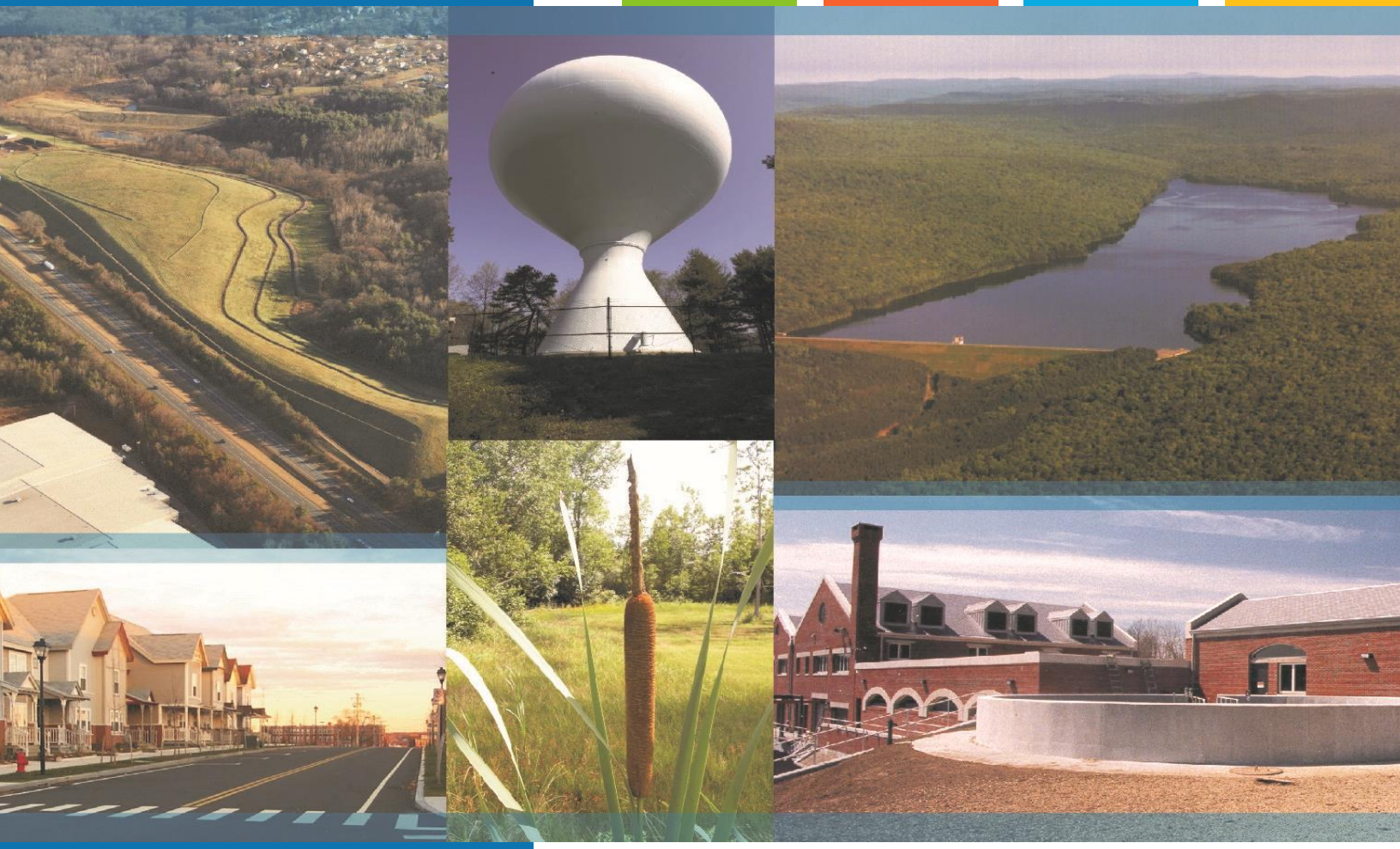

131 Morse Street
Foxborough, Massachusetts

Immediate Response Action Completion Report

Massachusetts Electric Company d/b/a National Grid

February 2022

Tighe&Bond

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Section 1
Introduction

1.1 Introduction

Tighe & Bond has prepared this Immediate Response Action (IRA) Completion Report on behalf of Massachusetts Electric Company d/b/a National Grid (MEC). This IRA Completion Report documents activities conducted in response to a sudden release of approximately 100 to 130 gallons of non-polychlorinated biphenyl (non-PCB) mineral oil dielectric fluid (MODF) from a pad-mounted transformer as a result of a fire at 131 Morse Street in Foxborough, Massachusetts (the Site). The Disposal Site is identified by the Massachusetts Department of Environmental Protection (MassDEP) with Release Tracking Number (RTN) 4-28528. This IRA Completion Report has been prepared in accordance with the Massachusetts Contingency Plan (MCP) requirements contained in 310 CMR 40.0427.

Tighe & Bond has prepared this IRA Completion Report on behalf of:

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Massachusetts Electric Company
19 Phillips Lane
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508-897-5520

The Licensed Site Professional (LSP) of record for this Site is:

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1.2 Site Description

The property on which the release occurred is an approximate 1.19-acre parcel identified as 131 Morse Street in Foxborough, Massachusetts. According to the Foxborough Board of Assessors, the property is identified as Lot 007 on Map 149 and is owned by CJW LLC. The property contains a mill building that was provided electricity via the damaged pad-mounted transformer and is located in the central portion of a mill complex, collectively known as 131 Morse Street. The Disposal Site is located in a commercial/industrial area of Foxborough. Commercial and industrial properties surround the Disposal Site property to the east, south, and west. The parcel to the north is currently vacant land.

The 131 Morse Street property is also located within the boundaries of another Disposal Site associated with RTN 4-255. This RTN (RTN 4-225) is associated with a release of hydraulic oil, No. 2 fuel oil and No. 6 fuel oil. MassDEP issued a Notice of Noncompliance for RTN 4-255 on May 1, 2019. No response action submittals have been filed with MassDEP since the NON was issued.

The Site Locus, attached as Figure 1 in Appendix A, identifies the Site on the Mansfield Massachusetts Quadrangle map, revised by the USGS in 1987. According to topographic contours shown on Figure 1, the Site is located at an elevation of approximately 177 feet (54 meters) above MSL. Topography in the immediate vicinity of the transformer is flat, with minor localized sloping to the north.

A Site Locus Map (Figure 1), Massachusetts Geographical Information Systems (MassGIS) Map Priority Resource Map (Figure 2), and Aerial (Figure 3) are included in Appendix A.

1.3 Release History

At approximately 7:30 AM on October 4, 2020, the Foxborough Fire Department notified MassDEP of the release of MODF from a pad-mounted transformer at 131 Morse Street. Pursuant to 310 CMR 40.0311(3) and 40.0311(8), the release required notification to MassDEP within two hours, as the Reportable Quantity (RQ) for non-PCB MODF of 25 gallons was exceeded and the release resulted in the appearance of a sheen on a surface water body.

The sudden release of MODF occurred after a motor vehicle accident along Morse Street caused damage to the electrical infrastructure at the 131 Morse Street mill complex, resulting in an electrical fire at the subject pad-mounted transformer and adjacent building. MODF was released to the ground surface surrounding the transformer. While responding to the fire, the Foxborough Fire Department applied copious amounts of water to the building and transformer. As a result, MODF released from the transformer during the fire was subsequently carried by the water to the underlying sluiceway via several openings in the top of the concrete-covered structure.

Tighe & Bond was notified of the release condition at approximately 9:07 AM and responded to the release at approximately 10:30 AM. In addition, Mr. Robert Murphy, of MassDEP, and Mr. William Howard, of MEC, also responded to the release. An initial visual inspection of the transformer area determined that MODF released during the fire was washed into a sluiceway that runs beneath the transformer pad and adjacent building. Inspection of the transformer nameplate did not reveal MODF capacity; however, based on the dimensions of the transformer oil reservoir, the maximum capacity of MODF was estimated as 180 gallons. Information provided to Tighe & Bond from MEC and the Foxborough Fire Department indicated that it is likely that a significant volume of the released MODF was incinerated in the fire. In consideration of the estimated capacity of the transformer reservoir, the volume of MODF recovered during response actions (approximately 50 gallons), and the likelihood that some of the MODF was incinerated during the fire, the volume of MODF released to the environment was estimated to be between 100 to 130 gallons.

1.4 Surrounding Resource Areas

Based on Site reconnaissance and a review of the MassGIS Priority Resource Map (Figure 2), the following resource areas have been identified within one-half mile (2,640 feet) of the Site.

- An unnamed stream flows through a sluiceway located directly beneath the Site, connecting Glue Factory Pond to the Rumford River;
- Glue Factory Pond is located approximately 150 feet east/northeast of the Site;

- MassDEP Inland Wetlands, associated with the Rumford River, are located approximately 270 feet southwest of the Site;
- Protected and Recreational Open Space is located approximately 310 feet southwest of the Site;
- A Medium-yield potentially productive aquifer is located approximately 700 feet northeast of the Site;
- An Area of Critical Environmental Concern is located approximately 1,000 feet east of the Site;
- NHESP Potential vernal pools are located approximately 1,000 feet west and northwest of the Site; and
- A MassDEP Approved Wellhead Protection Area, Zone II, is located approximately 1,200 feet east of the Site.

There are no known drinking water supplies within 500 feet of the Disposal Site. According to the Foxborough Water & Sewer Department, the residential properties to the west of the Site are serviced with municipal water. Additionally, the mill complex at 131 Morse Street is reportedly serviced by the Mansfield Water Department. According to the Mansfield Water Department, the area of Mansfield near the Disposal Site, to the south and east, is serviced with municipal water. According to the Massachusetts Energy & Environmental Affairs (EEA) Data Portal for Well Drilling, the closest known domestic drinking water well is located at 4 Belcher Lane, which is located approximately 2,340 feet west of the Disposal Site. The building at this address is a residential dwelling.

Based on this information, the Site is not located within a Current Drinking Water Source Area or a Potential Drinking Water Source Area.

1.5 Applicable Cleanup Standards

In accordance with 310 CMR 40.0975, the Method 1 soil standards consider both the potential risk of harm resulting from direct exposure to the oil and/or hazardous material in the soil and the potential impacts to groundwater at the Disposal Site. The Method 1 standards include an evaluation of potential receptors at a disposal site, based on the frequency and intensity of site use.

In accordance with 310 CMR 40.0933(9) soil category S-1 is applicable to soil located at depths of 0 to 3 feet BGS, in unpaved areas, as this soil is considered "accessible". At this point in time, no remaining MODF-impacted soil has been identified in unpaved locations at a depth of less than 3 feet BGS. Additionally, the Site is a commercial/industrial mill building, where children would likely be present at a low intensity and low frequency. Based on the current frequency and intensity of use by human receptors, Site soils are categorized as S-2, as impacted soils if present at the Site are located beneath concrete pavement or concrete structures and are considered potentially accessible or inaccessible. Should Site conditions change as additional response actions are completed, the applicable soil category(ies) will be evaluated and modified as necessary.

Pursuant to 310 CMR 40.0932, groundwater within a Current Drinking Water Source Area or within a Potential Drinking Water Source Area is designated as category GW-1. Groundwater located within 30 feet of an existing or planned building where annual

average depth to groundwater is less than 15 feet BGS is designated as GW-2. Category GW-2 standards are designated to be protective of potential impacts to indoor air quality from vapor phase migration of groundwater contaminants. In accordance with 310 CMR 40.0932, groundwater at all disposal sites shall be categorized as GW-3, and more than one groundwater category may be applicable to a Site.

The Site is not located within a Current Drinking Water Source Area or within a Potential Drinking Water Source Area. Depth to groundwater is approximately three feet BGS and the Disposal Site boundaries are located within 30 feet of a building. Therefore, groundwater categories GW-2 and GW-3 are applicable to the Disposal Site.

Section 2
Description of IRA Activities

This Completion Report summarizes IRAs completed at the Site following the discovery of the release.

2.1 Initial Response Actions – October 4,

On October 4, 2020, at 7:30 AM, the Foxborough Fire Department notified MassDEP of a sudden release of MODF from a pad-mounted transformer involved in an electrical fire. The MODF was released to the area surrounding the transformer and to a covered sluiceway that runs under the adjacent building. The sluiceway eventually discharges to a stream and ultimately to the Rumford River. Upon discovery of the impact to the sluiceway, the Foxborough Fire Department placed a boom within the sluiceway, downstream of the release location.

