporting limits. Pages from the laboratory report with the results for your water sample are attached for your review, along with a sample laboratory report diagram and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Anthony & Sophia & Michelina & Ennino Martino

2. Street Address: 245 Washington Ave

City/Town: St James, NY Zip Code: 11780

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3100A State Hwy

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 7, 2014

George V & Katherine Krouch
PO Box 648
Eastham, MA 02642

Subject: **Environmental Sampling Results**
3265 State Hwy

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property during the week of March 10, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was not detected above the laboratory reporting limits. Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: George V & Katherine Krouch

2. Street Address: PO Box 648

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3265 State Hwy

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 • Tel: (508) 226-1800 • Fax: (508) 226-1811

April 4, 2014

Briggs A Easterbrooks Jr & Car
PO Box 171
Eastham, MA 02642

Subject: **Environmental Sampling Results**
3315 State Hwy

On behalf of the Town of Eastham, this letter transmits to you the results of the water sample collected from the referenced property during the week of March 10, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. A very low concentration of 1,4-dioxane was detected in the primary sample at a concentration of 0.194 µg/L. Since the sampling protocol for this study includes the analysis of duplicate samples when 1,4 dioxane is detected above the laboratory detection limit of 0.15 µg/L, the duplicate sample was also analyzed. The concentration detected in this sample was 0.232 µg/L. Both concentrations are below the (proposed) Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, and a sample laboratory report diagram.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.

Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Briggs A Easterbrooks Jr & Car

2. Street Address: PO Box 171

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3315 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 24, 2014

Larry Ondovic
Solo Properties LLC
775 Hartford Tpk
Shrewsbury, MA 01545

Subject: 65 Alston Avenue, Eastham, MA

Dear Mr. Ondovic:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property on March 24, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was detected at an estimated concentration of 0.0813 micrograms per liter or µg/L. This concentration is well below the (proposed) Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L.

Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.

Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Larry Ondovic, Solo Properties LLC

2. Street Address: 775 Hartford Tpk

City/Town: Shrewsbury Zip Code: 01545

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 65 Alston Avenue

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 24, 2014

James Kenneway
80 Alston Ave.
Eastham, MA 02642

Subject: 80 Alston Avenue, Eastham, MA

Dear Mr. Kenneway:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property on March 28, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was not detected above the laboratory reporting limits. Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: James E. Kenneway

2. Street Address: 80 Alston Avenue

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 80 Alston Avenue

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 24, 2014

Paul H & Nancy J Underhill
255 Alston Ave.
Eastham, MA 02642

Subject: Laboratory Results for 255 and 265 Alston Avenue, Eastham, MA

Dear Mr. and Mrs. Underhill:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the drinking water samples collected for 1,4 dioxane laboratory analysis from 255 and 265 Alston Avenue on March 28, 2014, by Environmental Strategies & Management.

At 255 Alston Avenue, samples were collected from the influent (untreated), mid-point (between the two carbon adsorbers) and effluent (after both carbon vessels) points. The influent sample contained 2.06 micrograms per liter or µg/L of 1,4 dioxane and the mid-point sample contained an estimated 0.127 µg/L. 1,4 dioxane was not detected in the effluent sample. This compound was also not detected above the laboratory reporting limits in the sample collected from 265 Alston Avenue.

Pages from the laboratory report with the results for your water samples are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Environmental Strategies & Management plans to change the carbon in the system at 255 Alston Avenue on Tuesday, April 29, 2014. As always, please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.

Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Paul H & Nancy J Underhill

2. Street Address: 255 Alston Avenue

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 255 and 265 Alston Avenue

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 24, 2014

Kevin M Eastman
PO Box 747
Eastham, MA 02642

Subject: 30 Chipman St, Eastham, MA

Dear Mr. Eastman:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property on March 27, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was detected at an estimated concentration of 0.0969 micrograms per liter or µg/L. This concentration is well below the (proposed) Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L.

Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.

Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Kevin M Eastman

2. Street Address: PO Box 747

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 30 Chipman St

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 24, 2014

Jane S & Stuart E Pratt
4 Pine Trail
Carmel, NY 10512

Subject: 65 Deepwood Dr, Eastham, MA

Dear Mr. and Mrs. Pratt:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property on March 28, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was detected in the primary sample at a concentration of 0.297 micrograms per liter or µg/L. Since the sampling protocol for this study includes the analysis of duplicate samples when 1,4 dioxane is detected above the laboratory detection limit (in this case 0.139 µg/L), the duplicate sample was also analyzed. The concentration detected in this sample was 0.336 µg/L. Although the Massachusetts "GW-1" drinking water standard is currently set at 3 µg/L, the Massachusetts Department of Environmental Protection is planning on lowering this standard to 0.3 ug/L in the near future. In light of this, the Town of Eastham has elected to adopt this proposed standard as the new bottled water action limit. Therefore, bottled water has been made available to you for consumptive purposes. Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a list of drinking water standards, a sample laboratory report diagram, and a 1,4 dioxane information sheet.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Jane S & Stuart E Pratt

2. Street Address: 4 Pine Trail

City/Town: Carmel, NY Zip Code: 10512

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 65 Deepwood Dr

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 24, 2014

Robert S & Tracy P Moss
7 Eldia Way
Eastham, MA 02642

Subject: 7 Eldia Way, Eastham, MA

Dear Mr. and Mrs. Moss:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property on March 24, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was not detected above the laboratory reporting limits. Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.

Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Robert S & Tracy P Moss

2. Street Address: 7 Eldia Way

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 7 Eldia Way

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 24, 2014

Jacquelin & Devon R O'Rourke
PO Box 863
North Eastham, MA 02651

Subject: 65 Knowles St, Eastham, MA

Dear Mr. and Mrs. O'Rourke:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property on March 27, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was detected in the primary sample at a concentration of 5.03 micrograms per liter or µg/L. Since the sampling protocol for this study includes the analysis of duplicate samples when 1,4 dioxane is detected above the laboratory detection limit (in this case 0.139 µg/L), the duplicate sample was also analyzed. The concentration detected in this sample was 5.42 µg/L. Although the Massachusetts "GW-1" drinking water standard is currently set at 3 µg/L, the Massachusetts Department of Environmental Protection is planning on lowering this standard to 0.3 ug/L in the near future. In light of this, the Town of Eastham has elected to adopt this proposed standard as the new bottled water action limit. Therefore, bottled water has been made available to you for consumptive purposes. Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a list of drinking water standards, a sample laboratory report diagram, and a 1,4 dioxane information sheet.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Jacquelin & Devon R O'Rourke

2. Street Address: PO Box 863

City/Town: North Eastham Zip Code: 02651

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 65 Knowles St

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 24, 2014

Doug Wallace
PO Box 114
Eastham, MA 02642

Subject: 140 Meetinghouse Rd, Eastham, MA

Dear Mr. Wallace:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property on March 24, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was not detected above the laboratory reporting limits. Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.

Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Doug Wallace

2. Street Address: PO Box 114

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 140 Meetinghouse Rd

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 24, 2014

Sandblom Marjorie E Revocabl
C/O Russ Sandblom
185 Meetinghouse Rd
Eastham, MA 02642

Subject: 185 Meetinghouse Rd, Eastham, MA

Dear Mr. Sandblom:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property on March 27, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was not detected above the laboratory reporting limits. Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.

Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Sandblom Marjorie E Revocabl, C/O Russ Sandblo

2. Street Address: 185 Meetinghouse Rd

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 185 Meetinghouse Rd

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 24, 2014

David L Alexander
375 Meetinghouse Rd
Eastham, MA 02642

Subject: 375 Meetinghouse Rd, Eastham, MA

Dear Mr. Alexander:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water samples collected from your property on March 24, 2014, for 1,4 dioxane laboratory analysis by Environmental Strategies & Management. This compound was detected at a concentration of 0.175 micrograms per liter or µg/L in the primary sample. Since the sampling protocol for this study includes the analysis of duplicate samples when 1,4 dioxane is detected above the laboratory detection limit (0.15 µg/L), the duplicate sample was also analyzed. The concentration detected in this sample was 0.156 µg/L. Both concentrations are below the (proposed) Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L.

Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: David L Alexander

2. Street Address: 375 Meetinghouse Rd

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 375 Meetinghouse Rd

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 24, 2014

Nancy Fuller
4 Preservation Way
Eastham, MA 02642

Subject: 4 Preservation Way, Eastham, MA

Dear Ms. Fuller:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water samples collected from your property on March 25, 2014, for 1,4 dioxane laboratory analysis by Environmental Strategies & Management. This compound was detected at a concentration of 0.208 micrograms per liter or µg/L in the primary sample. Since the sampling protocol for this study includes the analysis of duplicate samples when 1,4 dioxane is detected above the laboratory detection limit (0.15 µg/L), the duplicate sample was also analyzed. The concentration detected in this sample was 0.196 µg/L. Both concentrations are below the (proposed) Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L.

Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Nancy Fuller

2. Street Address: 4 Preservation Way

City/Town: Eastham MA Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 4 Preservation Way

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton, MA Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 24, 2014

Bill Allen
PO Box 195
Eastham, MA 02642

Subject: 45 Redberry Ln, Eastham, MA

Dear Mr. Allen:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property on March 28, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was detected at an estimated concentration of 0.105 micrograms per liter or µg/L. This concentration is well below the (proposed) Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L.

Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Bill Allen

2. Street Address: PO Box 195

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 45 Redberry Ln

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 24, 2014

David H & Elizabeth B Lord
PO Box 178
So Wellfleet, MA 02663

Subject: 20 Sharon Circle, Eastham, MA

Dear Mr. and Mrs. Lord:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property on March 24, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was detected at an estimated concentration of 0.104 micrograms per liter or µg/L. This concentration is well below the (proposed) Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L.

Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: David H & Elizabeth B Lord

2. Street Address: PO Box 178

City/Town: So Wellfleet Zip Code: 02663

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 20 Sharon Circle

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 24, 2014

Byron L & Delores S Higgins
30 Starlight Ln
Eastham, MA 02642

Subject: 30 Starlight Ln, Eastham, MA

Dear Mr. and Mrs. Higgins:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water samples collected from your property on March 25, 2014, for 1,4 dioxane laboratory analysis by Environmental Strategies & Management. This compound was detected at a concentration of 0.278 micrograms per liter or µg/L in the primary sample. Since the sampling protocol for this study includes the analysis of duplicate samples when 1,4 dioxane is detected above the laboratory detection limit (0.15 µg/L), the duplicate sample was also analyzed. The concentration detected in this sample was 0.249 µg/L. Both concentrations are below the (proposed) Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L.

Pages from the laboratory report with the results for your water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Byron and Delores Higgins

2. Street Address: 30 Starlight Lane

City/Town: Eastham MA Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 30 Starlight Lane

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton, MA Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 24, 2014

Jack Conway Realtor
Attn Heather Fernald
137 Washington St
Norwell, MA 02061

Subject: 50 Starlight Ln, Eastham, MA

Dear Ms. Fernald:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from the 50 Starlight Lane property in Eastham on March 27, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was not detected above the laboratory reporting limits. Pages from the laboratory report with the results for this water sample are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and the Massachusetts drinking water standards.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Jack Conway Realtor, Attn Heather Fernald

2. Street Address: 137 Washington St

City/Town: Norwell Zip Code: 02061

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 50 Starlight Ln

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

April 24, 2014

Donna & Larry Paurowski
175 Blossom Street
Apt. 903
Boston, MA 02114

Naomi Reiss & Michael Klayman
18 Olive Street
Great Neck, NY 11020

Lana Reed & Thomas Bolton
24 Kendall Avenue
Framingham, MA 01702

Clause Grazia
14 Anne Drive
Bethany, CT 06524

Cynthia and Denis Desrosiers
160 Glendale Road
Hampden, MA 01036

Polly Herrick and Frank Foley
3172 State Highway
Eastham, MA 02642

Subject: **Environmental Sampling Results**
3160 – 3172 State Highway
Eastham, MA

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water samples collected from your primary and backup drinking water wells on March 25, 2014, by Environmental Strategies & Management. The water samples were submitted for laboratory analysis of 1,4 dioxane. This compound was detected in the samples from both wells (at 0.326 micrograms per liter or µg/L in the primary well and at 0.335 µg/L in the backup well). The sampling protocol for this study includes the analysis of duplicate samples, which are collected at the same time as the primary sample, when 1,4 dioxane is detected at or above the laboratory detection limit of 0.15 µg/L; therefore, duplicate samples were also analyzed. The concentrations detected in these samples were 0.306 µg/L in the primary well and at 0.338 µg/L in the backup well. All four concentrations are above the (proposed) Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L; therefore, bottled water has been made available to you for consumptive purposes.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a list of drinking water standards, a sample laboratory report diagram, and a 1,4 dioxane information sheet.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.

Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Polly Herrick and Frank Foley

2. Street Address: 3172 State Highway

City/Town: Eastham MA Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3170 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton, MA Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Clause Grazia

2. Street Address: 14 Anne Drive

City/Town: Bethany CT Zip Code: 06524

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3166 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton, MA Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Donna & Larry Paurowski

2. Street Address: 800 Boylston St #16

City/Town: Boston MA Zip Code: 02199

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3160 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton, MA Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Lana Reed and Thomas Bolton

2. Street Address: 24 Kendall Avenue

City/Town: Framingham MA Zip Code: 01702

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3164 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton, MA Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Naomi Reiss & Michael Klayman

2. Street Address: 18 Olive Street

City/Town: Great Neck NY Zip Code: 11020

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3162 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton, MA Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Cynthia and Denis Desrosiers

2. Street Address: 160 Glendale Road

City/Town: Hampden MA Zip Code: 01036

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3160-3172 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

May 20, 2014

Christopher & Deanna Ross
50 Alston Avenue
Eastham, MA 02642

Subject: Environmental Sampling Results
50 Alston Avenue, Eastham, MA

Dear Mr. and Mrs. Ross;

On behalf of the Town of Eastham, this letter transmits to you the results of water samples collected from your 50 Alston Avenue property on April 14, 2014. The water samples were submitted for laboratory analysis of volatile organic compounds (VOCs) and 1,4-dioxane. A concentration of 0.218 micrograms per liter or µg/L of 1,4 dioxane was detected in the primary sample. The sampling protocol for this study includes the analysis of duplicate samples, which are collected at the same time as the primary sample, when 1,4-dioxane is detected at or above the laboratory detection limit; therefore, the duplicate sample was also analyzed. The 1,4-dioxane concentration detected in this sample was 0.21 µg/L. Both results are below the bottled water action limit of 0.3 µg/L; however, you should continue using bottled water for consumptive purposes.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, and a sample laboratory report diagram. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Christopher & Deanna Ross

2. Street Address: 50 Alston Avenue

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 50 Alston Avenue

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

May 20, 2014

Timothy Brady
59 Pershing Ln
Orleans, MA 02653

Subject: **Environmental Sampling Results**
60 Chokeberry Drive, Eastham, MA

Dear Mr. Brady;

On behalf of the Town of Eastham, this letter transmits to you the testing results from water samples collected from your **60 Chokeberry Drive** property on April 11, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was not detected in the sample above the laboratory detection limit.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, and a sample laboratory report diagram. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Timothy Brady

2. Street Address: 59 Pershing Ln

City/Town: Orleans Zip Code: 02653

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 60 Chokeberry Drive

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

May 20, 2014

Marjorie J Obremski
8 Smithfield Ln
Florham Park, NY 07935

Subject: **Environmental Sampling Results**
115 Glacier Hills Rd, Eastham, MA

Dear Ms. Obremski;

On behalf of the Town of Eastham, this letter transmits to you the testing results from water sample collected from your **115 Glacier Hills Rd** property on April 14, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was not detected in the sample above the laboratory detection limit.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, and a sample laboratory report diagram. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Marjorie J Obremski

2. Street Address: 8 Smithfield Ln

City/Town: Florham Park, NY Zip Code: 07932

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 115 Glacier Hills Road

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

May 20, 2014

Jack Dillon
249 Beechwood Ln
Palm Coast, FL 32137

Subject: **Environmental Sampling Results**
145 Glacier Hills Rd, Eastham, MA

Dear Mr. Dillon,

On behalf of the Town of Eastham, this letter transmits to you the testing results from water sample collected from your **145 Glacier Hills Rd** property on April 14, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was not detected in the sample above the laboratory detection limit.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, and a sample laboratory report diagram. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Jack Dillon

2. Street Address: 249 Beechwood Ln

City/Town: Palm Coast, FL Zip Code: 32137

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 145 Glacier Hills Road

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

May 20, 2014

Kathy Kuhn
271 Highland Ave
Wallingford, CT 06492

Subject: **Environmental Sampling Results**
25 Jason Drive, Eastham, MA

Dear Ms. Kuhn,

On behalf of the Town of Eastham, this letter transmits to you the testing results from water sample collected from your **25 Jason Drive** property on April 14, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was not detected in the sample above the laboratory detection limit.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, and a sample laboratory report diagram. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Kathy Kuhn

2. Street Address: 271 Highland Ave

City/Town: Wallingford CT Zip Code: 06492

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 25 Jason Drive

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

May 20, 2014

Michele Burnat & Lesa Milas
396 Old Colchester Rd
Amston, CT 06231

Subject: **Environmental Sampling Results**
50 Knowles St, Eastham, MA

Dear Ms. Burnat and Ms. Milas,

On behalf of the Town of Eastham, this letter transmits to you the testing results from water sample collected from your **50 Knowles St** property on April 14, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was not detected in the sample above the laboratory detection limit.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, and a sample laboratory report diagram. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Michele Burnat & Lesa Milas

2. Street Address: 396 Old Colchester Rd

City/Town: Amston CT Zip Code: 06231

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 50 Knowles St

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

May 20, 2014

Linda Tuchin
155 Mary Chase Rd
Eastham MA 02642

Subject: **Environmental Sampling Results**
155 Mary Chase Rd, Eastham, MA

Dear Ms. Tuchin,

On behalf of the Town of Eastham, this letter transmits to you the testing results from water sample collected from your **155 Mary Chase Rd** property on April 14, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was not detected in the sample above the laboratory detection limit.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, and a sample laboratory report diagram. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Linda Tuchin

2. Street Address: 155 Mary Chase Rd

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 155 Mary Chase Rd

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

May 20, 2014

John B & Joan S McCusker **78 Douglas Rd** **Glen Ridge, NJ 07028** **3280 STATE HWY**	**Gary E & Mary G Zenobia** **91 Swendsen Dr** **Monroe, CT 06468** **3282 STATE HWY**	**Thomas & Renise Beauchene** **8 Hadley Rd** **Norton, MA 02766** **3284 STATE HWY**	**Edward P & Sara H Steinbauer** **318 South 10Th St** **North Wales, PA 19454** **3286 STATE HWY**
James P & Troisi Corradino **30 Raymond Ter** **Norwalk, CT 06855** **3288 STATE HWY**	**William E & Deborah A Bennett** **4 Cobbie Hill Ct** **Rock City Falls, NY 12663** **3290 STATE HWY**	**George H & Margaret M Logan** **34 Beakes Rd** **New Windsor, NY 12553** **3292 STATE HWY**	**Molly B Olson** **4827 Route 82** **Salt Point, NY 12578** **3294 STATE HWY**
James Jacobson & C. Breglia **36 Twinbrook Ave** **Salem, NH 03079** **3296 STATE HWY**	**Linda Dittmar & Deborah Bright** **31 Brewster St** **Cambridge , MA 02138** **3298 STATE HWY**		

Subject: Environmental Sampling Results
Well Sample from 3280 State Highway, Eastham, MA

Dear Property Owners,

On behalf of the Town of Eastham, this letter transmits to you the testing results from the water sample collected from the shared well utilized by the properties listed above in Eastham on April 14, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was detected at a concentration of 0.248 micrograms per liter or µg/L in the primary sample. This concentration is below Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L; however, the sampling protocol of this project is to conduct analysis of a duplicate sample (collected at the same time as the primary sample) if a compound is detected above the laboratory detection limit. The compound 1,4-dioxane was detected at a concentration of 0.198 µg/L in the duplicate sample.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, and a sample laboratory report diagram. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: John B & Joan S McCusker

2. Street Address: 78 Douglas Rd

City/Town: Glen Ridge NJ Zip Code: 07028

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3280 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Gary E & Mary G Zenobia

2. Street Address: 91 Swendsen Dr

City/Town: Monroe CT Zip Code: 06468

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3282 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Thomas & Renise Beuchene

2. Street Address: 8 Hadley Rd

City/Town: Norton Zip Code: 02766

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3284 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Edward P & Sara H Steinbauer

2. Street Address: 318 South 10Th St

City/Town: North Wales PA Zip Code: 19454

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3286 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: James P & Troisi Corradino

2. Street Address: 30 Raymond Ter

City/Town: Norwalk CT Zip Code: 06855

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3288 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: William E & Deborah A Bennett

2. Street Address: 4 Cobbie Hill Ct

City/Town: Rock City Falls NY` Zip Code: 12663

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3290 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: George H & Margaret M Logan

2. Street Address: 34 Beakes Rd

City/Town: New Windsor NY Zip Code: 12553

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3292 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Molly B Olson

2. Street Address: 4827 Route 82

City/Town: Salt Point NY Zip Code: 12578

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3294 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: James Jacobson & C. Breglia

2. Street Address: 36 Twinbrook Ave

City/Town: Salem NH Zip Code: 03079

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3296 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Linda Dittmar & Deborah Bright

2. Street Address: 31 Brewster St

City/Town: Cambridge Zip Code: 02138

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3298 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

May 20, 2014

Christopher & Samantha Stone
3440 State Hwy
Eastham, MA 02642

Subject: **Environmental Sampling Results**
3440 State Highway, Eastham, MA

Dear Mr and Mrs. Stone,

On behalf of the Town of Eastham, this letter transmits to you the testing results from water sample collected from your **3440 State Highway** property on April 11, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was not detected in the sample above the laboratory detection limit.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, and a sample laboratory report diagram. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Christopher & Samantha Stone

2. Street Address: 3440 State Hwy

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3440 State Hwy

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

May 20, 2014

David & Alfred Mills
1 James St
Norton, MA 02766

Subject: **Environmental Sampling Results**
5 Walters Way, Eastham, MA

Dear Mssrs Mills,

On behalf of the Town of Eastham, this letter transmits to you the testing results from the water sample collected from your **5 Walters Way** property on April 11, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was detected at a concentration of 0.147 micrograms per liter or µg/Lin the primary sample. This concentration is well below Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L; however, the sampling protocol of this project is to conduct analysis of a duplicate sample (collected at the same time as the primary sample) if a compound is detected above the laboratory detection limit. The compound 1,4-dioxane was not detected above the reporting limit (0.144) in the duplicate sample.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, and a sample laboratory report diagram. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: David & Alfred Mills

2. Street Address: 1 James St

City/Town: Norton Zip Code: 02766

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 5 Walters Way

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

William P & Linda S Burt
PO Box 666
No Eastham, MA 02651

Subject: **Environmental Sampling Results**
85 Alston Avenue

Dear Mr. and Mrs. Burt,

On behalf of the Town of Eastham, this letter transmits to you the testing results from the water sample collected from your **85 Alston Avenue** property on May 5, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was detected at a concentration of 0.236 micrograms per liter or µg/L in the primary sample. This concentration is below Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L; however, the sampling protocol of this project is to conduct analysis of a duplicate sample (collected at the same time as the primary sample) if a compound is detected above the laboratory detection limit. The compound 1,4-dioxane was detected at a concentration of 0.210 µg/L in the duplicate sample.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, and a sample laboratory report diagram and 1,4 dioxane information sheet. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: William P & Linda S Burt

2. Street Address: PO Box 666

City/Town: North Eastham Zip Code: 02651

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 85 Alston Ave

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-03	Date Collected:	05/05/14 09:35
Client ID:	ALSTON AVE_085	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/06/14 09:39
Analytical Date:	05/07/14 09:16		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.236		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-04	Date Collected:	05/05/14 09:40
Client ID:	ALSTON AVE_085 DUP	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:07
Analytical Date:	05/14/14 06:24		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.210		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	22		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Peter R Radke Jr
205 Queen Ann Dr
Eastham, MA 02642

Subject: Environmental Sampling Results
200 Alston Avenue

Dear Mr. Radke;

On behalf of the Town of Eastham, this letter transmits to you the results of the water sample collected from your **200 Alston Avenue** property on May 9, 2014. The water sample was submitted for laboratory analysis of volatile organic compounds (VOCs), 1,4 dioxane, and arsenic. Neither VOCs nor 1,4 dioxane was detected in the sample above the laboratory reporting limits. Arsenic was detected below the drinking water standards at an estimated concentration of 0.44 micrograms per liter or µg/L.

Pages from the laboratory reports with these results are attached for your review, along with MassDEP-required form BWSC-123, a list of drinking water standards, a sample laboratory report diagram and a 1,4 dioxane information sheet.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.

Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Peter R Radke Jr
205 Queen Ann Dr
Eastham, MA 02642

Subject: Environmental Sampling Results
200 Alston Avenue

Dear Mr. Radke;

On behalf of the Town of Eastham, this letter transmits to you the results of the water sample collected from your **200 Alston Avenue** property on May 9, 2014. The water sample was submitted for laboratory analysis of volatile organic compounds (VOCs), 1,4 dioxane, and arsenic. Neither VOCs nor 1,4 dioxane was detected in the sample above the laboratory reporting limits. Arsenic was detected below the drinking water standards at an estimated concentration of 0.44 micrograms per liter or µg/L.

Pages from the laboratory reports with these results are attached for your review, along with MassDEP-required form BWSC-123, a list of drinking water standards, and a sample laboratory report diagram.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.

Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Peter R Radke Jr

2. Street Address: 205 Queen Ann Dr

City/Town: Eastham, MA Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 200 Alston Avenue

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1410006
Project Number: 2013-027
Report Date: 05/22/14

SAMPLE RESULTS

Lab ID:	L1410006-01	Date Collected:	05/09/14 10:35
Client ID:	ALSTON AVE_200	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 15:55		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	31		15-110

Project Name: EASTHAM DW
Lab Number: L1410006
Project Number: 2013-027
Report Date: 05/22/14

SAMPLE RESULTS

Lab ID: L1410006-01
Client ID: ALSTON AVE_200
Sample Location: EASTHAM, MA
Matrix: Drinking Water
Date Collected: 05/09/14 10:35
Date Received: 05/09/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	0.00044	J	mg/l	0.00100	0.00020	1	05/15/14 08:53	05/15/14 14:48	EPA 3005A	3,200.8	BM

Project Name: EASTHAM DW **Lab Number:** L1410006

Project Number: 2013-027 **Report Date:** 05/22/14

SAMPLE RESULTS

Lab ID:	L1410006-01	Date Collected:	05/09/14 10:35
Client ID:	ALSTON AVE_200	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water		
Analytical Method:	16,524.2		
Analytical Date:	05/13/14 13:07		
Analyst:	GT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	ND		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1410006

Project Number: 2013-027 **Report Date:** 05/22/14

SAMPLE RESULTS

Lab ID: L1410006-01 Date Collected: 05/09/14 10:35

Client ID: ALSTON AVE_200 Date Received: 05/09/14

Sample Location: EASTHAM, MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	96		80-120
4-Bromofluorobenzene	91		80-120

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

David H & Jane S Coutts
75 Connelly Dr
Staatsburg, NY 12580

Subject: **Environmental Sampling Results**
225 Alston Avenue

Dear Mr. and Mrs. Coutts,

On behalf of the Town of Eastham, this letter transmits to you the testing results from the water sample collected from your **225 Alston Avenue** property on May 5, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was detected at a concentration of 0.350 micrograms per liter or µg/L in the primary sample. This concentration is above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L. The sampling protocol of this project is to conduct analysis of a duplicate sample (collected at the same time as the primary sample) if a compound is detected above the laboratory detection limit. The compound 1,4-dioxane was detected at a concentration of 0.365 µg/L in the duplicate sample. You should continue to use bottled water for consumptive purposes.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, and a sample laboratory report diagram and a 1,4 dioxane information sheet. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: David H & Jane S Coutts

2. Street Address: 75 Connelly Dr

City/Town: Staatsburg, NY Zip Code: 12580

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 225 Alston Avenue

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID:	L1409598-02	Date Collected:	05/06/14 09:25
Client ID:	ALSTON AVE_225	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 04:31		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.350		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	22		15-110

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID:	L1409598-03	Date Collected:	05/06/14 09:30
Client ID:	ALSTON AVE_225 DUP	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 14:30		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.365		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Mel Valentine
20 Cedar Ln
Eastham, MA 02642

Subject: Environmental Sampling Results for 20 Cedar Lane, Eastham MA

Please find attached pages from the laboratory report with the results of the water sample collected from your property by Environmental Strategies & Management. The water sample was submitted to Alpha Analytical of Mansfield, MA, for laboratory analysis of 1,4-dioxane. This compound was not detected above the laboratory reporting limit in the sample. In addition I have included a diagram which explains the information included on the laboratory report.

Sincerely,
Environmental Strategies & Management, Inc.

Lisa Flynn

Copy: Ms. Jane Crowley, Town of Eastham Board of Health

Project Name: EASTHAM DW
Lab Number: L1409836
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409836-05	Date Collected:	05/07/14 14:55
Client ID:	CEDAR LN_020	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:08
Analytical Date:	05/14/14 03:13		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Paul Bernard
25 Cedar Ln
Eastham, MA 02642

Subject: Environmental Sampling Results for 25 Cedar Lane, Eastham MA

Please find attached pages from the laboratory report with the results of the water sample collected from your property by Environmental Strategies & Management. The water sample was submitted to Alpha Analytical of Mansfield, MA, for laboratory analysis of 1,4-dioxane. This compound was not detected above the laboratory reporting limit in the sample. In addition I have included a diagram which explains the information included on the laboratory report.

Sincerely,
Environmental Strategies & Management, Inc.

Lisa Flynn

Copy: Ms. Jane Crowley, Town of Eastham Board of Health

Project Name: EASTHAM DW
Lab Number: L1409836
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409836-01	Date Collected:	05/07/14 13:45
Client ID:	CEDAR LN_025	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:08
Analytical Date:	05/13/14 23:55		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	27		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Bill Reilly
35 Cedar Ln
Eastham, MA 02642

Subject: Environmental Sampling Results for 35 Cedar Lane, Eastham MA

Please find attached pages from the laboratory report with the results of the water sample collected from your property by Environmental Strategies & Management. The water sample was submitted to Alpha Analytical of Mansfield, MA, for laboratory analysis of 1,4-dioxane. This compound was not detected above the laboratory reporting limit in the sample. In addition I have included a diagram which explains the information included on the laboratory report.

Sincerely,
Environmental Strategies & Management, Inc.

Lisa Flynn

Copy: Ms. Jane Crowley, Town of Eastham Board of Health

Project Name: EASTHAM DW
Lab Number: L1409836
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409836-03	Date Collected:	05/07/14 14:15
Client ID:	CEDAR LN_035	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:08
Analytical Date:	05/14/14 09:36		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Ivan G & Shirley Freed
40 Frye Rd
Bolton, MA 01740

Subject: **Environmental Sampling Results**
60 Chipman Street

Dear Mr. and Mrs. Freed:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your **60 Chipman Street** property on May 8, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was detected in the primary sample at a concentration of 0.382 micrograms per liter or µg/L. Since the sampling protocol for this study includes the analysis of duplicate samples when 1,4 dioxane is detected above the laboratory detection limit, the duplicate sample was also analyzed. The concentration detected in this sample was 0.341 µg/L. Both concentrations are above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L; therefore, bottled water has been made available to you for consumptive purposes. Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a list of drinking water standards, a sample laboratory report diagram, and a 1,4 dioxane information sheet.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Ivan G & Shirley Freed

2. Street Address: 40 Frye Rd

City/Town: Bolton, MA Zip Code: 01740

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 60 Chipman Street

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-03	Date Collected:	05/08/14 10:00
Client ID:	CHIPMAN ST_060	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 10:00		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.382		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: Not Specified
Lab Number: L1409877
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-04	Date Collected:	05/08/14 10:05
Client ID:	CHIPMAN ST_060 DUP	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 16:56		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.341		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	33		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Albert Hottelmann
PO Box 415
No Eastham, MA 02651

Subject: **Environmental Sampling Results**
4 Eldia Way

Dear Mr. Hottelmann:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property on May 7, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was detected in the primary sample at a concentration of 0.451 micrograms per liter or µg/L. Since the sampling protocol for this study includes the analysis of duplicate samples when 1,4 dioxane is detected above the laboratory detection limit (in this case 0.142 µg/L), the duplicate sample was also analyzed. The concentration detected in this sample was 0.449 µg/L. Both concentrations are above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L; therefore, bottled water has been made available to you for consumptive purposes. Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and a 1,4 dioxane information sheet.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Albert Hottelmann

2. Street Address: PO Box 415

City/Town: No. Eastham Zip Code: 02651

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 4 Eldia Way

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409738
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409738-05	Date Collected:	05/07/14 12:05
Client ID:	ELDIA WAY_004	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:07
Analytical Date:	05/13/14 22:19		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.451		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	27		15-110

Project Name: EASTHAM DW
Lab Number: L1409738
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409738-06	Date Collected:	05/07/14 12:10
Client ID:	ELDIA WAY_004 DUP	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/14/14 17:00
Analytical Date:	05/15/14 15:44		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.449		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Theodore F Jr & Kathleen Mickle
6 Eldia Way
Eastham, MA 02642

Subject: Environmental Sampling Results
6 Eldia Way, Eastham, MA

Dear Mr. and Mrs. Mickle,

On behalf of the Town of Eastham, this letter transmits to you the testing results from water sample collected from your **6 Eldia Way** property on May 9, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was not detected in the sample above the laboratory reporting limit.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram and a 1,4 dioxane information sheet. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Theodore F Jr & Kathleen Mickle

2. Street Address: 6 Eldia Way

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 6 Eldia Way

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409991
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409991-01	Date Collected:	05/09/14 08:15
Client ID:	ELDIA WAY_006	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 04:45		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.110	J	ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	17		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Eastham United Methodist Church
3200 State Hwy
Eastham, MA 02642

Subject: **Environmental Sampling Results**
9 Eldia Way and 3200 State Highway

Dear Property Owner,

On behalf of the Town of Eastham, this letter transmits to you the testing results from the water samples collected from **9 Eldia Way** on May 6, 2014, and from **3200 State Highway** on May 8, 2014. The water samples were submitted for laboratory analysis of 1,4-dioxane.

9 Eldia Way Results:
The compound 1,4-dioxane was detected at a concentration of 0.309 micrograms per liter or µg/L in the primary sample. This concentration is above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L. The sampling protocol of this project is to conduct analysis of a duplicate sample (collected at the same time as the primary sample) if a compound is detected above the laboratory detection limit. The compound 1,4-dioxane was detected at a concentration of 0.284 µg/L in the duplicate sample. Continued use of bottled water at this property is advised.

3200 State Highway Results:
1,4-dioxane was detected at a concentration of 0.424 µg/L in the primary sample and at a concentration of 0.418 µg/L in the duplicate sample. These concentrations are above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L. Continued use of bottled water at this property is advised.

Pages from the laboratory reports with these results are attached for your review, along with copies of MassDEP-required form BWSC-123, and a sample laboratory report diagram. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Eastham United Methodist Church

2. Street Address: 3200 State Hwy

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 9 Eldia Way

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-07	Date Collected:	05/08/14 13:00
Client ID:	STATE HWY_3200	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 12:55		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.424		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	25		15-110

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-08	Date Collected:	05/08/14 13:05
Client ID:	STATE HWY_3200 DUP	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 17:44		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.418		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	29		15-110

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Eastham United Methodist Church

2. Street Address: PO Box 445

City/Town: Eastham MA Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 9 Eldia Way

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton, MA Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Eastham United Methodist Church

2. Street Address: 3200 State Highway

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: Eastham United Methodist Church, 3200 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☐ residential ☐ commerical ☐ industrial ☐ school/playground ☑ Other church (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton, MA Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Eastham United Methodist Church
3200 State Hwy
Eastham, MA 02642

Subject: **Environmental Sampling Results**
9 Eldia Way and 3200 State Highway

Dear Property Owner,

On behalf of the Town of Eastham, this letter transmits to you the testing results from the water samples collected from **9 Eldia Way** on May 6, 2014, and from **3200 State Highway** on May 8, 2014. The water samples were submitted for laboratory analysis of 1,4-dioxane.

9 Eldia Way Results:
The compound 1,4-dioxane was detected at a concentration of 0.309 micrograms per liter or µg/L in the primary sample. This concentration is above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L. The sampling protocol of this project is to conduct analysis of a duplicate sample (collected at the same time as the primary sample) if a compound is detected above the laboratory detection limit. The compound 1,4-dioxane was detected at a concentration of 0.284 µg/L in the duplicate sample. Continued use of bottled water at this property is advised.

3200 State Highway Results:
1,4-dioxane was detected at a concentration of 0.424 µg/L in the primary sample and at a concentration of 0.418 µg/L in the duplicate sample. These concentrations are above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L. Continued use of bottled water at this property is advised.

Pages from the laboratory reports with these results are attached for your review, along with copies of MassDEP-required form BWSC-123, and a sample laboratory report diagram. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Eastham United Methodist Church

2. Street Address: 3200 State Hwy

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 9 Eldia Way

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID:	L1409598-07	Date Collected:	05/06/14 14:20
Client ID:	ELDIA WAY_009	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 06:45		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.309		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	22		15-110

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID:	L1409598-08	Date Collected:	05/06/14 14:25
Client ID:	ELDIA WAY_009 DUP	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 15:20		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.284		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	22		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Donna M Holway
11 Eldia Way
Eastham, MA 02642

Subject: **Environmental Sampling Results**
11 Eldia Way

Dear Ms. Holway:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your property on May 7, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was detected in the primary sample at a concentration of 3.58 micrograms per liter or µg/L. Since the sampling protocol for this study includes the analysis of duplicate samples when 1,4 dioxane is detected above the laboratory detection limit (in this case 0.144 µg/L), the duplicate sample was also analyzed. The concentration detected in this sample was 3.61 µg/L. Both concentrations are above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L; therefore, continued use of bottled water for consumptive purposes is advised. Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram and a 1,4 dioxane information sheet.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Donna M Holway

2. Street Address: 11 Eldia Way

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 11 Eldia Way

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409738
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409738-03	Date Collected:	05/07/14 09:50
Client ID:	ELDIA WAY_011	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:07
Analytical Date:	05/13/14 21:31		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	3.58		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: EASTHAM DW
Lab Number: L1409738
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409738-04	Date Collected:	05/07/14 09:55
Client ID:	ELDIA WAY_011 DUP	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/14/14 17:00
Analytical Date:	05/15/14 14:56		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	3.61		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

John L & Eileen B Ahle
13 Eldia Way
Eastham, MA 02642

Subject: Environmental Sampling Results
13 Eldia Way

Dear Mr. and Mrs. Ahle:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your **13 Eldia Way** property on May 9, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was detected in the primary sample at a concentration of 0.660 micrograms per liter or µg/L. Since the sampling protocol for this study includes the analysis of duplicate samples when 1,4 dioxane is detected above the laboratory detection limit, the duplicate sample was also analyzed. The concentration detected in this sample was 0.659 µg/L. Both concentrations are above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L; therefore, continued use of bottled water for consumptive purposes is advised. Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram and a 1,4 dioxane information sheet.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.

Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: John L & Eileen B Ahle

2. Street Address: 13 Eldia Way

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 13 Eldia Way

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409991
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409991-05	Date Collected:	05/09/14 11:40
Client ID:	ELDIA WAY_013	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 06:15		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.660		ug/l	0.150	0.0750	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	22		15-110

Project Name: EASTHAM DW
Lab Number: L1409991
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409991-06	Date Collected:	05/09/14 11:45
Client ID:	ELDIA WAY_013 DUP	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 20:08		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.659		ug/l	0.147	0.0735	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	34		15-110

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Eastham United Methodist Church

2. Street Address: PO Box 445

City/Town: Eastham MA Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 9 Eldia Way

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton, MA Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Robert F & Susan G Crockett
18 Walnut Ter
Holden, MA 01520

5 Fairview Avenue

Subject: **Environmental Sampling Results**
5 Fairview Avenue, Eastham, MA

Dear Mr. and Mrs. Crockett,

On behalf of the Town of Eastham, this letter transmits to you the testing results from water sample collected from your **5 Fairview Avenue** property on May 8, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was not detected in the sample above the laboratory reporting limit.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram and a 1,4 dioxane information sheet. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Robert F & Susan G Crockett

2. Street Address: 18 Walnut Ter

City/Town: Holden, MA Zip Code: 01520

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 5 Fairview Avenue

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-05	Date Collected:	05/08/14 11:30
Client ID:	FAIRVIEW AVE_005	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 12:10		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	20		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Leonard & Katherine Dufresne
PO Box 171
No Eastham, MA 02651

Subject: **Environmental Sampling Results**
20 Glacier Hills Road, Eastham, MA

Dear Mr. and Mrs. Dufresne,

On behalf of the Town of Eastham, this letter transmits to you the testing results from water sample collected from your **20 Glacier Hills Road** property on May 6, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was not detected in the sample above the laboratory reporting limit.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram and a 1,4 dioxane information sheet. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Leonard & Katherine Dufresne

2. Street Address: PO Box 171

City/Town: North Eastham Zip Code: 02651

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 20 Glacier Hills Rd

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409822
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409822-03	Date Collected:	05/06/14 09:20
Client ID:	GLACIER HILLS RD_020	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 10:24		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	16		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Peter F & Mary R Martinelli
18 Park Circle Dr
Dalton, MA 01226

Subject: **Environmental Sampling Results**
25 Knowles Street

Dear Mr. and Mrs. Martinelli:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your **25 Knowles Street** property on May 6, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was detected in the primary sample at a concentration of 3.72 micrograms per liter or µg/L. Since the sampling protocol for this study includes the analysis of duplicate samples when 1,4 dioxane is detected above the laboratory detection limit, the duplicate sample was also analyzed. The concentration detected in this sample was 3.58 µg/L. Both concentrations are above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L; therefore, continued use of bottled water for consumptive purposes is advised. Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram and a 1,4 dioxane information sheet.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Peter F & Mary R Martinelli

2. Street Address: 18 Park Circle Dr

City/Town: Dalton Zip Code: 01226

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 25 Knowles Street

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-01	Date Collected:	05/08/14 08:35
Client ID:	KNOWLES ST_025	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 09:15		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	3.72		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-02	Date Collected:	05/08/14 08:40
Client ID:	KNOWLES ST_025 DUP	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 16:08		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	3.58		ug/l	0.136	0.0682	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	21		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

John A Cunningham
PO Box 372
Eastham, MA 02642

Subject: **Environmental Sampling Results**
30 Knowles Street

Dear Mr. Cunningham:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your 30 Knowles Street property on May 6, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was detected in the primary sample at a concentration of 4.79 micrograms per liter or µg/L. Since the sampling protocol for this study includes the analysis of duplicate samples when 1,4 dioxane is detected above the laboratory detection limit, the duplicate sample was also analyzed. The concentration detected in this sample was 4.92 µg/L. Both concentrations are above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L; therefore, continued use of bottled water for consumptive purposes is advised. Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a list of drinking water standards, a sample laboratory report diagram and a 1,4 dioxane information sheet.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: John A Cunningham

2. Street Address: PO Box 372

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 30 Knowles Street

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409822
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409822-07	Date Collected:	05/06/14 09:50
Client ID:	KNOWLES ST_030	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 11:53		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	4.79		ug/l	0.143	0.0714	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	21		15-110

Project Name: EASTHAM DW
Lab Number: L1409822
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409822-08	Date Collected:	05/06/14 09:55
Client ID:	KNOWLES ST_030 DUP	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 15:33
Analytical Date:	05/13/14 03:15		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	4.92		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	30		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Thomas F & M Lynne Linnehan
50 Westminster Dr
Marlborough, MA 01752

Subject: **Environmental Sampling Results**
45 Knowles Street

Dear Mr. and Mrs. Linnehan:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your 45 Knowles Street property on May 6, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was detected in the primary sample at a concentration of 2.22 micrograms per liter or µg/L. Since the sampling protocol for this study includes the analysis of duplicate samples when 1,4 dioxane is detected above the laboratory detection limit, the duplicate sample was also analyzed. The concentration detected in this sample was 2.38 µg/L. Both concentrations are above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L; therefore, continued use of bottled water for consumptive purposes is advised. Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a list of drinking water standards, a sample laboratory report diagram and a 1,4 dioxane information sheet.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Thomas F & M Lynne Linnehan

2. Street Address: 50 Westminster Dr

City/Town: Marlborough Zip Code: 01752

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 45 Knowles Street

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409822
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409822-01	Date Collected:	05/06/14 08:30
Client ID:	KNOWLES ST_045	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 08:14		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	2.22		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: EASTHAM DW
Lab Number: L1409822
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409822-02	Date Collected:	05/06/14 08:35
Client ID:	KNOWLES ST_045 DUP	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 15:33
Analytical Date:	05/13/14 02:30		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	2.38		ug/l	0.147	0.0735	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	30		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

John R & Barbara McDonald
PO Box 1172
Orleans, MA 02653

Subject: **Environmental Sampling Results**
75 Knowles Street

Dear Mr. and Mrs. McDonald;

On behalf of the Town of Eastham, this letter transmits to you the results of the water sample collected from your **75 Knowles Street** property on May 8, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was not detected in the sample above the laboratory reporting limit.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and a 1,4 dioxane information sheet. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.

Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: John R & Barbara McDonald

2. Street Address: PO Box 1172

City/Town: Orleans, MA Zip Code: 02653

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 75 Knowles Street

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: Not Specified
Lab Number: L1409877
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-09	Date Collected:	05/08/14 07:55
Client ID:	KNOWLES ST_075	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 13:40		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	29		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Jeffrey L Carlson
Box 284
Eastham, MA 02642

Subject: Environmental Sampling Results
100 Meetinghouse Road

Dear Mr. Carlson;

On behalf of the Town of Eastham, this letter transmits to you the results of the water sample collected from your **100 Meetinghouse Road** property on May 6, 2014. The water sample was submitted for laboratory analysis of volatile organic compounds (VOCs), 1,4 dioxane, and arsenic. 1,4 dioxane was detected in the sample at a concentration of 1.90 micrograms per liter or µg/L. This concentration is above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L. Continued use of bottled water for consumptive purposes is advised. An estimated concentration of chloroform was detected below the reporting limits and the Massachusetts drinking water standards. No other compounds were detected in the sample.

Pages from the laboratory reports with these results are attached for your review, along with MassDEP-required form BWSC-123, a list of drinking water standards, a sample laboratory report diagram and a 1,4 dioxane information sheet.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Jeffrey L Carlson

2. Street Address: Box 284

City/Town: Eastham, MA Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 100 Meetinghouse Road

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID:	L1409598-04	Date Collected:	05/06/14 11:45
Client ID:	MEETINGHOUSE RD_100	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 05:15		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	1.90		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	19		15-110

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID: L1409598-04
Client ID: MEETINGHOUSE RD_100
Sample Location: EASTHAM MA
Matrix: Drinking Water
Date Collected: 05/06/14 11:45
Date Received: 05/06/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	ND		mg/l	0.00100	0.00020	1	05/08/14 08:06	05/09/14 22:46	EPA 3005A	3,200.8	BM

Project Name: EASTHAM DW **Lab Number:** L1409598

Project Number: 2013-027 **Report Date:** 05/20/14

SAMPLE RESULTS

Lab ID:	L1409598-04	Date Collected:	05/06/14 11:45
Client ID:	MEETINGHOUSE RD_100	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water		
Analytical Method:	16,524.2		
Analytical Date:	05/07/14 14:55		
Analyst:	GT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	0.52		ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1409598

Project Number: 2013-027 **Report Date:** 05/20/14

SAMPLE RESULTS

Lab ID: L1409598-04 Date Collected: 05/06/14 11:45

Client ID: MEETINGHOUSE RD_100 Date Received: 05/06/14

Sample Location: EASTHAM MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	99		80-120
4-Bromofluorobenzene	88		80-120

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Timothy Duket & Amy Martin
611 Centre St
Newton, MA 02458

Subject: Environmental Sampling Results
165 Meetinghouse Road

Dear Mr. Duket and Ms. Martin:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your **165 Meetinghouse Road** property on May 9, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was detected in the primary sample at a concentration of 0.746 micrograms per liter or µg/L. Since the sampling protocol for this study includes the analysis of duplicate samples when 1,4 dioxane is detected above the laboratory detection limit, the duplicate sample was also analyzed. The concentration detected in this sample was 0.748 µg/L. Both concentrations are above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L; therefore, bottled water has been made available to you for consumptive purposes. Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and a 1,4 dioxane information sheet.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.

Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Timothy Duket & Amy Martin

2. Street Address: 611 Centre St

City/Town: Newton, MA Zip Code: 02458

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 165 Meetinghouse Road

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409991
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409991-07	Date Collected:	05/09/14 12:50
Client ID:	MEETINGHOUSE RD_165	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 20:57		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.746		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	31		15-110

Project Name: EASTHAM DW
Lab Number: L1409991
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409991-08	Date Collected:	05/09/14 12:55
Client ID:	MEETINGHOUSE RD_165 DUP	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 21:45		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.748		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	35		15-110

Environmental
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273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Nancy E Stagg Ttee
PO Bx 1289
Wellfleet, MA 02667

Subject: **Environmental Sampling Results**
190 Meetinghouse Road Rear, Eastham, MA

Dear Ms. Stagg,

On behalf of the Town of Eastham, this letter transmits to you the testing results from water sample collected from **190 Meetinghouse Road Rear** on May 9, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was not detected in the sample above the laboratory reporting limit.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram and a 1,4 dioxane information sheet. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Nancy E Stagg Ttee

2. Street Address: PO Bx 1289

City/Town: Wellfleet, MA Zip Code: 02667

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 190 Meetinghouse Road Rear

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409991
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409991-09	Date Collected:	05/09/14 14:10
Client ID:	MEETINGHOUSE REAR_190	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 07:45		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	30		15-110

Environmental
Strategies
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273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Robert & Nancy L Nickerson
PO Box 701
Eastham, MA 02642

Subject: **Environmental Sampling Results**
205 Meetinghouse Road

Dear Mr. and Mrs. Nickerson,

On behalf of the Town of Eastham, this letter transmits to you the testing results from the water sample collected from your **205 Meetinghouse Road** property on May 5, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was detected at a concentration of 0.310 micrograms per liter or µg/L in the primary sample. This concentration is above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L. The sampling protocol of this project is to conduct analysis of a duplicate sample (collected at the same time as the primary sample) if a compound is detected above the laboratory detection limit. The compound 1,4-dioxane was detected at a concentration of 0.319 µg/L in the duplicate sample. You should continue to use bottled water for consumptive purposes.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram and a 1,4 dioxane information sheet. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.

Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Robert & Nancy L Nickerson

2. Street Address: PO Box 701

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 205 Meetinghouse Road

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-09	Date Collected:	05/05/14 14:35
Client ID:	MEETINGHOUSE RD_205	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/06/14 09:39
Analytical Date:	05/07/14 11:30		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.310		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-10	Date Collected:	05/05/14 14:40
Client ID:	MEETINGHOUSE RD_205 DUP	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:07
Analytical Date:	05/14/14 08:48		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.319		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Marina Laubert
PO Box 1379
N Eastham, MA 02651

Subject: Environmental Sampling Results
225 Meetinghouse Road

Dear Ms. Laubert:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your **225 Meetinghouse Road** property on May 9, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was detected in the primary sample at a concentration of 0.196 micrograms per liter or µg/L. Since the sampling protocol for this study includes the analysis of duplicate samples when 1,4 dioxane is detected above the laboratory detection limit, the duplicate sample was also analyzed. The concentration detected in this sample was 0.178 µg/L. Both concentrations are below the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L. Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and a 1,4 dioxane information sheet.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Marina Laubert

2. Street Address: PO Box 1379

City/Town: N Eastham, MA Zip Code: 02651

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 225 Meetinghouse Road

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409991
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409991-03	Date Collected:	05/09/14 10:00
Client ID:	MEETINGHOUSE RD_225	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 05:30		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.196		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: EASTHAM DW
Lab Number: L1409991
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409991-04	Date Collected:	05/09/14 10:05
Client ID:	MEETINGHOUSE RD_225 DUP	Date Received:	05/09/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 19:20		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.178		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	32		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Daniel G & Kristine M Griswold
5 Arnold Rd
Pelham, MA 01002-9757

Subject: **Environmental Sampling Results**
350 Meetinghouse Road

Dear Mr. and Mrs. Griswold,

On behalf of the Town of Eastham, this letter transmits to you the testing results from the water sample collected from your **350 Meetinghouse Road** property on May 5, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was detected at a concentration of 1.23 micrograms per liter or µg/L in the primary sample. This concentration is above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L. The sampling protocol of this project is to conduct analysis of a duplicate sample (collected at the same time as the primary sample) if a compound is detected above the laboratory detection limit. The compound 1,4-dioxane was detected at a concentration of 1.24 µg/L in the duplicate sample. You should continue to use bottled water for consumptive purposes.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram and a 1,4 dioxane information sheet. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Daniel G & Kristine M Griswold

2. Street Address: 5 Arnold Rd

City/Town: Pelham, MA Zip Code: 01002-9757

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 350 Meetinghouse Road

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-05	Date Collected:	05/05/14 11:35
Client ID:	MEETINGHOUSE RD_350	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/06/14 09:39
Analytical Date:	05/07/14 10:01		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	1.23		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-06	Date Collected:	05/05/14 11:40
Client ID:	MEETINGHOUSE RD_350 DUP	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:07
Analytical Date:	05/14/14 07:12		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	1.24		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Environmental
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& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Christine Schmidt
31 Jacobus Ave
Little Falls, NJ 07424

Subject: **Environmental Sampling Results**
370 Meetinghouse Road

Dear Ms. Schmidt:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your **370 Meetinghouse Road** property on May 8, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was detected in the primary sample at a concentration of 0.339 micrograms per liter or µg/L. Since the sampling protocol for this study includes the analysis of duplicate samples when 1,4 dioxane is detected above the laboratory detection limit, the duplicate sample was also analyzed. The concentration detected in this sample was 0.316 µg/L. Both concentrations are above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L; therefore, bottled water has been made available to you for consumptive purposes. Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram, and a 1,4 dioxane information sheet.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.

Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Christine Schmidt

2. Street Address: 31 Jacobus Ave

City/Town: Little Falls, NJ Zip Code: 07424

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 370 Meetinghouse Road

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-11	Date Collected:	05/08/14 11:55
Client ID:	MEETINGHOUSE RD_370	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 14:25		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.339		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	29		15-110

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-12	Date Collected:	05/08/14 12:00
Client ID:	MEETINGHOUSE RD_370 DUP	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 18:32		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.316		ug/l	0.139	0.0694	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	34		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Douglas Okane and Mark Okane
619 South Pearl Street
Denver, CO 80209

Subject: Environmental Sampling Results
180 Old Orchard Road, Eastham, MA

Dear Douglas Okane and Mark Okane;

On behalf of the Town of Eastham, this letter transmits to you the results of the water sample collected from your 180 Old Orchard Road property on May 6, 2014. The water sample was submitted for laboratory analysis of volatile organic compounds (VOCs), 1,4 dioxane, and arsenic. 1,4 dioxane was detected in the sample at a concentration of 0.527 micrograms per liter or µg/L. This concentration is above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L. Continued use of bottled water for consumptive purposes is advised. Estimated concentrations of chloroform and arsenic were detected below the reporting limits and the Massachusetts drinking water standards. No other compounds were detected.

Pages from the laboratory reports with these results are attached for your review, along with MassDEP-required form BWSC-123, a list of drinking water standards, a sample laboratory report diagram and a 1,4 dioxane information sheet.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Douglas Okane and Mark Okane

2. Street Address: 619 South Pearl Street

City/Town: Denver, CO Zip Code: 80209

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 180 Old Orchard Road

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID:	L1409598-01	Date Collected:	05/06/14 08:35
Client ID:	OLD ORCHARD RD_180	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 03:46		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.527		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	19		15-110

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID:	L1409598-01	Date Collected:	05/06/14 08:35
Client ID:	OLD ORCHARD RD_180	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 03:46		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.527		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	19		15-110

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID: L1409598-01
Client ID: OLD ORCHARD RD_180
Sample Location: EASTHAM MA
Matrix: Drinking Water

Date Collected: 05/06/14 08:35
Date Received: 05/06/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	0.00034	J	mg/l	0.00100	0.00020	1	05/08/14 08:06	05/09/14 22:40	EPA 3005A	3,200.8	BM

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID: L1409598-01
Client ID: OLD ORCHARD RD_180
Sample Location: EASTHAM MA
Matrix: Drinking Water
Analytical Method: 16,524.2
Analytical Date: 05/07/14 14:22
Analyst: GT

Date Collected: 05/06/14 08:35
Date Received: 05/06/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	0.40	J	ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1409598

Project Number: 2013-027 **Report Date:** 05/20/14

SAMPLE RESULTS

Lab ID: L1409598-01 Date Collected: 05/06/14 08:35

Client ID: OLD ORCHARD RD_180 Date Received: 05/06/14

Sample Location: EASTHAM MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	101		80-120
4-Bromofluorobenzene	89		80-120

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID: L1409598-01
Client ID: OLD ORCHARD RD_180
Sample Location: EASTHAM MA
Matrix: Drinking Water

Date Collected: 05/06/14 08:35
Date Received: 05/06/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor	Date Prepared	Date Analyzed	Prep Method	Analytical Method	Analyst
Total Metals - Westborough Lab											
Arsenic, Total	0.00034	J	mg/l	0.00100	0.00020	1	05/08/14 08:06	05/09/14 22:40	EPA 3005A	3,200.8	BM

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID: L1409598-01
Client ID: OLD ORCHARD RD_180
Sample Location: EASTHAM MA
Matrix: Drinking Water
Analytical Method: 16,524.2
Analytical Date: 05/07/14 14:22
Analyst: GT

Date Collected: 05/06/14 08:35
Date Received: 05/06/14
Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
Methylene chloride	ND		ug/l	0.50	0.15	1
1,1-Dichloroethane	ND		ug/l	0.50	0.09	1
Chloroform	0.40	J	ug/l	0.50	0.05	1
Carbon tetrachloride	ND		ug/l	0.50	0.10	1
1,2-Dichloropropane	ND		ug/l	0.50	0.09	1
Dibromochloromethane	ND		ug/l	0.50	0.08	1
1,1,2-Trichloroethane	ND		ug/l	0.50	0.12	1
Tetrachloroethene	ND		ug/l	0.50	0.09	1
Chlorobenzene	ND		ug/l	0.50	0.08	1
Trichlorofluoromethane	ND		ug/l	0.50	0.11	1
1,2-Dichloroethane	ND		ug/l	0.50	0.08	1
1,1,1-Trichloroethane	ND		ug/l	0.50	0.08	1
Bromodichloromethane	ND		ug/l	0.50	0.05	1
trans-1,3-Dichloropropene	ND		ug/l	0.50	0.09	1
cis-1,3-Dichloropropene	ND		ug/l	0.50	0.10	1
Bromoform	ND		ug/l	0.50	0.09	1
1,1,2,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
Benzene	ND		ug/l	0.50	0.09	1
Toluene	ND		ug/l	0.50	0.12	1
Ethylbenzene	ND		ug/l	0.50	0.06	1
p/m-Xylene	ND		ug/l	0.50	0.12	1
Chloromethane	ND		ug/l	0.50	0.15	1
Bromomethane	ND		ug/l	0.50	0.13	1
Vinyl chloride	ND		ug/l	0.50	0.08	1
Chloroethane	ND		ug/l	0.50	0.12	1
1,1-Dichloroethene	ND		ug/l	0.50	0.06	1
trans-1,2-Dichloroethene	ND		ug/l	0.50	0.09	1
cis-1,2-Dichloroethene	ND		ug/l	0.50	0.11	1
Trichloroethene	ND		ug/l	0.50	0.09	1
1,2-Dichlorobenzene	ND		ug/l	0.50	0.07	1
1,3-Dichlorobenzene	ND		ug/l	0.50	0.05	1

Project Name: EASTHAM DW **Lab Number:** L1409598

Project Number: 2013-027 **Report Date:** 05/20/14

SAMPLE RESULTS

Lab ID: L1409598-01 Date Collected: 05/06/14 08:35

Client ID: OLD ORCHARD RD_180 Date Received: 05/06/14

Sample Location: EASTHAM MA Field Prep: Not Specified

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
Volatile Organics by GC/MS - Westborough Lab						
1,4-Dichlorobenzene	ND		ug/l	0.50	0.05	1
Styrene	ND		ug/l	0.50	0.06	1
o-Xylene	ND		ug/l	0.50	0.09	1
1,1-Dichloropropene	ND		ug/l	0.50	0.11	1
2,2-Dichloropropane	ND		ug/l	0.50	0.11	1
1,1,1,2-Tetrachloroethane	ND		ug/l	0.50	0.09	1
1,2,3-Trichloropropane	ND		ug/l	0.50	0.11	1
Bromochloromethane	ND		ug/l	0.50	0.10	1
n-Butylbenzene	ND		ug/l	0.50	0.06	1
Dichlorodifluoromethane	ND		ug/l	0.50	0.10	1
Hexachlorobutadiene	ND		ug/l	0.50	0.11	1
Isopropylbenzene	ND		ug/l	0.50	0.08	1
p-Isopropyltoluene	ND		ug/l	0.50	0.07	1
Naphthalene	ND		ug/l	0.50	0.06	1
n-Propylbenzene	ND		ug/l	0.50	0.08	1
sec-Butylbenzene	ND		ug/l	0.50	0.06	1
tert-Butylbenzene	ND		ug/l	0.50	0.09	1
1,2,3-Trichlorobenzene	ND		ug/l	0.50	0.06	1
1,2,4-Trichlorobenzene	ND		ug/l	0.50	0.07	1
1,2,4-Trimethylbenzene	ND		ug/l	0.50	0.08	1
1,3,5-Trimethylbenzene	ND		ug/l	0.50	0.10	1
Bromobenzene	ND		ug/l	0.50	0.09	1
o-Chlorotoluene	ND		ug/l	0.50	0.10	1
p-Chlorotoluene	ND		ug/l	0.50	0.08	1
Dibromomethane	ND		ug/l	0.50	0.09	1
1,2-Dibromoethane	ND		ug/l	0.50	0.06	1
1,2-Dibromo-3-chloropropane	ND		ug/l	0.50	0.16	1
1,3-Dichloropropane	ND		ug/l	0.50	0.11	1
Methyl tert butyl ether	ND		ug/l	0.50	0.06	1
Xylenes, Total[1]	ND		ug/l	0.50	0.09	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,2-Dichlorobenzene-d4	101		80-120
4-Bromofluorobenzene	89		80-120

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Amanda L Martin
Box 1456
No Eastham, MA 02651

Subject: **Environmental Sampling Results**
310 Old Orchard Road

Dear Ms. Martin:

On behalf of the Town of Eastham, this letter transmits to you the laboratory results for the water sample collected from your 310 Old Orchard Road property on May 6, 2014, by Environmental Strategies & Management. The water sample was submitted for 1,4 dioxane laboratory analysis. This compound was detected in the primary sample at a concentration of 0.431 micrograms per liter or µg/L. Since the sampling protocol for this study includes the analysis of duplicate samples when 1,4 dioxane is detected above the laboratory detection limit, the duplicate sample was also analyzed. The concentration detected in this sample was 0.433 µg/L. Both concentrations are above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L; therefore, continued use of bottled water for consumptive purposes is advised. Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram and a 1,4 dioxane information sheet.

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, Southeast Regional Office

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Amanda L Martin

2. Street Address: Box 1456

City/Town: No Eastham Zip Code: 02651

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 310 Old Orchard Road

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409822
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409822-09	Date Collected:	05/06/14 14:30
Client ID:	OLD ORCHARD RD_310	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 12:38		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.431		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: EASTHAM DW
Lab Number: L1409822
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409822-10	Date Collected:	05/06/14 14:35
Client ID:	OLD ORCHARD RD_310 DUP	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 15:33
Analytical Date:	05/13/14 04:00		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.433		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	31		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 16, 2014

Linda Burt
Head Custodian
Eastham Elementary School
200 Schoolhouse Road
Eastham, MA 02642

Subject: Environmental Sampling Results
200 Schoolhouse Road

Dear Ms. Burt,

On behalf of the Town of Eastham, this letter transmits to you the testing results from the drinking water sample collected from **200 Schoolhouse Road** on May 6, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was detected at an estimated concentration of 0.105 micrograms per liter or µg/L. This concentration is below the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L.

A summary of all laboratory results from water samples collected at this property is attached. In addition, the MassDEP-required form BWSC-123 form, pages from the laboratory report with these results, and a sample laboratory report diagram are attached. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

1,4 Dioxane Analytical Results

Eastham Elementary School
200 Schoolhouse Road

(reported in ug/L)

Sample Date	Sample Collection Point	Lab Report Sample ID Logged	Lab ID	1,4-Dioxane
05/06/2014	Influent Side (before) pH Treatment Vessels	SCHOOLHOUSE RD_200	L1409598-05	0.105J
02/14/2014	Influent Side (before) pH Treatment Vessels	EES-PRE2	200-20946-1	0.083 J
	Duplicate (influent)	EES-151	200-20946-3	0.076 J
	Effluent Side (after) pH Treatment Vessels	EES-POST2	200-20946-2	0.094 J
02/11/2014	Influent Side (before) pH Treatment Vessels	ESS-PRE	200-20885-1	0.081 J
	Duplicate (influent)	ESS-150	200-20885-3	0.086 J
	Effluent Side (after) pH Treatment Vessels	ESS-POST	200-20885-2	0.096 J
02/12/2013	Raw Water Tap	200 Schoolhouse Rd.	480-32875-4	< 0.20
			Current Drinking Water Standard	0.3

Notes:

(a) The Sample collected on May 6, 2014, by Environmental Strategies & Management, was analyzed by Alpha Analytical using MassDEP CAM-compliant EPA Method 8270. The Method Detection Limit (MDL) was 0.0721 ug/L and the Reporting Limit (RL) was 0.144 ug/L. The analytical result was greater than the MDL, but less than the RL, and is therefore estimated and flagged as a "J" value.

The sample was collected from the sample port located after the pressure tank and before the pH treatment vessel. This sample location is before any water lines leading to faucets and fountains. Prior to sample collection, 30 gallons of water was purged from the system over a period of approximately 25 minutes using the faucet nearest to the sample location.

(b) Samples collected on February 11 and 14, 2014, by Environmental Partners Group, were analyzed by TestAmerica Laboratories using EPA Method 522 Mod. with a Method Detection Limit (MDL) of 0.040 ppb and a Reporting Limit (RL) of 0.20 ppb. The analytical results were greater than the MDL, but less than the RL, and therefore were estimated and flagged as a "J" value.

At this time, samples were collected from the ports before and after treatment vessels that provide pH treatment to the water. The taps from which the samples were collected were allowed to run a minimum of 15 minutes before sample collection. There are no drinking water fountains or bathroom faucets ahead of these taps.

(c) Samples collected on February 12, 2013, by Bennett Associates were analyzed using EPA Method 522 Mod by TestAmerica Laboratories. This sample was a raw water sample.