Tighe & Bond personnel responded to the release, arriving at approximately 10:30 AM. Clean Harbors Environmental Services (CHES), of Weymouth, Massachusetts, arrived on-Site at approximately 12:45 PM to initiate remediation activities. Mr. Robert Murphy, of MassDEP, and Mr. William Howard, of MEC, also responded to the release. Upon arrival, the damaged transformer could not be immediately assessed due to elevated temperatures resulting from the fire.

After Foxborough Fire Department personnel deemed the temperatures of the transformer reservoir safe to handle, CHES pumped approximately 50 gallons of MODF from the transformer reservoir. Information obtained from the manufacturer's metal nameplate affixed within the transformer cabinet is listed below:

Manufacturer: Westinghouse
Serial Number: 83JL073026
Oil Capacity: Not Listed
Rating: 300 kVa
PCB Status: Filled with Mineral Oil That Contained Less than 50 PPM PCB at Time of Manufacture

Although the transformer did not have a listed capacity on the nameplate, based on the dimensions of the transformer reservoir, the maximum capacity of MODF was estimated to be 180 gallons. Based on information obtained from MEC and the Foxborough Fire Department, it is likely that a significant volume of the MODF was incinerated in the fire rather than released to the environment. Therefore, it is estimated that a maximum of 100 to 130 gallons of MODF were released from the transformer during the electrical fire.

Although the transformer nameplate indicated that the PCB concentration of the MODF was less than 50 parts per million (ppm) PCBs, a sample of the MODF was field screened for PCBs using a Dexsil Clor-N-Oil kit to verify this information. The results of the field screening also indicated the PCB content of the MODF was less than 50 ppm. Additionally, a sample of MODF was collected from the transformer and was submitted for laboratory analysis of PCBs. Laboratory analytical results of the oil sample indicated that the PCB content was less than 2 ppm. A copy of the laboratory analytical report is included in

Appendix B. MEC was unable to remove the transformer from the pad on October 4, 2020 due to elevated temperatures of the transformer shell.

An initial inspection of the release area by Tighe & Bond personnel, MassDEP's Robert Murphy, and MEC's William Howard, suggested that the MODF released during the fire was washed into the sluiceway that runs beneath the transformer pad and adjacent building. Based on this initial assessment, Mr. Murphy provided oral approval of IRA activities including the application of absorbent material (including granular absorbents and sorbent booms), product recovery, removal of up to 25 cubic yards of soil, and assessment activities.

Upon removal of the remaining MODF from the transformer, CHES, with oversight provided by Tighe & Bond, removed MODF impacted soil, debris, and vegetation that surrounded the concrete transformer pad. During the removal activities, it was determined that the soil, debris, and vegetation was underlain by a concrete slab. Therefore, the depth of soil excavation was limited to approximately six inches. After exposing the concrete surface within the release area, liquid degreaser was applied to the concrete and was recovered with a vacuum truck. During the degreasing of the concrete surfaces surrounding the transformer pad, an approximate eight-inch hole was identified approximately ten feet to the south of the transformer pad. Observations of the hole identified a direct pathway to the sluiceway running beneath the transformer and adjacent building.

The extent of impacted soil, debris, and concrete surrounding the transformer were measured to be approximately 46 feet long by 30 feet wide, at the greatest extent. In addition to the surficial impacts in the vicinity of the transformer, sand and debris in front of the building entrance was also removed. As concrete was identified beneath all soil/debris removal areas, no post-excavation soil samples were collected during response actions on October 4, 2020.

In addition to the boom installed by the Foxborough Fire Department, CHES installed two additional booms within the sluiceway/stream on October 4, 2020, a second one in close proximity to the release area and one approximately 280 feet downstream from the release area. Refer to Figure 4 for locations of booms.

2.2 Oil Recovery

After the initial deployment of booms on October 4, 2020, CHES returned to the release area on October 6, 2020 to conduct additional recovery efforts from within the sluiceway and stream. CHES personnel utilized oil-absorbent pads and a skimmer to remove foam and a sheen on the surface of the stream that had accumulated upstream of each boom segment. Based on the documented release conditions, this material was assumed to include, in part, residual MODF. After recovery, CHES replaced all of the existing deployed booms with new sorbent booms and added two additional boom segments to further assist in containment of released product. The locations of the deployed boom segments are depicted on Figure 4.

Since the initial recovery activities, CHES, on behalf of MEC has continued to periodically manage the booms in the sluiceway and stream. During each event, CHES utilized skimmers to recover foam and if present, emulsified oil visible sheen that had accumulated behind the boom segments within the sluiceway and stream channel. Following removal of the accumulated material, each boom segment was removed, containerized in steel

drums for proper off-Site disposal, and replaced with a new boom segment. The specific dates of boom change outs are presented in Table 2-1 in Section 2.8.

2.3 Surface Water Sampling

On December 9, 2020, Tighe & Bond personnel collected samples of the surface water at three locations within the stream channel. Samples were collected upstream of the release area, proximate to Glue Factory Pond (SW-1), within the emulsified oil accumulated immediately behind a boom segment (SW-2), and downstream of the furthest downstream boom segment (SW-3), as shown on Figure 4. Samples SW-1 and SW-3 were submitted to ESS Laboratory (ESS) of Cranston, Rhode Island for analysis of extractable petroleum hydrocarbon (EPH) carbon ranges. Sample SW-2 was submitted for total petroleum hydrocarbon (TPH) Fingerprint analysis via EPA Method 8100M.

Laboratory analytical results did not reveal EPH hydrocarbon ranges at concentrations above laboratory method detection limits in samples SW-1 and SW-3. Fingerprint analysis of sample SW-2 indicated the sample represented petroleum hydrocarbons within the transformer oil range; however, the report excluded the quantitative TPH result and did not provide further detail on the range of hydrocarbons detected. Surface water analytical results are presented on Table 3 in Appendix C and further summarized in Section 2.4.3. A copy of the laboratory analytical report is included in Appendix B

2.4 February 2021 Soil Excavation

During the period of February 22 and February 24, 2021, Tighe & Bond was on site to observe CHES remove the concrete transformer pad and MODF-impacted soils underlying the transformer. CHES demolished the contaminated concrete pedestal and pad beneath the transformer location to access contaminated soil. In addition, a segment of the concrete duct-bank encasing the electrical conduits was also removed to facilitate soil removal. The duct-bank runs from the transformer to the nearest utility pole located to the southwest of the transformer as shown on Figure 5. The impacted concrete was transported off-Site for disposal/recycling as remediation waste.

Upon removal of the transformer pad, CHES excavated MODF-impacted soil in the vicinity of the former transformer using hand tools and vacuum-excavation methods. During soil excavation, the electric cables and PVC conduits leading to the former transformer were cut and removed to facilitate soil excavation. The extent of soil excavation was limited due to the proximity of the adjacent concrete sluiceway to the south and the building foundation to the north. The final excavation dimensions were approximately 6.5 feet long by five feet wide to a maximum depth of 2.5 feet bgs.

An estimated 10 yards of oily solids (concrete and soil) were generated from the Site as remediation waste for disposal. At the completion of the excavation activities, Tighe & Bond collected five soil samples (PX-2 through PX-6) from the sidewalls and base of the excavation area. An additional sample (PX-1) was collected from an area three feet to the west of the excavation through an area of cracked concrete pavement. Each of the six samples were field screened for TPH with a Dexsil PetroFLAG® analyzer (PetroFLAG®). Results of the PetroFLAG® field-screening are included on Table 1 in Appendix C and indicated elevated TPH concentrations at PX-1, PX-4, PX-5, and PX-6.

Following the completion of soil removal activities on February 24, 2021, six confirmatory soil samples (PX-1 through PX-6) were collected and submitted to ESS for analysis of EPH carbon ranges. Soil analytical results are presented on Table 1 in Appendix C and indicate soil samples from the bottom, south sidewall, and west sidewall (PX-4, PX-5, and PX-6) revealed elevated concentrations of EPH carbon ranges, in excess of the applicable MCP Method 1 S-2/GW-2 and S-2/GW-3 standards. As indicated above, the extent of the excavation was limited due to safety concerns associated with the structural integrity of the building and the sluiceway. Post excavation soil sample results represent end-point conditions upon completion of the limited excavation activities. These results indicated that additional assessment and/or remediation was necessary in the vicinity of the excavation. A copy of the laboratory analytical report is included in Appendix B.

During soil excavation activities, two 6-inch diameter pipes were observed within the excavation area. The pipes were located at a depth of approximately three to four feet bgs and were oriented perpendicular to the building foundation and sluiceway. The pipes were observed to be intact (in the areas exposed during excavation) with no major cracks or damage and were observed to penetrate the wall of the sluiceway. Although no liquid was observed entering the sluiceway from either pipe during the period of February 22 through February 24, 2021, the pipes are believed to be drain lines connecting one or more floor drains within the adjacent building to the sluiceway.

2.5 Structural Stability Analysis

On March 9, 2021, McKenzie Engineering Company, Inc. (McKenzie) was contracted by MEC to conduct a preliminary structural analysis of the adjacent building. Tighe & Bond and CHES were present during the Site walk completed by McKenzie. McKenzie observed portions of the sluiceway visible from ground surface and observed the exterior of the building in the area abutting the transformer. McKenzie concluded that structural stabilization methods to the wall system abutting the transformer were necessary to complete additional excavation in the vicinity of the release. A copy of the preliminary assessment documentation prepared by McKenzie Engineering was included in the IRA Status Report submitted on August 3, 2021.

2.6 MODF Fingerprint and Petroleum Forensic Analysis

During the period of March and April 2021, Tighe & Bond collected samples of the observed emulsified oil that had accumulated at the downstream boom location. The samples were submitted to ESS along with a previously collected soil sample (PX-5) for petroleum hydrocarbon fingerprint analysis via EPA Method 8100M and/or saturated hydrocarbons via EPA Method 8015M. The objective of the petroleum forensics analyses was to qualitatively identify the oil within the samples and compare the petroleum characteristics of the emulsified oil collected from the stream to the petroleum characteristics of the soil sample that was impacted by the MODF release.

The results of the evaluation indicated that the emulsified oil contained a mixture of petroleum product eluting in the mid to heavy molecular weight ranges indicative of waste oils, lubricating oils, transformer oils and motor oils. However, comparison of the emulsified oil sample to the soil sample indicated the petroleum hydrocarbon composition within the soil sample appears to be more representative of MODF than that of the emulsified oil sample collected from the stream. Based on this information, it is likely that

an alternate source of oil is contributing to the emulsified oil observed within the stream channel. The laboratory analytical reports are included in Appendix B.

2.7 Sluiceway Investigation

On June 10, 2021, Frogmen Divers & Marine Service, Inc. (FDMS) of Sandwich, Massachusetts completed a visual investigation of the sluiceway. The objective of the sluiceway investigation was to document conditions within the sluiceway and identify potential migration pathways to the surface water body. General observations documented by FDMS are included below.

- Sections of the sluiceway structure abutting the transformer were observed to be in poor condition with deteriorated, crumbling concrete, as well upstream cave-ins.

- Light staining indicative of potential oil impact was observed on the walls and ceiling of the sluiceway directly abutting the transformer location. No visual evidence of active migration of MODF to the sluiceway was observed.

- Heavy, dark petroleum staining was observed on the interior concrete walls slightly above the observed water line within the remainder of the sluiceway.

- Numerous drainpipes were observed leading from the direction of the adjacent building into the sluiceway. The observed drainpipes near the release area and upstream of the release area were scoped with a camera. Generally, within the first 5 to 15 feet from the sluiceway walls, the pipes contained debris which prevented the camera from being advanced further. As such, the point of origination of the pipes could not be ascertained.

In addition to these observations, an absorbent boom section was placed in the sluiceway upstream of the transformer location to qualitatively evaluate background conditions upstream of the release. The upstream boom location has consistently shown visual indications of petroleum staining, as described later in Section 2.9.

2.8 Limited Subsurface Assessment

On December 29, 2021, Tighe & Bond observed Martin GeoEnvironmental, LLC (Martin Geo), of Belchertown, Massachusetts, advanced three borings in the vicinity of the former transformer using vacuum excavation methods and Geoprobe® direct push drilling techniques. Each soil boring location was pre-cleared to a depth of approximately five feet bgs using vacuum excavation. Each boring was then completed to depth with a track-mounted Geoprobe direct-push drill rig. Soils encountered at each location were visually observed and consisted of a mixture of sand and gravel with trace amounts of silt. All three borings were completed as groundwater monitoring wells. Soil borings were advanced to a depth of approximately ten feet bgs, approximately six to seven feet into the groundwater table.

The soil boring locations are shown on Figures 5 and 6 in Appendix A. Soil boring and groundwater monitoring well completion logs are included in Appendix D. As shown on Figures 5 and 6, monitoring wells MW-2 and MW-3 were installed on either side of the former transformer, just at or beyond the extents of the soil removal described in Section

2.2. These locations were selected to delineate the horizontal extent of the potential MODF impact with consideration of physical Site constraints such as the underlying sluiceway and the adjacent structurally compromised building. MW-1 is located on the opposite side of the sluiceway from the former transformer. This location was selected due to the exceedance of EPH ranges in the southern sidewall post excavation (PX-5) soil sample but could not be located immediately outside the bounds of the excavation due to the presence of the sluiceway.

During the advancement of each soil boring, select samples were collected for field-screening with a PetroFLAG® for the presence of TPH. Field screening results are shown on Table 1 in Appendix C. A total of five samples (B-1 (2.5-5'), B-2 (2.5-5'), B-2 (5-7'), B-3 (2.5-5'), and B-3 (5-7')) were submitted to ESS for analysis of EPH carbon ranges. In addition, one sample, B-3 (5-7'), was submitted for petroleum fingerprint analysis via EPA Method 8100M and one sample, B-3 (2-5'), was submitted for sieve analysis. The results of the sieve analysis identified the soil as brown, well-graded gravel with silt and sand.

As indicated on Table 1 in Appendix C, EPH carbon ranges were detected in three of the five soil samples (B-2 (5-7'), B-3 (2.5-5'), and B-3 (5-7')); at concentrations well below the applicable MCP Method 1 S-2/GW-2 and S-2/GW-3 standards. These data suggest residual MODF impact to soil remaining after excavation activities is limited to the area immediately beneath the former transformer. Laboratory analytical results are summarized in Table 1 in Appendix C and the laboratory analytical reports are included in Appendix B. In addition, petroleum identification performed by the laboratory on sample B-3 (5-7') indicated that the sample contained material eluting in the mid to high molecular weight ranges of the chromatogram. Examples of similar material eluting in these ranges are hydraulic, transformer, motor and lubricating oils. Information obtained from the laboratory indicates that this sample could contain multiple sources of petroleum.

Each boring was completed as a groundwater monitoring well, with nine feet of slotted PVC well screen and one foot of solid PVC riser. The monitoring wells were finished at ground surface with flush-mount road boxes. After installation, each well was developed on December 29, 2021, removing between 20 and 30 gallons from each well.

Tighe & Bond returned to the Site on January 6, 2022 to collect groundwater samples and conduct a wellhead elevation survey. The top of PVC casing at each monitoring well was surveyed for location and elevation relative to a local benchmark with an assigned elevation of 100 feet. Prior to sample collection, each monitoring well was gauged for depth to groundwater and for the presence of light non-aqueous phase liquid (LNAPL). LNAPL was not observed in any of the monitoring wells during these activities. Groundwater samples were collected from monitoring wells MW-1 through MW-3 (inadvertently called BW-1 through BW-3 on the laboratory report), via low-flow sampling techniques and were submitted to ESS for EPH carbon range analysis. The results of the laboratory analysis are included on Table 2 in Appendix C and indicate that EPH carbon ranges were not detected at concentrations above laboratory method reporting limits (MRLs). The laboratory analytical report is provided in Appendix B.

Groundwater elevations were calculated based on the data obtained from the wellhead elevation survey and monitoring well gauging activities. Based solely on these data, the localized groundwater flow direction within the well network appears to be to the north. Although site-specific data suggest groundwater flow direction to the north, one of the

three wells (MW-1) is separated from the other two (MW-2 and MW-3) by the sluiceway that runs beneath the Site. Based on the measured depth to groundwater and depth of the sluiceway, it is likely that the sluiceway is causing localized influence on groundwater flow direction by acting as a flow boundary between the monitoring wells. A groundwater elevation map depicting the location of the sluiceway with respect to the monitoring wells is included as Figure 6 in Appendix A.

Based on a review of historical environmental reports associated with the mill complex, the groundwater flow direction is to the south/southwest towards the Rumford River. This is generally consistent with the presumption that localized groundwater flow is likely to follow local topography flow towards the sluiceway/stream, which eventually discharges to the Rumford River. The Rumford River generally flows to the south of the Disposal Site.

2.9 Oil Absorbent Boom Removal

Based on the results of the June 2021 sluiceway assessment, the December 2021 limited subsurface assessment and continued observation of the deployed boom segments, it was determined that the MODF released from the transformer was no longer likely migrating to the sluiceway. The rationale for this determination is provided below:

- In June 2021 light staining was observed on portion of the sluiceway structure in the area of the transformer, but no active MODF migration was observed.
- Well gauging information obtained on January 6, 2022 indicated no LNAPL present in monitoring wells in the immediate release area.
- The groundwater analytical results from the January 6, 2022 sampling event indicated no dissolved phase EPH carbon ranges in groundwater in the immediate release area
- Visual observations of the downstream boom segments indicated the presence of organic foaming but minimal visual indication of emulsified oil (as seen in Photograph 1 in Appendix E)
- The absorbent boom segments placed upstream of the transformer release were observed to contain apparent petroleum hydrocarbon impact (see Photograph 2 in Appendix E).

Based on these multiple lines of evidence, the boom segments deployed in the sluiceway and stream channel as part of response actions completed under RTN 4-28528 were removed on January 26, 2022.

2.10 Management of Remediation Waste

Remediation waste generated during the IRA consisted of absorbent materials, contaminated soil, contaminated concrete, and emulsified oil recovered from the stream.

The following table summarizes remediation waste generated during sluiceway and stream channel remediation efforts.

Table 2-1 – Booms, Absorbent Pads, and Recovered Product

Date	UHWM	Volume	Container	Description	Designated Facility
10/4/2020	015188123FLE	129 gallons	Tank Truck	MODF	CHES Braintree
10/6/2020	015188146FLE	300 pounds	Drums	Oily Debris	Clean Harbors El Dorado
10/22/2020	015189992FLE	240 pounds	Drums	Oily Debris	Clean Harbors Grassy Mountain
11/20/2020	015188520FLE	200 pounds	Drums	Oily Debris	Clean Harbors El Dorado
12/9/2020	011026028FLE	300 pounds	Drums	Oily Solids	Clean Harbors Grassy Mountain
12/31/2020	015519517FLE	250 pounds	Drums	Oily Debris	Clean Harbors Grassy Mountain
1/22/2021	011026040FLE	300 pounds	Drums	Oily Solids	Clean Harbors Grassy Mountain
2/11/2021	015513221FLE	150 pounds	Drums	Oily Debris	CHES Braintree
2/22/2021	015513162FLE	300 pounds	Drums	Oily Debris	CHES Braintree
3/11/2021	015520454FLE	200 pounds	Drums	Oily Debris	CHES Braintree
4/2/2021	015519986FLE	300 pounds	Drums	Oily Debris	CHES Braintree
5/11/2021	015829497FLE	300 pounds	Drums	Oily Debris	CHES Braintree
6/10/2021	015834702FLE	350 pounds	Drums	Oily Debris	CHES Braintree
9/8/2021	016455987FLE	500 pounds	Drums	Oily Solids	Clean Harbors El Dorado
1/26/2022	016325056FLE	1,400 pounds	Drums	Oily Solids	CHES Braintree

The following table summarizes remediation waste generated during source-area removal activities in the vicinity of the former transformer area:

Table 2-2 – Contaminated Soil and Concrete

Date	UHWM	Volume	Container	Description	Designated Facility
10/4/2020	011032243FLE	Four yards	Tank Truck	Oily Solids	CHES Braintree
2/23/2021	015513164FLE	Three yards	Dump Truck	Oily Debris	CHES Braintree
2/24/2021	015519880FLE	Four yards	Tank Truck	Oily Solids	CHES Braintree
2/24/2021	015519881FLE	Three yards	Dump Truck	Oily Solids	CHES Braintree

Final copies of the Uniform Hazardous Waste Manifests (UHWM) are included in Appendix F.

Section 3
IRA Evaluation

3.1 Critical Exposure Pathway Evaluation

An evaluation of Critical Exposure Pathways (CEPs) was presented in the December 2020 IRA Plan. As indicated in the IRA Plan, a CEP did not exist based on the lack of schools, residences, day care facilities and/or drinking water supply wells located at or in the immediate vicinity of the Disposal Site. Since the initial CEP evaluation, site conditions have not substantially changed and property use in the immediate vicinity remains consistent with the use presented in the IRA Plan. Based on this information and the distance to residential dwellings, schools, and daycares; the characteristics of MODF which are deemed not volatile; and the lack of impact to groundwater at the Disposal Site, a CEP is not likely to exist at the Disposal Site.

3.2 Imminent Hazard Evaluation

An Imminent Hazard (IH) is a hazard which poses a significant risk of harm to health, safety, public welfare or the environment if it were present for even a short period of time. Releases that constitute an IH are defined in 310 CMR 40.0321.

Based on the site assessment activities conducted to date at the Disposal Site, none of the conditions which pose or could pose an IH have been met.

3.3 Substantial Release Migration Evaluation

As stated in the December 2020 IRA Plan, a Condition of Substantial Release Migration (SRM) existed at the Disposal Site at the time of the release based on the discharge of separate-phase oil to the sluiceway as documented by the Foxboro Fire Department. As documented herein, the condition of SRM has been evaluated as part of the IRA and has been addressed through the implementation of response actions under the IRA. Specifically, the source of the release has been eliminated through the removal of the damaged transformer and MODF concentrations in the environment have been reduced via the excavation of MODF-impacted soil and recovery of emulsified oil from the sluiceway and stream channel. Additionally, the results of a detailed evaluation of the sluiceway in June 2021 did not identify evidence of MODF entering the sluiceway in the vicinity of the former transformer. Furthermore, recent subsurface investigation activities conducted in the immediate vicinity of the former transformer did not reveal the presence of LNAPL in soil or on groundwater within the monitoring wells and EPH carbon ranges were not detected in groundwater samples collected from the three wells. Based on this information, the source of MODF has been eliminated and the concentrations of residual MODF remaining in site soil have been reduced such that the Condition of SRM has been eliminated.

Section 4 IRA Completion Statement and On-Going Activities

On behalf of MEC, Tighe & Bond has prepared this IRA Completion Report for a release of non-PCB MODF from a pad-mounted transformer at 131 Morse Street in Foxborough, Massachusetts. This report was prepared in accordance with the requirements set forth in 310 CMR 40.0427(4). The subsurface limitations applicable to this IRA Completion Report are included in Appendix G.

Response actions were conducted at the Disposal Site in accordance with 310 CMR 40.0410 and included the recovery of MODF, excavation of MODF-impacted soil and debris, and assessment of site conditions including soil and groundwater impacts, preferential migration pathways, and surface water impacts. As a result of these IRA activities, the conditions that gave rise to the need for the IRA have been assessed and remediated such that the previously identified condition of SRM has been eliminated and the stabilization of site conditions has been achieved pursuant to 310 CMR 40.0427. In addition, CEPs and/or Imminent Hazard conditions did not exist at the outset of the IRA and do not exist at the time of the IRA Completion Statement. Therefore, the IRA associated with RTN 4-28528 is viewed to be complete

Future response actions related to this IRA will consist of additional assessment activities and may include additional soil, groundwater, and surface water sample collection and analysis. Additional investigation activities will be conducted as part of a Phase II Comprehensive Site Assessment in accordance with 310 CMR 40.0800.

Section 5
Public Notification

In accordance with the public notification requirements of the MCP, 310 CMR 40.1403(10), the property owner has been provided notice of environmental sampling activities and the laboratory analytical results. Copies of these notices are included as Appendix H.