Environmental Strategies & Management

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Town of Eastham

2. Street Address: 2500 State Highway

City/Town: Eastham, MA Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 200 Schoolhouse Road

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409598
Project Number: 2013-027
Report Date: 05/20/14

SAMPLE RESULTS

Lab ID:	L1409598-05	Date Collected:	05/06/14 13:00
Client ID:	SCHOOLHOUSE RD_200	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 06:00		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.105	J	ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Richard W & Kathleen LaPlant
300 Schoolhouse Rd
Eastham, MA 02642

Subject: **Environmental Sampling Results**
300 Schoolhouse Road

Dear Mr. and Mrs. LaPlant,

On behalf of the Town of Eastham, this letter transmits to you the testing results from the water sample collected from your **300 Schoolhouse Road** property on May 7, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was detected at a concentration of 0.168 micrograms per liter or µg/L in the primary sample. This concentration is below Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L; however, the sampling protocol of this project is to conduct analysis of a duplicate sample (collected at the same time as the primary sample) if a compound is detected above the laboratory detection limit. The compound 1,4-dioxane was detected at a concentration of 0.177 µg/L in the duplicate sample.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram and a 1,4 dioxane information sheet. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Richard W & Kathleen LaPlant

2. Street Address: 300 Schoolhouse Rd

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 300 Schoolhouse Rd

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409738
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409738-01	Date Collected:	05/07/14 08:30
Client ID:	SCHOOLHOUSE RD_300	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:07
Analytical Date:	05/13/14 20:43		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.168		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	26		15-110

Project Name: EASTHAM DW
Lab Number: L1409738
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409738-02	Date Collected:	05/07/14 08:35
Client ID:	SCHOOLHOUSE RD_300 DUP	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/14/14 17:00
Analytical Date:	05/15/14 14:08		
Analyst:	CM		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.177		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	30		15-110

Environmental
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273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Cynthia Deslauriers Ttee
345 Schoolhouse Rd
Eastham, MA 02642

Subject: **Environmental Sampling Results**
345 Schoolhouse Road, Eastham, MA

Dear Ms. Deslauriers,

On behalf of the Town of Eastham, this letter transmits to you the testing results from water sample collected from your **345 Schoolhouse Road** property on May 7, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was not detected in the sample above the laboratory reporting limit.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram and a 1,4 dioxane information sheet. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.

Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Cynthia Deslauriers Ttee

2. Street Address: 345 Schoolhouse Rd

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 345 Schoolhouse Rd

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409836
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409836-07	Date Collected:	05/07/14 11:30
Client ID:	SCHOOLHOUSE RD_345	Date Received:	05/07/14
Sample Location:	EASTHAM, MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:10
Analytical Date:	05/14/14 04:00		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.153	0.0765	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	25		15-110

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273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Donald R & Melissa Reilly
5 Leghorn Ln
Cromwell, CT 06416

Subject: **Environmental Sampling Results**
4 Selah Circle, Eastham, MA

Dear Mr. and Mrs. Reilly,

On behalf of the Town of Eastham, this letter transmits to you the testing results from water sample collected from your **4 Selah Circle** property on May 6, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was not detected in the sample above the laboratory reporting limit.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram and a 1,4 dioxane information sheet. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Donald R & Melissa Reilly

2. Street Address: 5 Leghorn Ln

City/Town: Cromwell, CT Zip Code: 06416

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 4 Selah Circle

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409822
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409822-05	Date Collected:	05/06/14 13:00
Client ID:	SELAH CIRCLE_004	Date Received:	05/06/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/07/14 07:52
Analytical Date:	05/08/14 11:09		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.143	0.0714	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	25		15-110

Environmental
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273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Matthew M Muir
PO Box 337
No Eastham, MA 02651

Subject: **Environmental Sampling Results**
5 Starlight Lane

Dear Mr. Muir,

On behalf of the Town of Eastham, this letter transmits to you the testing results from the water sample collected from your **5 Starlight Lane** property on May 5, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was detected at a concentration of 0.394 micrograms per liter or µg/L in the primary sample. This concentration is above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L. The sampling protocol of this project is to conduct analysis of a duplicate sample (collected at the same time as the primary sample) if a compound is detected above the laboratory detection limit. The compound 1,4-dioxane was detected at a concentration of 0.362 µg/L in the duplicate sample. You should continue to use bottled water for consumptive purposes.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram and a 1,4 dioxane information sheet. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.

Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Matthew M Muir

2. Street Address: PO Box 337

City/Town: North Eastham, MA Zip Code: 02651

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 5 Starlight Lane

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-07	Date Collected:	05/05/14 12:40
Client ID:	STARLIGHT LN_005	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/06/14 09:39
Analytical Date:	05/07/14 10:46		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.394		ug/l	0.147	0.0735	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	29		15-110

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-08	Date Collected:	05/05/14 12:45
Client ID:	STARLIGHT LN_005 DUP	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:07
Analytical Date:	05/14/14 08:00		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.362		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	21		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

Carlos & Judith B Neu
14 Longfellow Rd
Cambridge, MA 02138

Subject: **Environmental Sampling Results**
3168 State Hwy

Dear Mr. and Mrs. Neu,

On behalf of the Town of Eastham, this letter transmits to you the testing results from the water sample collected from your **3168 State Hwy** property on May 5, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was detected at a concentration of 0.334 micrograms per liter or µg/L in the primary sample. This concentration is above the Massachusetts drinking water standard and the bottle water action limit of 0.3 µg/L. The sampling protocol of this project is to conduct analysis of a duplicate sample (collected at the same time as the primary sample) if a compound is detected above the laboratory detection limit. The compound 1,4-dioxane was detected at a concentration of 0.350 µg/L in the duplicate sample. You should continue to use bottled water for consumptive purposes.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram and a 1,4 dioxane information sheet. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Carlos & Judith B Neu

2. Street Address: 14 Longfellow Rd

City/Town: Cambridge Zip Code: 02138

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3168 State Hwy

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-01	Date Collected:	05/05/14 08:35
Client ID:	STATE HWY_3168	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/06/14 09:39
Analytical Date:	05/07/14 07:34		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.334		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	24		15-110

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-02	Date Collected:	05/05/14 08:40
Client ID:	STATE HWY_3168 DUP	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/09/14 06:07
Analytical Date:	05/14/14 05:36		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.350		ug/l	0.142	0.0708	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	23		15-110

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-07	Date Collected:	05/08/14 13:00
Client ID:	STATE HWY_3200	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/12/14 10:00
Analytical Date:	05/13/14 12:55		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.424		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	25		15-110

Project Name: Not Specified
Project Number: 2013-027
Lab Number: L1409877
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409877-08	Date Collected:	05/08/14 13:05
Client ID:	STATE HWY_3200 DUP	Date Received:	05/08/14
Sample Location:	Not Specified	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/13/14 20:18
Analytical Date:	05/14/14 17:44		
Analyst:	JT		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	0.418		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	29		15-110

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: Eastham United Methodist Church

2. Street Address: 3200 State Highway

City/Town: Eastham Zip Code: 02642

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: Eastham United Methodist Church, 3200 State Highway

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☐ residential ☐ commerical ☐ industrial ☐ school/playground ☑ Other church (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton, MA Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 6, 2014

James E Chapin & Mary C Nee
118 Governors Rd
Milton, MA 02186

Subject: **Environmental Sampling Results**
3 Whidah Lane

Dear Mr. Chapin and Mrs. Nee,

On behalf of the Town of Eastham, this letter transmits to you the testing results from the water sample collected from your **3 Whidah Lane** property on May 5, 2014. The water sample was submitted for laboratory analysis of 1,4-dioxane. This compound was not detected above the laboratory reporting limit.

Pages from the laboratory report with these results are attached for your review, along with MassDEP-required form BWSC-123, a sample laboratory report diagram and a 1,4 dioxane information sheet. Status reports describing activities related to the Eastham landfill are available at the Eastham Town Hall and library, and are also available on line at:

http://public.dep.state.ma.us/fileviewer/Rtn.aspx?rtn=4-0024301

Please call us at 508-226-1800 if you have any questions.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, PG, LSP
Principal Geologist

Copy: Ms. Jane Crowley, Town of Eastham Board of Health
MassDEP, SERO

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

4 | 24301

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: Eastham Landfill, 255 Old Orchard Road

City/Town: Eastham Zip Code: 02642

B. This notice is being provided to the following party:

1. Name: James E Chapin & Mary C Nee

2. Street Address: 118 Governors Rd

City/Town: Milton, MA Zip Code: 02186

C. This notice is being given to inform its recipient (the party listed in Section B):

☑ 1. That environmental sampling will be/has been conducted at property owned by the recipient of this notice.

☑ 2. Of the results of environmental sampling conducted at property owned by the recipient of this notice.

☑ 3. Check to indicate if the analytical results are attached. (If item 2. above is checked, the analytical results from the environmental sampling must be attached to this notice.)

D. Location of the property where the environmental sampling will be/has been conducted:

1. Street Address: 3 Whidah Lane

City/Town: Eastham Zip Code: 02642

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☑ residential ☐ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Private well drinking water.

E. Contact information related to the party providing this notice:

Contact Name: Douglas Heely

Street Address: 273 West Main Street

City/Town: Norton Zip Code: 02766

Telephone: (508) 226-1800 Email: dheely@esm-inc.com

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

Project Name: EASTHAM DW
Lab Number: L1409481
Project Number: 2013-027
Report Date: 05/29/14

SAMPLE RESULTS

Lab ID:	L1409481-11	Date Collected:	05/05/14 10:25
Client ID:	WHIDAH LN_003	Date Received:	05/05/14
Sample Location:	EASTHAM MA	Field Prep:	Not Specified
Matrix:	Drinking Water	Extraction Method:	EPA 3510C
Analytical Method:	97,8270D-SIM	Extraction Date:	05/06/14 09:39
Analytical Date:	05/07/14 12:15		
Analyst:	JS		

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
MCP 1,4 Dioxane by 8270D-SIM - Mansfield Lab						
1,4-Dioxane	ND		ug/l	0.144	0.0721	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
1,4-Dioxane-d8	28		15-110

Environmental
Strategies
& Management

273 West Main Street, Norton, MA 02766 ◆ Tel: (508) 226-1800 ◆ Fax: (508) 226-1811

June 30, 2014

Town of Eastham Board of Health
2500 State Highway
Eastham, MA 02642-2544

Eastham Board of Selectmen
Eastham Town Hall
2500 State Highway
Eastham MA 02643-2544

Subject: Immediate Response Action Status Report
Town of Eastham Landfill
255 Old Orchard Road, Eastham MA
RTN 4-24301

As required by the Massachusetts Contingency Plan (MCP), notice is hereby given that the above referenced document has been submitted electronically to the Massachusetts Department of Environmental Protection (MassDEP).

The objective of the Immediate Response Action program is to identify private water wells in the vicinity of the Eastham Landfill that have been impacted by 1,4 dioxane, and to provide alternative safe drinking water to affected residents. In addition, the IRA program includes implementation of appropriate and feasible mitigating measures to remove 1,4 dioxane and other VOCs related to the Eastham landfill from drinking water. This IRA Status report (and the incorporated Landfill Monitoring Plan report) discusses activities completed during the between March 1 and May 31, 2014).

The submitted documents can be viewed on line or at the MassDEP Southeast regional office. For more information about these options, please visit
http://www.mass.gov/eea/agencies/massdep/

If you have any questions, please contact our office at 508-226-1800.

Sincerely,
Environmental Strategies & Management, Inc.



Douglas Heely, LSP

Copy: MassDEP Southeast Region

BARNSTABLE COUNTY
DEPARTMENT OF HEALTH AND ENVIRONMENT

BARNSTABLE COUNTY COMPLEX
3195 MAIN STREET / PO BOX 427
BARNSTABLE, MASSACHUSETTS 02630

Phone: (508) 375-6613
FAX (508) 362-2603
TDD (508) 362-5885

June 19, 2014

Mrs. Jane Crowley
Eastham Health Department
2500 State Highway
Eastham, MA 02642

Dear Jane:

Enclosed please find the results from samples dated June 18, 2014 for the soil gas monitoring of the Eastham Landfill site.

Please note that no levels exceeded the reportable limit for methane gas under the Guide to the Solid Waste Management Regulations 310 CMR 19.150.

Please excuse the formatting of this report as I am in the process of accessing and transferring the software compatible with the equipment used in this program following the loss of my colleague Lee Mannillo.

If you have any questions or need further information, feel free to contact me directly at 508-375-6676 or lmulkeen@barnstablecounty.org.

Sincerely,

Lynn K. Mulkeen
Senior Environmental Specialist

cc: Mark Dakers, MassDEP
Doug Heely, Environmental Strategies & Management
Lisa Flynn, Environmental Strategies & Management

Eastham Soil Gas Sampling-JUNE 2014
Date: June 18, 2014
Sampled by: Lynn Mulkeen, Barnstable County Dept of Health and Environment
Weather: Sunny 85

Well ID	Time	Barometric Pressure (inHg)	Initial Reading	Parameter	Purged Reading
GMW 2	11:45	29.65	19.4	Oxygen (%)	19.2
			0	Methane (%LEL)	0
			0	H2S (ppm)	0
			0	VOC (ppm)	0
GMW 2A	11:55	29.63	18.3	Oxygen (%)	16.1
			0	Methane (%LEL)	0
			0	H2S (ppm)	0
			0.1	VOC (ppm)	0
GMW 2B	12:00	29.63	18.5	Oxygen (%)	15.7
			0	Methane (%LEL)	0
			0	H2S (ppm)	0
			0	VOC (ppm)	0
GMW 3	12:05	29.61	18.5	Oxygen (%)	19.2
			0	Methane (%LEL)	0
			1	H2S (ppm)	0
			0	VOC (ppm)	0
GMW 4	12:10	29.58	18.5	Oxygen (%)	16.6
			0	Methane (%LEL)	0
			0	H2S (ppm)	0
			0	VOC (ppm)	0
GMW 1	12:20	29.58	18.5	Oxygen (%)	18
			0	Methane (%LEL)	0
			0	H2S (ppm)	0
			0	VOC (ppm)	0

Method 3 Risk Assessment for Resident Exposed to Chemicals in Drinking Water - Shortform 2012 (sf12rw)

Index

Tab	
EPCs	Table RW-1: Select chemicals and enter Exposure Point Concentrations (EPCs). Estimated risks are shown to the right.
C Eq	Table RW-2: Equations to calculate cancer risks.
NC Eq	Table RW-3: Equations to calculate noncancer risks.
DA Eq	Table RW-4: Equations to calculate Absorbed Dermal Dose.
DA	Table RW-5: Dermal Absorbed Dose from Showering
IECs Eq	Table RW-6: Equations to calculate Inhalation Exposure Concentrations in the shower.
IECs	Table RW-7: Inhalation Exposure Concentration in the Shower
Exp	Table RW-8: Definitions and exposure factors.
Chem	Table RW-9: Chemical-specific data.