Tighe&Bond

APPENDIX A

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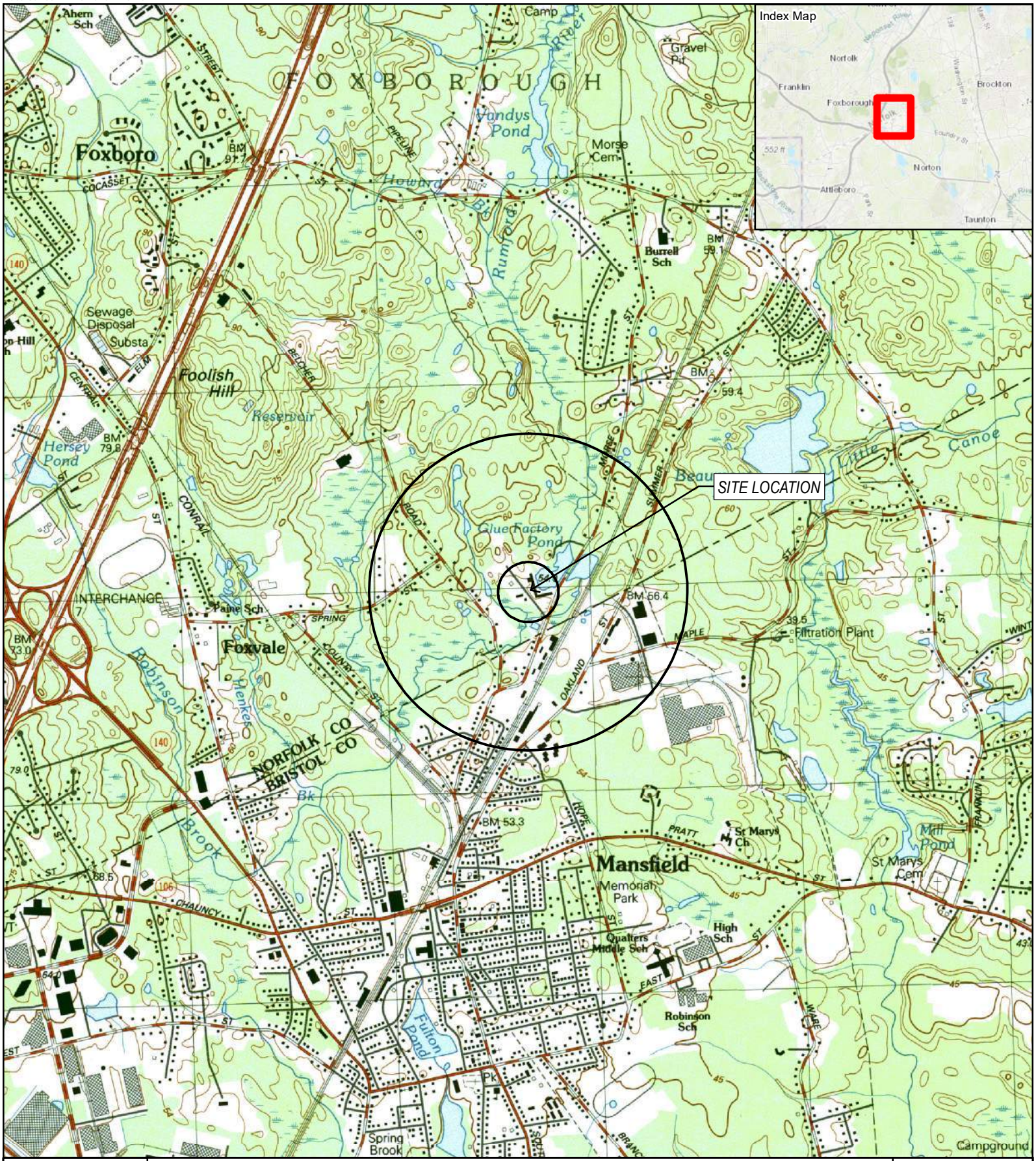

N

1 inch = 2,000 feet

0 1,000 2,000

Feet

MODF RELEASE

Site Location

131 Morse Street, Foxborough, Massachusetts
Figure 1

Based on USGS Topographic Map for Mansfield, MA Revised 1987. Contour Interval Equals 3 meters.

nationalgrid
Tighe&Bond

THIS DOCUMENT IS INTENDED FOR GENERAL PLANNING & INFORMATION PURPOSES ONLY. ALL MEASUREMENTS & LOCATIONS ARE APPROXIMATE.

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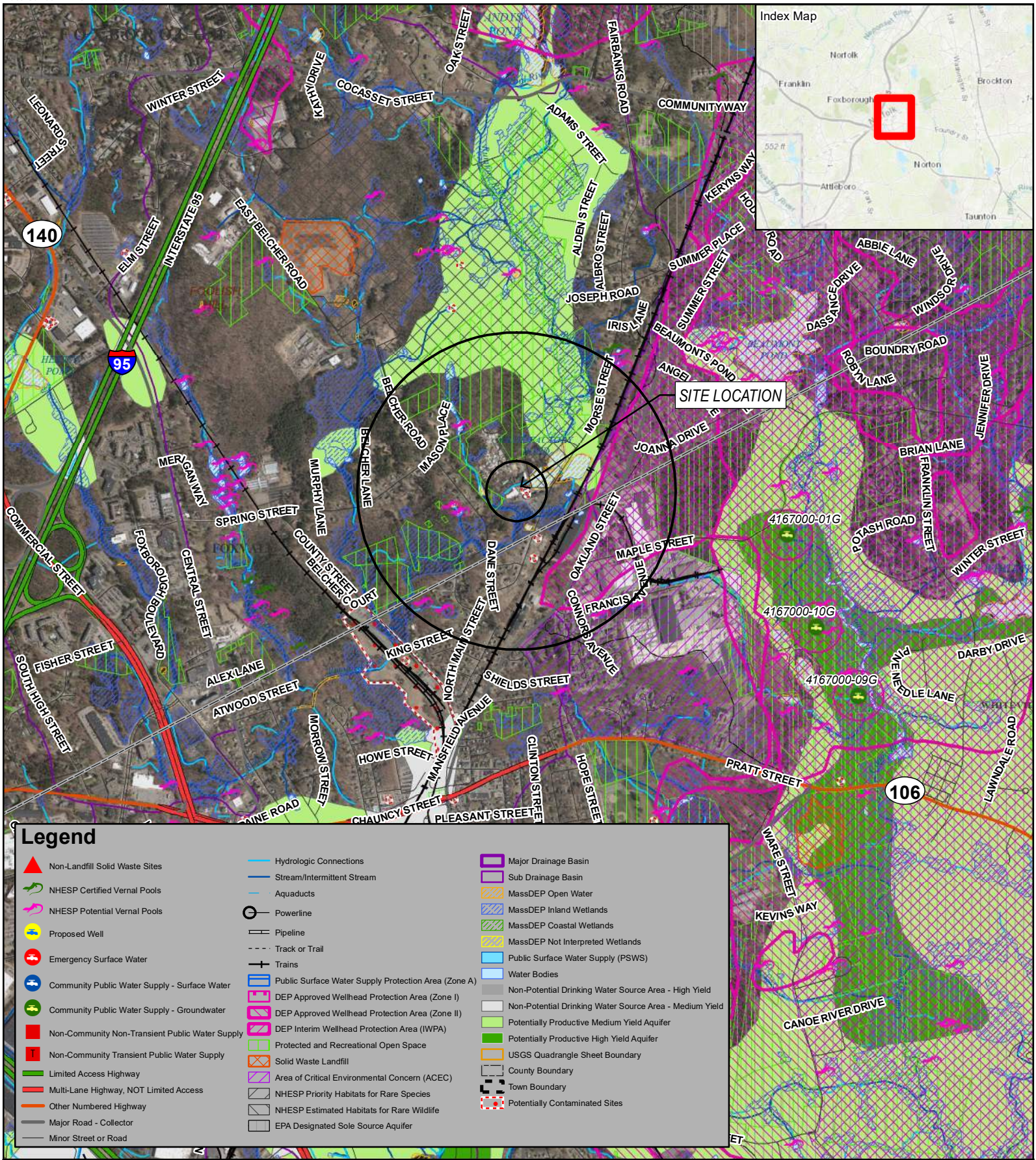

Legend

- Non-Landfill Solid Waste Sites
- NHESP Certified Vernal Pools
- NHESP Potential Vernal Pools
- Proposed Well
- Emergency Surface Water
- Community Public Water Supply - Surface Water
- Community Public Water Supply - Groundwater
- Non-Community Non-Transient Public Water Supply
- Non-Community Transient Public Water Supply
- Limited Access Highway
- Multi-Lane Highway, NOT Limited Access
- Other Numbered Highway
- Major Road - Collector
- Minor Street or Road
- Hydrologic Connections
- Stream/Intermittent Stream
- Aquaducts
- Powerline
- Pipeline
- Track or Trail
- Trains
- Public Surface Water Supply Protection Area (Zone A)
- DEP Approved Wellhead Protection Area (Zone I)
- DEP Approved Wellhead Protection Area (Zone II)
- DEP Interim Wellhead Protection Area (IWPA)
- Protected and Recreational Open Space
- Solid Waste Landfill
- Area of Critical Environmental Concern (ACEC)
- NHESP Priority Habitats for Rare Species
- NHESP Estimated Habitats for Rare Wildlife
- EPA Designated Sole Source Aquifer
- Major Drainage Basin
- Sub Drainage Basin
- MassDEP Open Water
- MassDEP Inland Wetlands
- MassDEP Coastal Wetlands
- MassDEP Not Interpreted Wetlands
- Public Surface Water Supply (PSWS)
- Water Bodies
- Non-Potential Drinking Water Source Area - High Yield
- Non-Potential Drinking Water Source Area - Medium Yield
- Potentially Productive Medium Yield Aquifer
- Potentially Productive High Yield Aquifer
- USGS Quadrangle Sheet Boundary
- County Boundary
- Town Boundary
- Potentially Contaminated Sites

N

1 inch = 2,000 feet

0 1,000 2,000
Feet

MODF RELEASE

Priority Resources

131 Morse Street, Foxborough, Massachusetts
Figure 2

Data source: Bureau of Geographic Information (MassGIS), Commonwealth of Massachusetts, Executive Office of Technology
Circles indicate 500-foot and half-mile radii.
Data valid as of November 2020.

nationalgrid
Tighe&Bond

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Date Saved: 11/19/2020 6:21:43 PM

N

1 inch = 200 feet

0 100 200

Feet

MODF RELEASE

Orthophotograph

131 Morse Street, Foxborough, Massachusetts
Figure 3

Based on MassGIS Color Orthophotography (2019).

nationalgrid
Tighe&Bond

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Date Saved: 1/10/22 3:37:40pm

DUKE'S
131 MORSE STREET
BUILDING

TRANSFORMER
LOCATION

SLUICEWAY BOOMS

SLUICEWAY BOOMS

SLUICEWAY BOOMS

SLUICEWAY BOOMS

SW-1

FLOW

SLUICEWAY

SW-2

SLUICEWAY BOOMS

CONCRETE RETAINING
WALLS

HOLE IN CONCRETE SLAB LEADING TO
SLUICEWAY (ASSUMED ENTRY POINT FOR
MODF–IMPACTED RUNOFF INTO THE SLUICEWAY)

SEE FIGURE 5 FOR
DETAILS

FLOW

TELTRON ENGINEERING
131 MORSE STREET BUILDING

SLUICEWAY BOOMS

SW-3

Index Map

Legend

- APPROXIMATE SLUICEWAY BENEATH BUILDING/ROAD
- APPROXIMATE SLUICEWAY BENEATH CONCRETE SLAB
- APPROXIMATE OPEN CHANNEL SLUICEWAY
- SURFACE WATER LOCATION
- APPROXIMATE PARCEL BOUNDARY

N

1inch = 30 feet

0 15 30

Feet

MODF RELEASE

Sluiceway Boom Locations

131 Morse Street, Foxborough, Massachusetts
Figure 4

NOTES

nationalgrid
Tighe&Bond

File Location: \\tighebond.com\data\Data\Projects\N\N5067 National Grid 2020 ER\084 MEC Morse St Foxborough\Drawings_Figures\Drawings\N-5067-084.dwg
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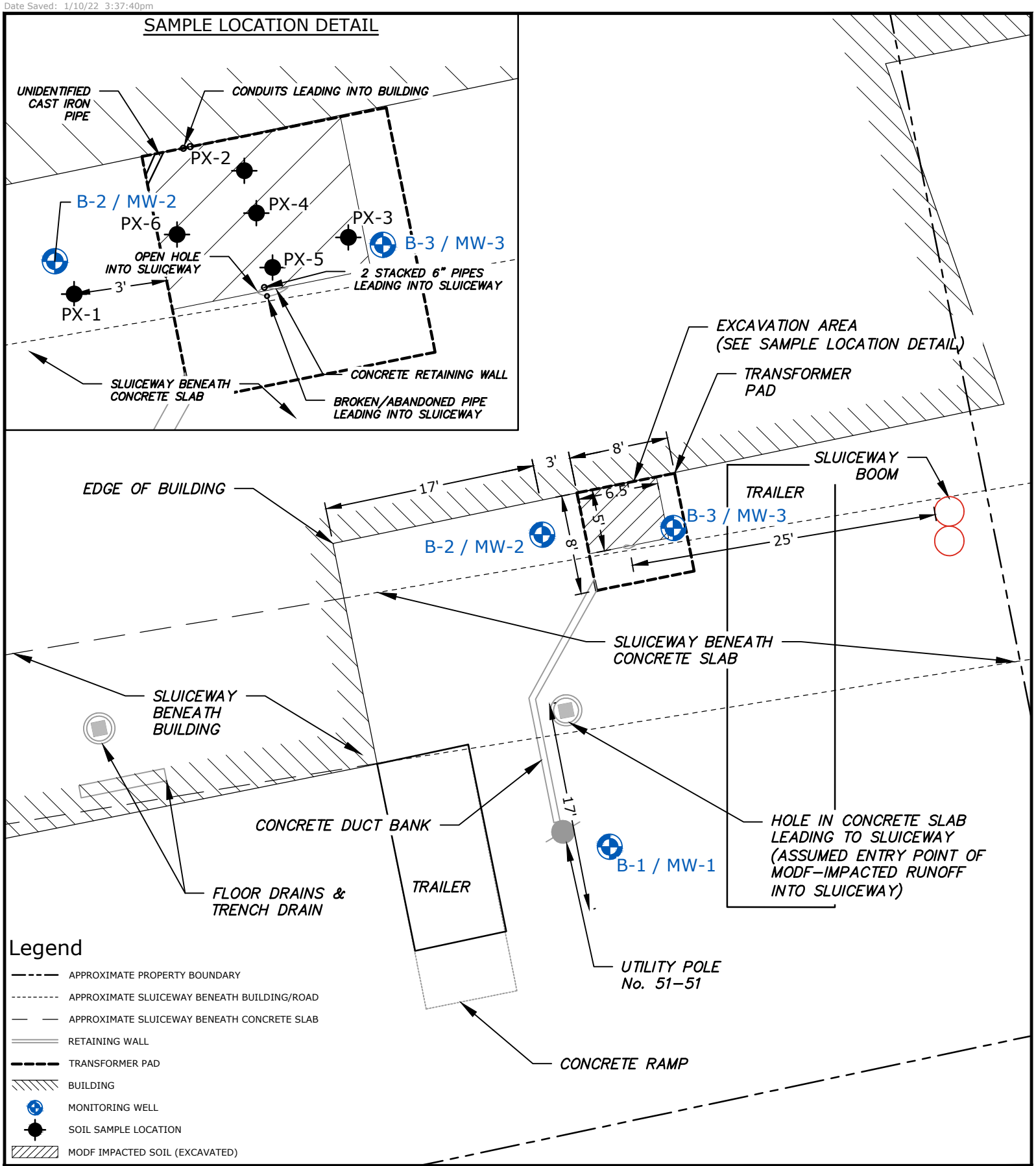

N

1inch = 10 feet

0 5 10

Feet

MODF RELEASE

Site Plan

131 Morse Street, Foxborough, Massachusetts
Figure 5

NOTES
BASE IMAGE FROM MASSACHUSETTS 2019 USGS COLOR ORTHO IMAGERY

nationalgrid
Tighe&Bond

File Location: \\tighebond.com\data\Data\Projects\N\N5067 National Grid 2020 ER\084 MEC Morse St Foxborough\Drawings_Figures\Drawings\N-5067-084.dwg
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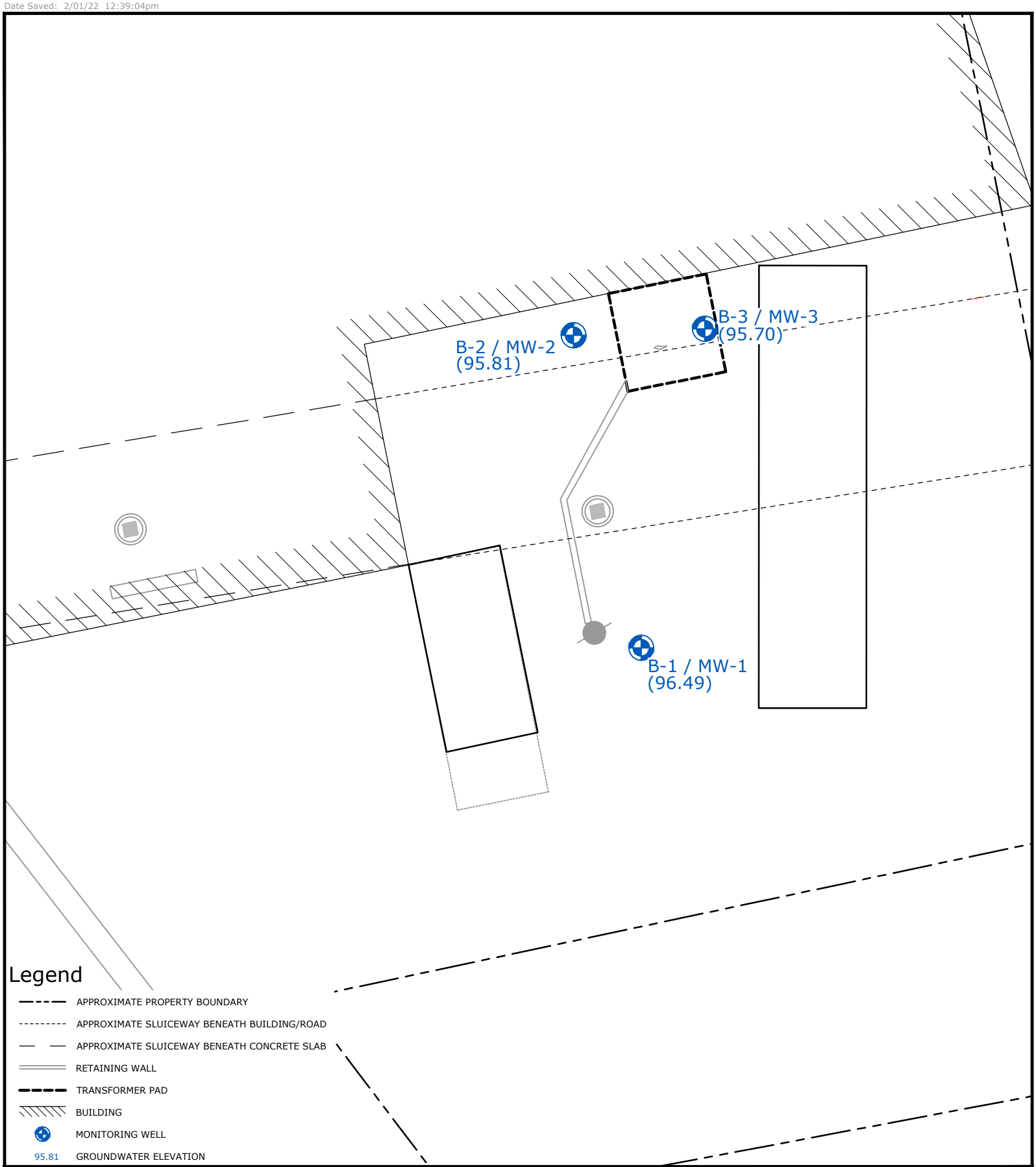

N

1inch = 10 feet

0 5 10

Feet

MODF RELEASE

Groundwater Elevation Map

131 Morse Street, Foxborough, Massachusetts
Figure 6

NOTES
1) BASE IMAGE FROM MASSACHUSETTS 2019 USGS COLOR ORTHO IMAGERY.
2) GROUNDWATER ELEVATIONS ARE BASED ON AN ARBITRARY DATUM WITH A BENCHMARK AT 100 FEET.

nationalgrid
Tighe&Bond

Tighe&Bond

APPENDIX B

CERTIFICATE OF ANALYSIS

Matt Abraham
Tighe & Bond
120 Front Street, Suite 7
Worcester, MA 01608

RE: MEC - 131 Morse St Foxborough MA (N-5067-084)
ESS Laboratory Work Order Number: 21C0073

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 4:02 pm, Mar 09, 2021

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 21C0073

SAMPLE RECEIPT

The following samples were received on March 02, 2021 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been performed and achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Limit Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

Question I: All samples for EPH were analyzed for a subset of the required MCP list per the client's request.

Lab Number	Sample Name	Matrix	Analysis
21C0073-01	PX-1	Soil	EPH8270, MADEP-EPH
21C0073-02	PX-2	Soil	EPH8270, MADEP-EPH
21C0073-03	PX-3	Soil	EPH8270, MADEP-EPH
21C0073-04	PX-4	Soil	EPH8270, MADEP-EPH
21C0073-05	PX-5	Soil	EPH8270, MADEP-EPH
21C0073-06	PX-6	Soil	EPH8270, MADEP-EPH

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA ESS Laboratory Work Order: 21C0073

PROJECT NARRATIVE

MADEP-EPH Extractable Petroleum Hydrocarbons

21C0073-04	**Surrogate recovery(ies) diluted below the MRL (SD).**
	1-Chlorooctadecane (% @ 40-140%)
21C0073-05	**Surrogate recovery(ies) diluted below the MRL (SD).**
	1-Chlorooctadecane (% @ 40-140%)
21C0073-06	**Surrogate recovery(ies) diluted below the MRL (SD).**
	1-Chlorooctadecane (% @ 40-140%)
D1C0070-CCV1	**Continuing Calibration %Diff/Drift is above control limit (CD+).**
	Fluorene (22% @ 20%)
D1C0070-CCV6	**Continuing Calibration %Diff/Drift is above control limit (CD+).**
	Fluorene (22% @ 20%), O-Terphenyl (23% @ 20%), Phenanthrene (22% @ 20%)
D1C0070-CCV8	**Continuing Calibration %Diff/Drift is above control limit (CD+).**
	Fluoranthene (21% @ 20%)
D1C0070-CCVA	**Continuing Calibration %Diff/Drift is above control limit (CD+).**
	Fluoranthene (22% @ 20%), O-Terphenyl (23% @ 20%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 21C0073

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH
MADEP 18-2.1 - VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 21C0073

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **21C0073-01 through 21C0073-06**

Matrices: ( ) Ground Water/Surface Water (x) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) MassDEP VPH (GC/PID/FID) CAM IV A	( ) 8082 PCB CAM V A	( ) 9014 Total Cyanide/PAC CAM VI A	( ) 6860 Perchlorate CAM VIII B
( ) 8270 SVOC CAM II B	( ) 7010 Metals CAM III C	( ) MassDEP VPH (GC/MS) CAM IV C	( ) 8081 Pesticides CAM V B	( ) 7196 Hex Cr CAM VI B	( ) MassDEP APH CAM IX A
( ) 6010 Metals CAM III A	( ) 6020 Metals CAM III D	(x) MassDEP EPH CAM IV B	( ) 8151 Herbicides CAM V C	( ) Explosives CAM VIII A	( ) TO-15 VOC CAM IX B

Affirmative responses to questions A through F are 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 (x) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (x) 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 (x) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (x) No ( )
E	VPH, EPH, APH and TO-15 only: a. Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes (x) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (x) No ( )

Responses to Questions G, H and I below are required for "'Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (x) No ( )*
	***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.**	
H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	Yes ( ) No (x)*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes ( ) No (x)*

All negative responses must be addressed in an attached laboratory narrative.