Spreadsheets designed by Andrew Friedmann, MassDEP
Questions and Comments may be addressed to:
Lydia Thompson
Massachusetts Department of Environmental Protection
Office of Research and Standards
One Winter Street
Boston, MA 02108 USA
Telephone: (617) 556-1165
Fax: (617) 556-1006
Email: Lydia.Thompson@state.ma.us

Resident - Drinking Water: Table RW-1
Exposure Point Concentration (EPC) and Risk
Based on Resident Ages 1-31 (Cancer) and 1-8 (Noncancer)

ShortForm Version 10-12

Vlookup Version v0414

ELCR (all chemicals) = 1.9E-05

HI (all chemicals) = 2.7E-02

****Do not insert or delete any rows****

Click on empty cell below and select OHM using arrow.

Oil or Hazardous Material (OHM)	EPC (µg/L)	ELCR ingestion	ELCR dermal	ELCR inhalation	$ELCR_{total}$	Chronic HQ_{ing}	Chronic HQ_{derm}	Chronic HQ_{inh}	HQ_{total}
DIOXANE, 1,4-	1.0E+01	1.9E-05	5.5E-08	4.2E-07	1.9E-05	2.0E-02	6.0E-05	7.5E-03	2.7E-02

MassDEP ORS
Contact: Lydia Thompson
Lydia.Thompson@state.ma.us
617-556-1165

Resident - Drinking Water: Table RW-2

Equations to Calculate Cancer Risk for Resident (Age 1-31 years)

Vlookup Version v0414

Cancer Risk from Ingestion

$$ELCR_{ing} = LADD_{ing(1\text{-}31)} * CSF$$

$$LADD_{ing\ (1\text{-}31)} = LADD_{ing\ (1\text{-}8)} + LADD_{ing\ (8\text{-}15)} + LADD_{ing\ (15\text{-}31)}$$

$$LADD_{ing\ (age\ group\ x)} = \frac{EPC * VI_x * RAF_{c\text{-}ing} * EF * ED_{ing} * EP_x * C}{BW_x * AP_{lifetime}}$$

Cancer Risk from Dermal Absorption

$$ELCR_{derm} = LADD_{derm(1\text{-}31)} * CSF$$

$$LADD_{derm\ (1\text{-}31)} = LADD_{derm\ (1\text{-}8)} + LADD_{derm\ (8\text{-}15)} + LADD_{derm\ (15\text{-}31)}$$

$$LADD_{derm(age\ group\ x)} = \frac{DA_x * SA_x * EF * ED_{derm} * EP_x}{OAE_c * BW_x * AP_{lifetime}}$$

or, if outside "Effective Predictive Domain", then

$$LADD_{derm(age\ group\ x)} = DM * LADD_{ing(age\ group\ x)}$$

Cancer Risk from Inhalation

$$ELCR_{inh} = LADE_{(1\text{-}31)} * URF$$

$$LADE_{(1\text{-}31)} = LADE_{(1\text{-}8)} + LADE_{(8\text{-}15)} + LADE_{(15\text{-}31)}$$

$$LADE_{(age\ x)} = \frac{IEC_{S\text{-}x} * EF * ED_{inh\text{-}x} * EP_x}{AP_{lifetime}}$$

Parameter	Value	Units
CSF	OHM-specific	$(mg/kg\text{-}day)^{-1}$
URF	OHM-specific	$(\mu g/m^3)^{-1}$
LADD	age/OHM-specific	mg/kg-day
LADE	age/OHM-specific	$\mu g/m^3$
EPC	OHM-specific	µg/L
$VI_{(1\text{-}8)}$	1	L/day
$VI_{(8\text{-}15)}$	2	L/day
$VI_{(15\text{-}31)}$	2	L/day
$RAF_{c\text{-}ing}$	OHM-specific	dimensionless
EF	1.00	event/day
$ED_{ing\ \&\ derm}$	1	day/event
$ED_{inh(1\text{-}8)}$	0.046	day/event
$ED_{inh(8\text{-}15)}$	0.046	day/event
$ED_{inh(15\text{-}31)}$	0.044	day/event
$EP_{(1\text{-}8)}$	7	years
$EP_{(8\text{-}15)}$	7	years
$EP_{(15\text{-}31)}$	16	years
C	0.001	mg/µg
$BW_{(1\text{-}8)}$	17.0	kg
$BW_{(8\text{-}15)}$	39.9	kg
$BW_{(15\text{-}31)}$	58.7	kg
$AP_{(lifetime)}$	70	years
$IEC_{S\text{-}x}$	age/OHM-specific	$\mu g/m^3$
DA_x	age/OHM-specific	$mg/cm^2\text{-}day$
OAE_c	OHM-specific	dimensionless
$SA_{(1\text{-}8)}$	7130	cm^2
$SA_{(8\text{-}15)}$	12800	cm^2
$SA_{(15\text{-}31)}$	16731	cm^2
DM	OHM-specific	dimensionless

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Resident - Drinking Water: Table RW-3

Equations to Calculate Noncancer Risk for Resident Child (Age 1-8 years)

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Noncancer Risk from Ingestion

$$HQ_{ing} = \frac{ADD_{ing}}{RfD}$$

$$ADD_{ing} = \frac{EPC * VI * RAF_{nc\text{-}ing} * EF * ED_{ing} * EP * C}{BW * AP}$$

Noncancer Risk from Dermal Absorption

$$HQ_{derm} = \frac{ADD_{derm}}{RfD}$$

$$ADD_{derm} = \frac{DA * SA * EF * ED_{derm} * EP}{OAE_{nc} * BW * AP}$$

or, if DA is outside the "Effective Predictive Domain" of the dermal model, then

$$ADD_{derm} = DM * ADD_{ing}$$

Noncancer Risk from Inhalation

$$HQ_{inh} = \frac{ADE}{RfC}$$

$$ADE = \frac{IEC_S * EF * ED_{inh} * EP * C}{AP}$$

Parameter	Value	Units
RfD	OHM-specific	mg/kg-day
RfC	OHM-specific	mg/m^3
ADD_{ing}	OHM-specific	mg/kg-day
ADD_{derm}	OHM-specific	mg/kg-day
ADE	OHM-specific	mg/m_3
EPC	OHM-specific	µg/L
VI	1	L/day
$RAF_{nc\text{-}ing}$	OHM-specific	dimensionless
$RAF_{nc\text{-}derm}$	OHM-specific	dimensionless
EF	1.00	event/day
ED_{ing}	1	day/event
ED_{derm}	1	day/event
ED_{inh}	0.046	day/event
EP	7	years
C	0.001	mg/µg
BW	17.0	kg
$AP_{(noncancer)}$	7	years
IEC_S	OHM-specific	$µg/m^3$
DA	OHM-specific	mg/cm^2-day
OAE_{nc}	OHM-specific	dimensionless
SA	7130	cm^2
DM	OHM-specific	dimensionless

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Resident - Drinking Water: Table RW-4

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Equations to Calculate Absorbed Dermal Dose from Showering (DA)

Model equations obtained from U.S. EPA (2001) Risk Assessment Guidance for Superfund (RAGS), Volume I: Human Health Evaluation Manual (Part E, Supplemental Guidance for Dermal Risk Assessment) Interim (http://www.epa.gov/oswer/riskassessment/ragse/index.htm).

Steady State versus Non-Steady State for Organic Chemicals: The time for an organic chemical to reach steady state is a function of the chemical's molecular weight (MW) and it's ability to traverse skin (expressed as a permeability constant, Kp). If an organic chemical does not reach steady state before the shower is over (i.e., time to reach steady state, t*, is greater than the shower duration, D_s), Equation (1) is used to calculate the dermal dose for this non-steady state. For organic chemicals that have reached a steady state by the end of the shower, Equation (2) is used to calculate dermal dose.

Effective Predictive Domain: The model is not used for organic chemicals that fall outside its effective predictive domain. Strictly, chemicals with very large or very small Kow values are outside of the EPD. Chemicals outside the Effective Predictive Domain are identified with an asterix in Tables B-2 and B-3 in the above citation as well as in Table V4 in the Vlookup (V) workbook.
For these chemicals, the dermal dose is estimated as a function of the oral dose according to MA DEP (1995) Guidance for Disposal Site Risk Characterization and Equation (3) below. Note that the dermal dose in these cases is calculated as an average daily dose (ADD) or life-time average daily dose (LADD) and expressed in mg/kg-bw. Equation (3) is also presented in Tables DW-2 and DW-3.

(1) Organic Chemicals Inside Effective Predictive Domain - *Non-Steady State*

Equation for estimating dermally absorbed dose (DA) for organic chemicals when the shower duration (D_s) is less than or equal to the time to reach steady state (t*).

$$DA = 2 * FA * C * Kp * Cw * [(6*t*D_s)/p)]^{1/2}$$

(2) Organic Chemicals Inside Effective Predictive Domain - *Steady State*

Equation for estimating DA for organic chemicals when D_s is greater than the time to reach t*.

$$DA = FA * C * Kp * Cw * [(D_s/(1+B)) + 2 * t * ((1+3B+3B^2)/(1+B)^2)]$$

(3) Organic Chemicals Outside Effective Predictive Domain

$$(L)ADD_{derm} = DM * (L)ADD_{ing}$$

(4) Inorganic Chemicals

Equation for estimating DA for inorganic chemicals in water.

$$DA = C * Kp * Cw * D_s$$

Where the equations to calculate the input values are:

(a) Equation for predicting strateum corneum permeability constant (Kp) for organic chemicals:

$$Kp = 10^{[-2.8+(0.66*logKow)-(0.0056*MW)]}$$

(b) Equation for calculating ratio of permeability of chemical in strateum corneum to permeability in viable epidermis (B)

$$B = Kp * ((MW)^{1/2}/2.6)$$

(c) Calculations for calculating time to reach steady state (t*):

When B is less than or equal to 0.6

$$t^* = 2.4 * t$$

When B is greater than 0.6

$$t^* = (b - (b^2 - c^2)^{1/2}) * l_{sc}^2/D_{sc}$$

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Resident - Drinking Water: Table RW-4

Equations to Calculate Absorbed Dermal Dose from Showering (DA)

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(d) Equations for calculating b and c

$$c = (1 + 3B + 3B^2)/(3 * (1+B)) \qquad b = (2(1+B)^2/p) - c$$

(e) Equation for calculating lag time (t)

$$t = l_{sc}^2/(6*D_{sc})$$

(f) Equation for calculating effective diffusivity (D_{sc})

$$D_{sc} = 10^{-2.8-(0.0056*MW)} * l_{sc}$$

Parameter	Value	Units	Notes
DA_{event} - Absorbed dose per event per area skin exposed	calculated	mg/cm^2-day	see Table RW-4 and RW-5
FA - Fraction absorbed	OHM-specific	dimensionless	see Table RW-5
Kp - Strateum corneum (sc) permeability constant	OHM-specific	cm/hr	see Table RW-9
C - Conversion Factor	0.000001	m^3/cm^3	
C_w - [OHM] in water, Exposure Point Concentration	OHM-specific	mg/m^3	see Table RW-1, expressed as µg/L
t - Lag time	calculated	hrs	Time for chemical to cross strateum corneum (Table RW-5)
D_s - Shower Duration	age-specific	hrs	see Table RW-6
$LogK_{ow}$ - Octanol/water partition coefficient	OHM-specific	dimensionless	see Table RW-9
MW - Molecular Weight	OHM-specific	g/mole	see Table RW-9
t* - Time to reach steady state	calculated	hr	see Table RW-5
b - Empirical variable used to calculate t*	calculated	dimensionless	see Table RW-5
c - Empirical variable used to calculate t*	calculated	dimensionless	see Table RW-5
l_{sc} - Thickness of skin	0.001	cm	MA DEP (1995). Guidance for Disposal Site Risk Characterization. Appendix Table B-9.
D_{sc} - Effective diffusivity for chemical transfer through the skin	calculated	cm^2/hr	see Table RW-5
B - Ratio of permeability of chemical in strateum corneum to permeability of chemical in viable epidermis	calculated	dimensionless	see Table RW-5

Resident - Drinking Water: Table RW-5
Dermal Absorded Dose (DA) from Showering

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Oil or Hazardous Material	Ratio of perm. in strateum corneum to viable epidermis B	Lag Time (tau) hours	Effective Diffusivity of Chemical Transfer Through Skin Dsc (cm2/hr)	Time to Reach Steady State t* hours	t* when B>0.6 hours	b	c	Absorbed Dose (1-8) DA (mg/cm2-day)	Absorbed Dose (8-15) DA (mg/cm2-day)	Absorbed Dose (15-31) DA (mg/cm2-day)	Outside Effective Predictive Domain	Fraction Absorbed FA	Absorbed Dose (1-8) w/ FA term DA(1-8) (mg/cm2-day)	Absorbed Dose (8-16) w/ FA term DA(8-16) (mg/cm2-day)	Absorbed Dose (16-31) w/ FA term DA(16-31) (mg/cm2-day)	Dermal Mult. DM
DIOXANE, 1,4-	1.13E-03	0.327	5.10E-07	0.78		3.0E-01	3.3E-01	4.32E-09	4.15E-09	3.66E-09		1	4.32E-09	4.15E-09	3.66E-09	

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Resident - Drinking Water: Table RW-6

Equations to Calculate Inhalation Exposure Concentration in the Shower (IEC_S)

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Model equations obtained from Foster, S.A. and Chrostowski, P.C. (1987) Inhalation Exposures to Volatile Organic Contaminants in the Shower. Presentation at the 80th Annual Meeting of APCA. New York, NY. June 21-26, 1987.