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Laurel Stoddard Date: March 09, 2021

Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA
Client Sample ID: PX-1
Date Sampled: 02/24/21 14:00
Percent Solids: 90
Initial Volume: 24.5
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 21C0073
ESS Laboratory Sample ID: 21C0073-01
Sample Matrix: Soil
Units: mg/kg dry

Prepared: 3/2/21 16:35

MADEP-EPH Extractable Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C9-C18 Aliphatics1	**417** (33.9)		MADEP-EPH		2	AMF	03/04/21 21:42	D1C0089	DC10202
C19-C36 Aliphatics1	**512** (33.9)		MADEP-EPH		2	AMF	03/04/21 21:42	D1C0089	DC10202
C11-C22 Unadjusted Aromatics1	**276** (16.9)		EPH8270		1	AMF	03/04/21 8:43	D1C0070	DC10202
C11-C22 Aromatics1,2	**276** (16.9)		EPH8270			AMF	03/04/21 8:43		[CALC]

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1-Chlorooctadecane	*61 %*		*40-140*
Surrogate: 2-Bromonaphthalene	*98 %*		*40-140*
Surrogate: 2-Fluorobiphenyl	*96 %*		*40-140*
Surrogate: O-Terphenyl	*61 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA
Client Sample ID: PX-2
Date Sampled: 02/24/21 14:05
Percent Solids: 97
Initial Volume: 24.7
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 21C0073
ESS Laboratory Sample ID: 21C0073-02
Sample Matrix: Soil
Units: mg/kg dry

Prepared: 3/2/21 16:35

MADEP-EPH Extractable Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C9-C18 Aliphatics1	**41.5** (15.7)		MADEP-EPH		1	AMF	03/03/21 17:19	D1C0058	DC10202
C19-C36 Aliphatics1	**66.8** (15.7)		MADEP-EPH		1	AMF	03/03/21 17:19	D1C0058	DC10202
C11-C22 Unadjusted Aromatics1	**47.4** (15.7)		EPH8270		1	AMF	03/04/21 15:52	D1C0070	DC10202
C11-C22 Aromatics1,2	**46.9** (15.7)		EPH8270			AMF	03/04/21 15:52		[CALC]

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1-Chlorooctadecane	*56 %*		*40-140*
Surrogate: 2-Bromonaphthalene	*103 %*		*40-140*
Surrogate: 2-Fluorobiphenyl	*99 %*		*40-140*
Surrogate: O-Terphenyl	*84 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA
Client Sample ID: PX-3
Date Sampled: 02/24/21 14:10
Percent Solids: 95
Initial Volume: 24.4
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 21C0073
ESS Laboratory Sample ID: 21C0073-03
Sample Matrix: Soil
Units: mg/kg dry

Prepared: 3/2/21 16:35

MADEP-EPH Extractable Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C9-C18 Aliphatics1	ND (16.2)		MADEP-EPH		1	AMF	03/03/21 18:07	D1C0058	DC10202
C19-C36 Aliphatics1	**20.3** (16.2)		MADEP-EPH		1	AMF	03/03/21 18:07	D1C0058	DC10202
C11-C22 Unadjusted Aromatics1	**177** (16.2)		EPH8270		1	AMF	03/04/21 16:28	D1C0070	DC10202
C11-C22 Aromatics1,2	**135** (16.2)		EPH8270			AMF	03/05/21 19:22		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1-Chlorooctadecane	*52 %*		*40-140*
Surrogate: 2-Bromonaphthalene	*103 %*		*40-140*
Surrogate: 2-Fluorobiphenyl	*99 %*		*40-140*
Surrogate: O-Terphenyl	*70 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA
Client Sample ID: PX-4
Date Sampled: 02/24/21 14:15
Percent Solids: 93
Initial Volume: 24.2
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 21C0073
ESS Laboratory Sample ID: 21C0073-04
Sample Matrix: Soil
Units: mg/kg dry

Prepared: 3/2/21 16:35

MADEP-EPH Extractable Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C9-C18 Aliphatics1	**5670** (334)		MADEP-EPH		20	AMF	03/04/21 22:31	D1C0089	DC10202
C19-C36 Aliphatics1	**7490** (334)		MADEP-EPH		20	AMF	03/04/21 22:31	D1C0089	DC10202
C11-C22 Unadjusted Aromatics1	**5770** (334)		EPH8270		20	AMF	03/05/21 21:09	D1C0105	DC10202
C11-C22 Aromatics1,2	**5740** (334)		EPH8270			AMF	03/05/21 21:09		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1-Chlorooctadecane	*%*	*SD*	*40-140*
Surrogate: 2-Bromonaphthalene	*114 %*		*40-140*
Surrogate: 2-Fluorobiphenyl	*113 %*		*40-140*
Surrogate: O-Terphenyl	*82 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA
Client Sample ID: PX-5
Date Sampled: 02/24/21 14:20
Percent Solids: 83
Initial Volume: 24.4
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 21C0073
ESS Laboratory Sample ID: 21C0073-05
Sample Matrix: Soil
Units: mg/kg dry

Prepared: 3/2/21 16:35

MADEP-EPH Extractable Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C9-C18 Aliphatics1	**7170** (370)		MADEP-EPH		20	AMF	03/04/21 23:19	D1C0089	DC10202
C19-C36 Aliphatics1	**8980** (370)		MADEP-EPH		20	AMF	03/04/21 23:19	D1C0089	DC10202
C11-C22 Unadjusted Aromatics1	**7080** (370)		EPH8270		20	AMF	03/05/21 22:21	D1C0105	DC10202
C11-C22 Aromatics1,2	**7030** (370)		EPH8270			AMF	03/05/21 22:21		[CALC]

	%Recovery	*Qualifier*	*Limits*
Surrogate: 1-Chlorooctadecane	*%*	*SD*	*40-140*
Surrogate: 2-Bromonaphthalene	*121 %*		*40-140*
Surrogate: 2-Fluorobiphenyl	*112 %*		*40-140*
Surrogate: O-Terphenyl	*85 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA
Client Sample ID: PX-6
Date Sampled: 02/24/21 14:25
Percent Solids: 95
Initial Volume: 24.3
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 21C0073
ESS Laboratory Sample ID: 21C0073-06
Sample Matrix: Soil
Units: mg/kg dry

Prepared: 3/2/21 16:35

MADEP-EPH Extractable Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C9-C18 Aliphatics1	**3990** (326)		MADEP-EPH		20	AMF	03/05/21 0:08	D1C0089	DC10202
C19-C36 Aliphatics1	**5260** (326)		MADEP-EPH		20	AMF	03/05/21 0:08	D1C0089	DC10202
C11-C22 Unadjusted Aromatics1	**2310** (163)		EPH8270		10	AMF	03/09/21 11:28	D1C0148	DC10202
C11-C22 Aromatics1,2	**2310** (163)		EPH8270			AMF	03/09/21 11:28		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1-Chlorooctadecane	*%*	*SD*	*40-140*
Surrogate: 2-Bromonaphthalene	*85 %*		*40-140*
Surrogate: 2-Fluorobiphenyl	*81 %*		*40-140*
Surrogate: O-Terphenyl	*60 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 21C0073

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
MADEP-EPH Extractable Petroleum Hydrocarbons										
Batch DC10202 - 3546										
Blank										
C19-C36 Aliphatics1	ND	15.0	mg/kg wet							
C9-C18 Aliphatics1	ND	15.0	mg/kg wet							
Decane (C10)	ND	0.5	mg/kg wet							
Docosane (C22)	ND	0.5	mg/kg wet							
Dodecane (C12)	ND	0.5	mg/kg wet							
Eicosane (C20)	ND	0.5	mg/kg wet							
Hexacosane (C26)	ND	0.5	mg/kg wet							
Hexadecane (C16)	ND	0.5	mg/kg wet							
Hexatriacontane (C36)	ND	0.5	mg/kg wet							
Nonadecane (C19)	ND	0.5	mg/kg wet							
Nonane (C9)	ND	0.5	mg/kg wet							
Octacosane (C28)	ND	0.5	mg/kg wet							
Octadecane (C18)	ND	0.5	mg/kg wet							
Tetracosane (C24)	ND	0.5	mg/kg wet							
Tetradecane (C14)	ND	0.5	mg/kg wet							
Triacontane (C30)	ND	0.5	mg/kg wet							
Surrogate: 1-Chlorooctadecane	*1.40*		mg/kg wet	*2.000*		*70*	*40-140*			
Blank										
2-Methylnaphthalene	ND	0.20	mg/kg wet							
Acenaphthene	ND	0.40	mg/kg wet							
Acenaphthylene	ND	0.20	mg/kg wet							
Anthracene	ND	0.40	mg/kg wet							
Benzo(a)anthracene	ND	0.40	mg/kg wet							
Benzo(a)pyrene	ND	0.40	mg/kg wet							
Benzo(b)fluoranthene	ND	0.40	mg/kg wet							
Benzo(g,h,i)perylene	ND	0.40	mg/kg wet							
Benzo(k)fluoranthene	ND	0.40	mg/kg wet							
C11-C22 Unadjusted Aromatics1	ND	15.0	mg/kg wet							
Chrysene	ND	0.40	mg/kg wet							
Dibenzo(a,h)Anthracene	ND	0.20	mg/kg wet							
Fluoranthene	ND	0.40	mg/kg wet							
Fluorene	ND	0.40	mg/kg wet							
Indeno(1,2,3-cd)Pyrene	ND	0.40	mg/kg wet							
Naphthalene	ND	0.40	mg/kg wet							
Phenanthrene	ND	0.40	mg/kg wet							
Pyrene	ND	0.40	mg/kg wet							
Surrogate: 2-Bromonaphthalene	*1.35*		mg/kg wet	*2.000*		*68*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*1.45*		mg/kg wet	*2.000*		*73*	*40-140*			
Surrogate: O-Terphenyl	*1.73*		mg/kg wet	*2.000*		*87*	*40-140*			
LCS										
C19-C36 Aliphatics1	13.3	15.0	mg/kg wet	16.00		83	40-140			
C9-C18 Aliphatics1	7.8	15.0	mg/kg wet	12.00		65	40-140			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 21C0073

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
MADEP-EPH Extractable Petroleum Hydrocarbons										
Batch DC10202 - 3546										
Decane (C10)	0.9	0.5	mg/kg wet	2.000		47	40-140			
Docosane (C22)	1.5	0.5	mg/kg wet	2.000		75	40-140			
Dodecane (C12)	1.1	0.5	mg/kg wet	2.000		53	40-140			
Eicosane (C20)	1.5	0.5	mg/kg wet	2.000		75	40-140			
Hexacosane (C26)	1.5	0.5	mg/kg wet	2.000		75	40-140			
Hexadecane (C16)	1.4	0.5	mg/kg wet	2.000		68	40-140			
Hexatriacontane (C36)	1.5	0.5	mg/kg wet	2.000		77	40-140			
Nonadecane (C19)	1.5	0.5	mg/kg wet	2.000		74	40-140			
Nonane (C9)	0.8	0.5	mg/kg wet	2.000		40	30-140			
Octacosane (C28)	1.5	0.5	mg/kg wet	2.000		76	40-140			
Octadecane (C18)	1.4	0.5	mg/kg wet	2.000		72	40-140			
Tetracosane (C24)	1.5	0.5	mg/kg wet	2.000		75	40-140			
Tetradecane (C14)	1.2	0.5	mg/kg wet	2.000		61	40-140			
Triacontane (C30)	1.5	0.5	mg/kg wet	2.000		75	40-140			
Surrogate: 1-Chlorooctadecane	*1.44*		mg/kg wet	*2.000*		*72*	*40-140*			
LCS										
2-Methylnaphthalene	1.13	0.20	mg/kg wet	2.000		57	40-140			
Acenaphthene	1.49	0.40	mg/kg wet	2.000		75	40-140			
Acenaphthylene	1.30	0.20	mg/kg wet	2.000		65	40-140			
Anthracene	1.81	0.40	mg/kg wet	2.000		91	40-140			
Benzo(a)anthracene	1.52	0.40	mg/kg wet	2.000		76	40-140			
Benzo(a)pyrene	1.76	0.40	mg/kg wet	2.000		88	40-140			
Benzo(b)fluoranthene	1.59	0.40	mg/kg wet	2.000		79	40-140			
Benzo(g,h,i)perylene	1.79	0.40	mg/kg wet	2.000		90	40-140			
Benzo(k)fluoranthene	2.03	0.40	mg/kg wet	2.000		102	40-140			
C11-C22 Unadjusted Aromatics1	28.0	15.0	mg/kg wet	34.00		82	40-140			
Chrysene	1.97	0.40	mg/kg wet	2.000		98	40-140			
Dibenzo(a,h)Anthracene	1.76	0.20	mg/kg wet	2.000		88	40-140			
Fluoranthene	1.60	0.40	mg/kg wet	2.000		80	40-140			
Fluorene	1.33	0.40	mg/kg wet	2.000		66	40-140			
Indeno(1,2,3-cd)Pyrene	1.66	0.40	mg/kg wet	2.000		83	40-140			
Naphthalene	1.02	0.40	mg/kg wet	2.000		51	40-140			
Phenanthrene	1.43	0.40	mg/kg wet	2.000		71	40-140			
Pyrene	1.76	0.40	mg/kg wet	2.000		88	40-140			
Surrogate: 2-Bromonaphthalene	*1.25*		mg/kg wet	*2.000*		*63*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*1.58*		mg/kg wet	*2.000*		*79*	*40-140*			
Surrogate: O-Terphenyl	*1.81*		mg/kg wet	*2.000*		*91*	*40-140*			
LCS										
2-Methylnaphthalene Breakthrough	0.0		%				0-5			
Naphthalene Breakthrough	0.0		%				0-5			
LCS Dup										
C19-C36 Aliphatics1	13.1	15.0	mg/kg wet	16.00		82	40-140	1	25	
C9-C18 Aliphatics1	7.3	15.0	mg/kg wet	12.00		61	40-140	7	25	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 21C0073

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
MADEP-EPH Extractable Petroleum Hydrocarbons										
Batch DC10202 - 3546										
Decane (C10)	0.9	0.5	mg/kg wet	2.000		45	40-140	5	25	
Docosane (C22)	1.5	0.5	mg/kg wet	2.000		76	40-140	0.3	25	
Dodecane (C12)	1.0	0.5	mg/kg wet	2.000		50	40-140	6	25	
Eicosane (C20)	1.5	0.5	mg/kg wet	2.000		74	40-140	0.1	25	
Hexacosane (C26)	1.5	0.5	mg/kg wet	2.000		75	40-140	0.2	25	
Hexadecane (C16)	1.3	0.5	mg/kg wet	2.000		66	40-140	3	25	
Hexatriacontane (C36)	1.5	0.5	mg/kg wet	2.000		77	40-140	0.7	25	
Nonadecane (C19)	1.5	0.5	mg/kg wet	2.000		74	40-140	0.3	25	
Nonane (C9)	0.8	0.5	mg/kg wet	2.000		38	30-140	5	25	
Octacosane (C28)	1.5	0.5	mg/kg wet	2.000		76	40-140	0.3	25	
Octadecane (C18)	1.4	0.5	mg/kg wet	2.000		72	40-140	0.4	25	
Tetracosane (C24)	1.5	0.5	mg/kg wet	2.000		75	40-140	0.1	25	
Tetradecane (C14)	1.1	0.5	mg/kg wet	2.000		57	40-140	6	25	
Triacontane (C30)	1.5	0.5	mg/kg wet	2.000		75	40-140	0.2	25	
Surrogate: 1-Chlorooctadecane	*1.41*		mg/kg wet	*2.000*		*71*	*40-140*			
LCS Dup										
2-Methylnaphthalene	1.03	0.20	mg/kg wet	2.000		52	40-140	9	30	
Acenaphthene	1.53	0.40	mg/kg wet	2.000		77	40-140	3	30	
Acenaphthylene	1.17	0.20	mg/kg wet	2.000		58	40-140	11	30	
Anthracene	1.91	0.40	mg/kg wet	2.000		95	40-140	5	30	
Benzo(a)anthracene	1.59	0.40	mg/kg wet	2.000		79	40-140	4	30	
Benzo(a)pyrene	1.84	0.40	mg/kg wet	2.000		92	40-140	4	30	
Benzo(b)fluoranthene	1.59	0.40	mg/kg wet	2.000		79	40-140	0.08	30	
Benzo(g,h,i)perylene	1.94	0.40	mg/kg wet	2.000		97	40-140	8	30	
Benzo(k)fluoranthene	2.11	0.40	mg/kg wet	2.000		105	40-140	4	30	
C11-C22 Unadjusted Aromatics1	29.1	15.0	mg/kg wet	34.00		86	40-140	4	25	
Chrysene	2.09	0.40	mg/kg wet	2.000		104	40-140	6	30	
Dibenzo(a,h)Anthracene	1.82	0.20	mg/kg wet	2.000		91	40-140	4	30	
Fluoranthene	1.68	0.40	mg/kg wet	2.000		84	40-140	5	30	
Fluorene	1.37	0.40	mg/kg wet	2.000		69	40-140	3	30	
Indeno(1,2,3-cd)Pyrene	1.71	0.40	mg/kg wet	2.000		85	40-140	3	30	
Naphthalene	0.99	0.40	mg/kg wet	2.000		50	40-140	3	30	
Phenanthrene	1.47	0.40	mg/kg wet	2.000		74	40-140	3	30	
Pyrene	1.87	0.40	mg/kg wet	2.000		94	40-140	6	30	
Surrogate: 2-Bromonaphthalene	*1.27*		mg/kg wet	*2.000*		*63*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*1.52*		mg/kg wet	*2.000*		*76*	*40-140*			
Surrogate: O-Terphenyl	*1.89*		mg/kg wet	*2.000*		*95*	*40-140*			
LCS Dup										
2-Methylnaphthalene Breakthrough	0.0		%				0-5		200	
Naphthalene Breakthrough	0.0		%				0-5		200	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA ESS Laboratory Work Order: 21C0073

Notes and Definitions

U	Analyte included in the analysis, but not detected
SD	Surrogate recovery(ies) diluted below the MRL (SD).
D	Diluted.
CD+	Continuing Calibration %Diff/Drift is above control limit (CD+).
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 21C0073

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Tighe & Bond - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 21C0073
Date Received: 3/2/2021
Project Due Date: 3/9/2021
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 0.4 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / (No)
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	139689	Yes	N/A	Yes	8 oz jar	NP	
2	139690	Yes	N/A	Yes	8 oz jar	NP	
3	139691	Yes	N/A	Yes	8 oz jar	NP	
4	139692	Yes	N/A	Yes	8 oz jar	NP	
5	139693	Yes	N/A	Yes	8 oz jar	NP	
6	139694	Yes	N/A	Yes	8 oz jar	NP	

2nd Review
Were all containers scanned into storage/lab? Initials AG
Are barcode labels on correct containers? (Yes) / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / (NA)
Are all Hex Chrome stickers attached? Yes / No / (NA)
Are all QC stickers attached? Yes / No / (NA)
Are VOA stickers attached if bubbles noted? Yes / No / (NA)

Completed

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Tighe & Bond - KPB/TB

ESS Project ID: 21C0073

Date Received: 3/2/2021

By: [signature] Date & Time: 3/2/21 16:01

Reviewed By: [signature] Date & Time: 3/2/21 1609

185 Frances Avenue
Cranston, RI 02921
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 2100073 | Page 1 of 1

Turn Time ☐ >5 ☒ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Criteria:

Is this project for any of the following?: ☐ CT RCP ☒ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)

☒ Limit Checker ☐ State Forms ☐ EQuIS
☒ Excel ☐ Hard Copy ☒ Enviro Data
☐ CLP-Like Package ☐ Other (Specify) →

CLIENT INFORMATION

Client: Tighe + Bond
Address: 120 Front St
Worcester MA 01608
Phone:
Email Distribution List:

PROJECT INFORMATION

Project Name: 131 Morse St - Foxborough MA
Project Location: " "
Project Number: N-5067-084
Project Manager: Kerri Lewis / Matthew Abraham
Bill to:
PO#:
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	EPH carbon ranges	Total Number of Bottles
1	2/24/21	1400	G	S	px-1	X	
2	↓	1405	↓	↓	px-2	X	
3	↓	1410	↓	↓	px-3	X	
4	↓	1415	↓	↓	px-4	X	
5	↓	1420	↓	↓	px-5	X	
6	↓	1425	↓	↓	px-6	X	

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*

Sampled by: KL

Chain needs to be filled out neatly and completely for on time delivery.

Comments: * Please specify "Other" preservative and containers types in this space

0.4°

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
[signature]	3/2/2021	930	[signature]	[signature]	3/2/2021	935	[signature] 3-2-21 13:41
[signature]	3/2/21	15:20	[signature]				

CERTIFICATE OF ANALYSIS

Matt Abraham
Tighe & Bond
120 Front Street, Suite 7
Worcester, MA 01608

RE: NGrid - 131 Morse St (N-5067-084)
ESS Laboratory Work Order Number: 21L1079

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 5:59 pm, Jan 13, 2022

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 21L1079

SAMPLE RECEIPT

The following samples were received on December 30, 2021 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been performed and achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Limit Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

Question I: All samples for EPH were analyzed for a subset of the required MCP list per the client's request.

GC-FID Fingerprint

The sample produced a chromatogram that contained material eluting in the mid to high molecular weight ranges of the chromatogram. Examples of similar material eluting in these ranges are hydraulic, transformer, motor and lubricating oils.

Lab Number	Sample Name	Matrix	Analysis
21L1079-01	B-1 2.5-5ft	Soil	EPH8270, MADEP-EPH
21L1079-02	B-2 2.5-5ft	Soil	EPH8270, MADEP-EPH
21L1079-03	B-2 5-7ft	Soil	EPH8270, MADEP-EPH
21L1079-04	B-3 2-5ft	Soil	EPH8270, MADEP-EPH, SUB
21L1079-05	B-3 5-7ft	Soil	8100M, EPH8270, MADEP-EPH

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 21L1079

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

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Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 21L1079

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH
MADEP 18-2.1 - VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 21L1079

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **21L1079-01 through 21L1079-05**

Matrices: ( ) Ground Water/Surface Water (x) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) MassDEP VPH (GC/PID/FID) CAM IV A	( ) 8082 PCB CAM V A	( ) 9014 Total Cyanide/PAC CAM VI A	( ) 6860 Perchlorate CAM VIII B
( ) 8270 SVOC CAM II B	( ) 7010 Metals CAM III C	( ) MassDEP VPH (GC/MS) CAM IV C	( ) 8081 Pesticides CAM V B	( ) 7196 Hex Cr CAM VI B	( ) MassDEP APH CAM IX A
( ) 6010 Metals CAM III A	( ) 6020 Metals CAM III D	(x) MassDEP EPH CAM IV B	( ) 8151 Herbicides CAM V C	( ) Explosives CAM VIII A	( ) TO-15 VOC CAM IX B

Affirmative responses to questions A through F are 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 (x) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (x) 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 (x) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (x) No ( )
E	VPH, EPH, APH and TO-15 only: a. Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes ( ) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (x) No ( )

Responses to Questions G, H and I below are required for '"Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)? ***Data User Note:*** ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.***	Yes (x) No ( )*
H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	Yes (x) No ( )*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes ( ) No (x)*

****All negative responses must be addressed in an attached laboratory narrative.***

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Laurel Stoddard Date: January 13, 2022

Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St
Client Sample ID: B-1 2.5-5ft
Date Sampled: 12/29/21 09:40
Percent Solids: 82
Initial Volume: 25.2
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 21L1079
ESS Laboratory Sample ID: 21L1079-01
Sample Matrix: Soil
Units: mg/kg dry

Prepared: 1/3/22 17:00

MADEP-EPH Extractable Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C9-C18 Aliphatics1	ND (18.1)		MADEP-EPH		1	MJV	01/05/22 11:50	D2A0058	DA20331
C19-C36 Aliphatics1	ND (18.1)		MADEP-EPH		1	MJV	01/05/22 11:50	D2A0058	DA20331
C11-C22 Unadjusted Aromatics1	ND (18.1)		EPH8270		1	MJV	01/05/22 13:30	D2A0042	DA20331
C11-C22 Aromatics1,2	ND (18.1)		EPH8270			MJV	01/05/22 13:30		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1-Chlorooctadecane	*73 %*		*40-140*
Surrogate: 2-Bromonaphthalene	*87 %*		*40-140*
Surrogate: 2-Fluorobiphenyl	*83 %*		*40-140*
Surrogate: O-Terphenyl	*72 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St
Client Sample ID: B-2 2.5-5ft
Date Sampled: 12/29/21 09:20
Percent Solids: 83
Initial Volume: 24.5
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 21L1079
ESS Laboratory Sample ID: 21L1079-02
Sample Matrix: Soil
Units: mg/kg dry

Prepared: 1/3/22 17:00

MADEP-EPH Extractable Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C9-C18 Aliphatics1	ND (18.4)		MADEP-EPH		1	MJV	01/05/22 12:25	D2A0058	DA20331
C19-C36 Aliphatics1	ND (18.4)		MADEP-EPH		1	MJV	01/05/22 12:25	D2A0058	DA20331
C11-C22 Unadjusted Aromatics1	ND (18.4)		EPH8270		1	MJV	01/05/22 14:07	D2A0042	DA20331
C11-C22 Aromatics1,2	ND (18.4)		EPH8270			MJV	01/05/22 14:07		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1-Chlorooctadecane	*81 %*		*40-140*
Surrogate: 2-Bromonaphthalene	*89 %*		*40-140*
Surrogate: 2-Fluorobiphenyl	*80 %*		*40-140*
Surrogate: O-Terphenyl	*82 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St
Client Sample ID: B-2 5-7ft
Date Sampled: 12/29/21 09:48
Percent Solids: 73
Initial Volume: 24.3
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 21L1079
ESS Laboratory Sample ID: 21L1079-03
Sample Matrix: Soil
Units: mg/kg dry