(1) Inhalation Exposure Concentration in the Shower.

$$IECs = [(S/R_{ae}) * (D_s + (e^{-Rae*Dt}/R_{ae}) - (e^{Rae(Ds-Dt)}/R_{ae}))] / D_t$$

Where the equations to calculate the input values are:

(a) Indoor Air Generation Rate

$$S = (C_{wd} * FR) / SV$$

(b) Concentration Leaving Water Droplet

$$C_{wd} = C_{w0}(1-e^{((-KaL*ts)/60d)})$$

(c) Adjusted Mass Transfer Coefficient

$$K_{aL} = K_{L*} ((T_l * u_s)/(T_s * u_l))^{-1/2}$$

(d) Overall Mass Transfer Coefficient

$$K_L = [(1/k_l) + (R * T)/(HLC * k_g)]^{-1}$$

(e) Liquid Film Mass Transfer Coefficient

$$k_l = k_l(CO_2) * ((MW_{CO2})/(MW_{VOC}))^{1/2}$$

(f) Gas Film Mass Transfer Coefficient

$$k_g = k_{g(water)} * (MW_{water}/MW_{VOC})^{1/2}$$

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Resident - Drinking Water: Table RW-6

Equations to Calculate Inhalation Exposure Concentration in the Shower (IEC_S)

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Parameter	Value	Units	Notes
IEC_S - Inhalation Exposure Concentration in shower	calculated	µg/m^3	see Table RW-7
S - Indoor air generation rate	calculated	µg/m^3-min	see Table RW-7
R_{ae} - Air Exchange Rate	8.33E-03	1/min	MADEP. 1995. Guidance for Disposal Site Risk Characterization. Appendix Table B-9.
D_s - Shower Duration for age group 1-8	45.7	min	see Table RW-8
	0.762	hour	see Table RW-8
D_t - Total Time in Shower Room for age group 1-8	65.7	min	see Table RW-8
D_s - Shower Duration for age group 8-15	42.1	min	see Table RW-8
	0.702	hr	see Table RW-8
D_t - Total Time in Shower Room for age group 8-15	66.4	min	see Table RW-8
D_s - Shower Duration for age group 15-31	32.8	min	see Table RW-8
	0.547	hr	see Table RW-8
D_t - Total Time in Shower Room for age group 15-31	62.8	min	see Table RW-8
C_{wd} - Concentration leaving water droplet	calculated	µg/l	see Table RW-7
FR - Shower Flow Rate	10	1/min	MADEP. 1995. Guidance for Disposal Site Risk Characterization. Appendix Table B-9.
SV - Shower room air volume	6	m^3	Ibid
C_{w0} - Shower water concentration	OHM-specific	µg/l	EPC. See Table RW-1
K_{aL} - Adjusted mass transfer coefficient	calculated	cm/hr	see Table RW-7
t_s - Shower droplet time	2	seconds	MADEP. 1995. Guidance for Disposal Site Risk Characterization. Appendix Table B-9.
d - Droplet diameter	1	mm	Ibid
60d = Droplet interfacial area	60	cm/hr-seconds	the specific interfacial area, 6/d, for a spherical droplet of diamter d (mm), multiplied by conversion factors, hr/3600 seconds and 100 mm/cm
K_L - Overall mass transfer coefficient	calculated	cm/hr	see Table RW-7
Tl = Calibration water temperature of K_L	293	°K	MADEP. 1995. Guidance for Disposal Site Risk Characterizaiton. Appendix Table B-9.
µs - Water viscosity at Ts	0.596	cp	Ibid
T_s - Shower water temperature	318	°K	Ibid
μ_1 - Water viscosity at T_l	1.002	cp	Ibid
k_l - Liquid film mass transfer coefficient	calculated	cm/hr	see Table RW-7
R - Universal Gas Constant	8.20E-05	atm-m^3/mol-°K	MADEP. 1995. Guidance for Disposal Site Risk Characterizaiton. Appendix Table B-9.
T - Absolute temperature	293	°K	Ibid
HLC - Henry's Law Constant	OHM-specific	atm-m^3/mol	see Table RW-7
k_g - Gas-film mass transfer coefficient	calculated	cm/hr	see Table RW-7
$k_l(CO_2)$ - Liquid-film mass transfer coefficient, CO_2	20	cm/hr	MADEP. 1995. Guidance for Disposal Site Risk Characterizaiton. Appendix Table B-9.
MW_{CO2} - Molecular weight of CO_2	44	g/mole	Ibid
MW_{VOC} - Molecular Weight of OHM	OHM-specific	g/mole	Ibid
$k_g(H_2O)$ - Gas-film mass transfer coefficient, water	3000	cm/hr	Ibid
MW_{H2O} - Molecular weight of water	18	g/mole	Ibid

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Resident - Drinking Water: Table RW-7
Inhalation Exposure Concentration in the Shower (IEC_S)

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Oil or Hazardous Material	Henry's Law Constant HLC atm-m3/mol	Molecular Weight MW g/mole	INTERIM CALCULATIONS: gas-film mass transfer coefficient k_g (cm/hr)	liquid-film mass transfer coefficient k_l (cm/hr)	Overall Mass Transfer Coefficient K_L (cm/hr)	Adjusted Mass Transfer Coefficient K_{aL} (cm/hr)	Concentration Leaving Water Droplet C_{wd} (µg/l)	Indoor Air Generation Rate S (µg/(m3-min))	**Inhalation Exposure Concentration $IEC_{S(1-8)}$ (µg/m³)**	**Inhalation Exposure Concentration $IEC_{S(8-15)}$ (µg/m³)**	**Inhalation Exposure Concentration $IEC_{S(15-31)}$ (µg/m³)**
DIOXANE, 1,4-	4.80E-06	88	1356.80	14.14	0.27	0.36	1.2E-01	2.0E-01	4.90E+00	4.70E+00	3.96E+00

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Resident - Drinking Water: Table RW-8
Definitions and Exposure Factors

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Parameter	Value	Units	Notes
ELCR - Excess Lifetime Cancer Risk	chemical specific	dimensionless	Pathway specific (ing =ingestion, derm=dermal, inh=inhalation)
HI - Hazard Index	chemical specific	dimensionless	Pathway specific (ing =ingestion, derm=dermal, inh=inhalation)
CSF - Cancer Slope Factor	chemical specific	$(mg/kg\text{-}day)^{-1}$	see Table RW-9
URF - Unit Risk Factor	chemical specific	$(\mu g/m^3)^{-1}$	see Table RW-9
RfD - Reference Dose	chemical specific	mg/kg-day	see Table RW-9
RfC - Reference Concentration	chemical specific	$\mu g/m^3$	see Table RW-9
LADD - Lifetime Average Daily Dose	chemical specific	mg/kg-day	Pathway specific. See Table RW-2
LADE - Lifetime Average Daily Exposure	chemical specific	$\mu g/m^3$	see Table RW-2
ADD - Average Daily Dose	chemical specific	mg/kg-day	Pathway specific. See Table RW-3.
ADE - Average Daily Exposure	chemical specific	$\mu g/m^3$	Pathway specific. See Table RW-3.
EPC - Exposure Point Concentration	chemical specific	µg/L	see Table RW-1
$VI_{(1-8)}$ - Volume Ingested for age group 1-8	1	L/day	MADEP. 1995. Guidance for Disposal Site Risk Characterization. Appendix B-9.
$VI_{(8-15)}$ - Volume Ingested for age group 8-15	2	L/day	Ibid
$VI_{(15-31)}$ - Volume Ingested for age group 15-31	2	L/day	Ibid
$RAF_{c/nc}$ - Relative Absorption Factor for Cancer/Noncancer Effects	chemical specific	dimensionless	Pathway specific
EF - Exposure Frequency	1.00	event/day	
$ED_{ing,derm}$ - Exposure Duration for ingestion or dermal exposure	1	day/event	
ED_{inh} - Exposure Duration for inhalation exposure for age group 1-8	0.046	day/event	Calculated: Total time in shower room for a 1 - 8 year old (65.7 min) / day (1440 min).
ED_{inh} - Exposure Duration for inhalation exposure for age group 8-15	0.046	day/event	Calculated: Total time in shower room for a 8 - 15 year old (66.4 min) / day (1440 min)
ED_{inh} - Exposure Duration for inhalation exposure for age group 15-31	0.044	day/event	Calculated: Total time in shower room for a 15 - 31 year old (62.8 min) / day (1440 min)
$EP_{(1-8)}$ - Exposure Period for age group 1-8	7	years	
$EP_{(8-15)}$ - Exposure Period for age group 8-15	7	years	
$EP_{(15-31)}$ - Exposure Period for age group 15-31	16	years	
$BW_{(1-8)}$ - Body Weight for age group 1-8	17.0	kg	U.S. EPA. 1997. Exposure Factors Handbook. Table 7-7, females.
$BW_{(8-15)}$ - Body Weight for age group 8-15	39.9	kg	U.S. EPA. 1997. Exposure Factors Handbook. Table 7-7, females.
$BW_{(15-31)}$ - Body Weight for age group 15-31	58.7	kg	U.S. EPA. 1997. Exposure Factors Handbook. Table 7-7, females.
$AP_{(lifetime)}$ - Averaging Period for lifetime	70	years	
$AP_{(noncancer)}$ - Averaging Period for noncancer	7	years	
IEC_S - Inhalation Exposure Concentration from showering	chemical specific	mg/m^3	Age group specific. See Table RW-7.
DA - Dose Absorbed through skin in shower	chemical specific	$mg/cm^2\text{-}day$	Age group specific. See Table RW-5.
$OAE_{c/nc}$ - Oral Absorption Efficiency for Cancer/Noncancer Effects	chemical specific	dimensionless	
$SA_{(1-8)}$ - Surface Area for age group 1-8	7130	cm^2	50th percentile for females. Appendix Table B-2. MADEP. 1995. Guidance for Disposal Site Risk Characterization.
$SA_{(8-15)}$ - Surface Area for age group 8-15	12800	cm^2	50th percentile for females. Appendix Table B-2. MADEP. 1995. Guidance for Disposal Site Risk Characterization.
$SA_{(15-31)}$ - Surface Area for age group 15-31	16731	cm^2	50th percentile for females. Appendix Table B-2. MADEP. 1995. Guidance for Disposal Site Risk Characterization.
D_s - Shower Duration for age group 1-8	45.7	min	U.S. EPA. 1997. Exposure Factors Handbook. Table 15-21.
	0.76	hour	95th percentile ages 1-8. Weighted average of 1-8 year age groups: ((4x50)+(3x40))/7= 45.7 minutes
D_t - Total Time in Shower Room for age group 1-8	65.7	min	U.S. EPA. 1997. Exposure Factors Handbook. Tables 15-21,23. Equals the shower duration (Ds) plus the number of minutes spent in the shower room immediately after showering (95th percentile): Ds + ((4*20)+(3*20))/7 = 65.7 minutes
D_s - Shower Duration for age group 8-15	42.1	min	U.S. EPA. 1997. Exposure Factors Handbook. Table 15-21.
	0.70	hr	95th percentile ages 8-15. Weighted average of 8-15 age groups: ((4x40)+(3x45)/7 = 42.1 minutes
D_t - Total Time in Shower Room for age group 8-15	66.4	min	U.S. EPA. 1997. Exposure Factors Handbook. Tables 15-21,23. Equals the shower duration (Ds) plus the number of minutes spent in the shower room immediately after showering (95th percentile): Ds + ((4*20)+(3*30))/7=66.4 minutes
D_s - Shower Duration for age group 15-31	32.8	min	U.S. EPA. 1997. Exposure Factors Handbook. Table 15-21.
	0.55	hr	95th percentile ages 15-31. Weighted average of 15-31 year age groups: ((3x45)+(13x30)/16 = 32.8 minutes.
D_t - Total Time in Shower Room for age group 15-32	62.8	min	U.S. EPA. 1997. Exposure Factors Handbook. Tables 15-21,23. Equals the shower duration (Ds) plus the number of minutes spent in the shower room immediately after showering (95th percentile): Ds + ((3*30)+(13*30))/16 = 62.8 minutes
DM - Dermal Multiplier	chemical specific	dimensionless	If Kp < 0.5 cm/hr, then 0.2. Otherwise 1.

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Resident - Drinking Water: Table RW-9
Chemical-Specific Data

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Oil or Hazardous Material	CSF $(mg/kg\text{-}day)^{-1}$	URF $(\mu g/m^3)^{-1}$	$RAF_{c\text{-}ing}$	OAE_c	RfD mg/kg-day	RfC mg/m^3	$RAF_{nc\text{-}ing}$	OAE_{nc}	DM	Molecular Weight g/mole	log K_{ow}	Permeability Coefficient Kp cm/hr	Henry's Law Constant HLC $atm\text{-}m^3/mol$
DIOXANE, 1,4-	1.0E-01	5.0E-06	1	1	3.0E-02	3.0E-02	1	1		88	-0.32	3.13E-04	4.80E-06

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