Prepared: 1/3/22 17:00

MADEP-EPH Extractable Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C9-C18 Aliphatics1	ND (21.3)		MADEP-EPH		1	MJV	01/05/22 13:00	D2A0058	DA20331
C19-C36 Aliphatics1	ND (21.3)		MADEP-EPH		1	MJV	01/05/22 13:00	D2A0058	DA20331
C11-C22 Unadjusted Aromatics1	**214** (21.3)		EPH8270		1	MJV	01/06/22 5:09	D2A0042	DA20331
C11-C22 Aromatics1,2	**151** (21.3)		EPH8270			MJV	01/06/22 22:16		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1-Chlorooctadecane	*71 %*		*40-140*
Surrogate: 2-Bromonaphthalene	*78 %*		*40-140*
Surrogate: 2-Fluorobiphenyl	*76 %*		*40-140*
Surrogate: O-Terphenyl	*62 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St
Client Sample ID: B-3 2-5ft
Date Sampled: 12/29/21 11:22
Percent Solids: 92
Initial Volume: 24.4
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 21L1079
ESS Laboratory Sample ID: 21L1079-04
Sample Matrix: Soil
Units: mg/kg dry

Prepared: 1/3/22 17:00

MADEP-EPH Extractable Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C9-C18 Aliphatics1	**85.1** (16.7)		MADEP-EPH		1	MJV	01/05/22 13:34	D2A0058	DA20331
C19-C36 Aliphatics1	**99.9** (16.7)		MADEP-EPH		1	MJV	01/05/22 13:34	D2A0058	DA20331
C11-C22 Unadjusted Aromatics1	**53.7** (16.7)		EPH8270		1	MJV	01/05/22 14:45	D2A0042	DA20331
C11-C22 Aromatics1,2	**53.7** (16.7)		EPH8270			MJV	01/05/22 14:45		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1-Chlorooctadecane	*70 %*		*40-140*
Surrogate: 2-Bromonaphthalene	*89 %*		*40-140*
Surrogate: 2-Fluorobiphenyl	*84 %*		*40-140*
Surrogate: O-Terphenyl	*74 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St
Client Sample ID: B-3 2-5ft
Date Sampled: 12/29/21 11:22

ESS Laboratory Work Order: 21L1079
ESS Laboratory Sample ID: 21L1079-04
Sample Matrix: Soil

Subcontracted Analysis

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Units	Batch
Grain Size	**See Attached** (N/A)								

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St
Client Sample ID: B-3 5-7ft
Date Sampled: 12/29/21 11:45
Percent Solids: 87
Initial Volume: 19.4
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 21L1079
ESS Laboratory Sample ID: 21L1079-05
Sample Matrix: Soil
Units: mg/kg dry
Analyst: BXK
Prepared: 1/5/22 20:10

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons	**823** (11.8)		8100M		1	01/06/22 14:44	D2A0109	DA20507
Fingerprint	**See Project Narrative**							

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*78 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St
Client Sample ID: B-3 5-7ft
Date Sampled: 12/29/21 11:45
Percent Solids: 87
Initial Volume: 24.2
Final Volume: 1
Extraction Method: 3546

ESS Laboratory Work Order: 21L1079
ESS Laboratory Sample ID: 21L1079-05
Sample Matrix: Soil
Units: mg/kg dry

Prepared: 1/3/22 17:00

MADEP-EPH Extractable Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C9-C18 Aliphatics1	**128** (17.7)		MADEP-EPH		1	MJV	01/05/22 14:09	D2A0058	DA20331
C19-C36 Aliphatics1	**145** (17.7)		MADEP-EPH		1	MJV	01/05/22 14:09	D2A0058	DA20331
C11-C22 Unadjusted Aromatics1	**86.1** (17.7)		EPH8270		1	MJV	01/05/22 15:23	D2A0042	DA20331
C11-C22 Aromatics1,2	**86.1** (17.7)		EPH8270			MJV	01/05/22 15:23		[CALC]

	%Recovery	Qualifier	Limits
Surrogate: 1-Chlorooctadecane	*77 %*		*40-140*
Surrogate: 2-Bromonaphthalene	*85 %*		*40-140*
Surrogate: 2-Fluorobiphenyl	*81 %*		*40-140*
Surrogate: O-Terphenyl	*74 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 21L1079

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8100M Total Petroleum Hydrocarbons										
Batch DA20507 - 3546										
Blank										
Decane (C10)	ND	0.2	mg/kg wet							
Docosane (C22)	ND	0.2	mg/kg wet							
Dodecane (C12)	ND	0.2	mg/kg wet							
Eicosane (C20)	ND	0.2	mg/kg wet							
Hexacosane (C26)	ND	0.2	mg/kg wet							
Hexadecane (C16)	ND	0.2	mg/kg wet							
Hexatriacontane (C36)	ND	0.2	mg/kg wet							
Nonadecane (C19)	ND	0.2	mg/kg wet							
Nonane (C9)	ND	0.2	mg/kg wet							
Octacosane (C28)	ND	0.2	mg/kg wet							
Octadecane (C18)	ND	0.2	mg/kg wet							
Tetracosane (C24)	ND	0.2	mg/kg wet							
Tetradecane (C14)	ND	0.2	mg/kg wet							
Total Petroleum Hydrocarbons	ND	10.0	mg/kg wet							
Triacontane (C30)	ND	0.2	mg/kg wet							
Surrogate: O-Terphenyl	*3.99*		mg/kg wet	*5.000*		*80*	*40-140*			
LCS										
Decane (C10)	1.6	0.2	mg/kg wet	2.500		65	40-140			
Docosane (C22)	2.1	0.2	mg/kg wet	2.500		85	40-140			
Dodecane (C12)	1.7	0.2	mg/kg wet	2.500		69	40-140			
Eicosane (C20)	2.1	0.2	mg/kg wet	2.500		86	40-140			
Hexacosane (C26)	2.2	0.2	mg/kg wet	2.500		87	40-140			
Hexadecane (C16)	2.0	0.2	mg/kg wet	2.500		80	40-140			
Hexatriacontane (C36)	2.4	0.2	mg/kg wet	2.500		97	40-140			
Nonadecane (C19)	2.2	0.2	mg/kg wet	2.500		87	40-140			
Nonane (C9)	1.5	0.2	mg/kg wet	2.500		60	30-140			
Octacosane (C28)	2.1	0.2	mg/kg wet	2.500		86	40-140			
Octadecane (C18)	2.1	0.2	mg/kg wet	2.500		84	40-140			
Tetracosane (C24)	1.9	0.2	mg/kg wet	2.500		77	40-140			
Tetradecane (C14)	1.9	0.2	mg/kg wet	2.500		75	40-140			
Total Petroleum Hydrocarbons	29.4	10.0	mg/kg wet	35.00		84	40-140			
Triacontane (C30)	2.2	0.2	mg/kg wet	2.500		87	40-140			
Surrogate: O-Terphenyl	*4.08*		mg/kg wet	*5.000*		*82*	*40-140*			
LCS Dup										
Decane (C10)	1.7	0.2	mg/kg wet	2.500		70	40-140	7	25	
Docosane (C22)	2.2	0.2	mg/kg wet	2.500		89	40-140	4	25	
Dodecane (C12)	1.8	0.2	mg/kg wet	2.500		73	40-140	6	25	
Eicosane (C20)	2.2	0.2	mg/kg wet	2.500		90	40-140	5	25	
Hexacosane (C26)	2.3	0.2	mg/kg wet	2.500		91	40-140	5	25	
Hexadecane (C16)	2.1	0.2	mg/kg wet	2.500		85	40-140	6	25	
Hexatriacontane (C36)	2.6	0.2	mg/kg wet	2.500		102	40-140	5	25	
Nonadecane (C19)	2.3	0.2	mg/kg wet	2.500		94	40-140	7	25	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 21L1079

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8100M Total Petroleum Hydrocarbons										
Batch DA20507 - 3546										
Nonane (C9)	1.6	0.2	mg/kg wet	2.500		63	30-140	4	25	
Octacosane (C28)	2.3	0.2	mg/kg wet	2.500		90	40-140	5	25	
Octadecane (C18)	2.2	0.2	mg/kg wet	2.500		88	40-140	5	25	
Tetracosane (C24)	2.0	0.2	mg/kg wet	2.500		81	40-140	5	25	
Tetradecane (C14)	2.0	0.2	mg/kg wet	2.500		80	40-140	6	25	
Total Petroleum Hydrocarbons	31.0	10.0	mg/kg wet	35.00		89	40-140	5	25	
Triacontane (C30)	2.3	0.2	mg/kg wet	2.500		91	40-140	5	25	
Surrogate: O-Terphenyl	*4.20*		mg/kg wet	*5.000*		*84*	*40-140*			
MADEP-EPH Extractable Petroleum Hydrocarbons										
Batch DA20331 - 3546										
Blank										
C19-C36 Aliphatics1	ND	15.0	mg/kg wet							
C9-C18 Aliphatics1	ND	15.0	mg/kg wet							
Decane (C10)	ND	0.5	mg/kg wet							
Docosane (C22)	ND	0.5	mg/kg wet							
Dodecane (C12)	ND	0.5	mg/kg wet							
Eicosane (C20)	ND	0.5	mg/kg wet							
Hexacosane (C26)	ND	0.5	mg/kg wet							
Hexadecane (C16)	ND	0.5	mg/kg wet							
Hexatriacontane (C36)	ND	0.5	mg/kg wet							
Nonadecane (C19)	ND	0.5	mg/kg wet							
Nonane (C9)	ND	0.5	mg/kg wet							
Octacosane (C28)	ND	0.5	mg/kg wet							
Octadecane (C18)	ND	0.5	mg/kg wet							
Tetracosane (C24)	ND	0.5	mg/kg wet							
Tetradecane (C14)	ND	0.5	mg/kg wet							
Triacontane (C30)	ND	0.5	mg/kg wet							
Surrogate: 1-Chlorooctadecane	*1.74*		mg/kg wet	*2.000*		*87*	*40-140*			
Blank										
2-Methylnaphthalene	ND	0.20	mg/kg wet							
Acenaphthene	ND	0.40	mg/kg wet							
Acenaphthylene	ND	0.20	mg/kg wet							
Anthracene	ND	0.40	mg/kg wet							
Benzo(a)anthracene	ND	0.40	mg/kg wet							
Benzo(a)pyrene	ND	0.40	mg/kg wet							
Benzo(b)fluoranthene	ND	0.40	mg/kg wet							
Benzo(g,h,i)perylene	ND	0.40	mg/kg wet							
Benzo(k)fluoranthene	ND	0.40	mg/kg wet							
C11-C22 Unadjusted Aromatics1	ND	15.0	mg/kg wet							
Chrysene	ND	0.40	mg/kg wet							
Dibenzo(a,h)Anthracene	ND	0.20	mg/kg wet							
Fluoranthene	ND	0.40	mg/kg wet							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 21L1079

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
MADEP-EPH Extractable Petroleum Hydrocarbons										
Batch DA20331 - 3546										
Fluorene	ND	0.40	mg/kg wet							
Indeno(1,2,3-cd)Pyrene	ND	0.40	mg/kg wet							
Naphthalene	ND	0.40	mg/kg wet							
Phenanthrene	ND	0.40	mg/kg wet							
Pyrene	ND	0.40	mg/kg wet							
Surrogate: 2-Bromonaphthalene	*1.54*		mg/kg wet	*2.000*		*77*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*1.43*		mg/kg wet	*2.000*		*72*	*40-140*			
Surrogate: O-Terphenyl	*1.57*		mg/kg wet	*2.000*		*78*	*40-140*			
LCS										
C19-C36 Aliphatics1	13.1	15.0	mg/kg wet	16.00		82	40-140			
C9-C18 Aliphatics1	6.9	15.0	mg/kg wet	12.00		57	40-140			
Decane (C10)	0.9	0.5	mg/kg wet	2.000		47	40-140			
Docosane (C22)	1.4	0.5	mg/kg wet	2.000		72	40-140			
Dodecane (C12)	1.0	0.5	mg/kg wet	2.000		50	40-140			
Eicosane (C20)	1.4	0.5	mg/kg wet	2.000		70	40-140			
Hexacosane (C26)	1.5	0.5	mg/kg wet	2.000		73	40-140			
Hexadecane (C16)	1.3	0.5	mg/kg wet	2.000		64	40-140			
Hexatriacontane (C36)	1.5	0.5	mg/kg wet	2.000		76	40-140			
Nonadecane (C19)	1.4	0.5	mg/kg wet	2.000		69	40-140			
Nonane (C9)	0.8	0.5	mg/kg wet	2.000		40	30-140			
Octacosane (C28)	1.4	0.5	mg/kg wet	2.000		71	40-140			
Octadecane (C18)	1.3	0.5	mg/kg wet	2.000		66	40-140			
Tetracosane (C24)	1.3	0.5	mg/kg wet	2.000		66	40-140			
Tetradecane (C14)	1.1	0.5	mg/kg wet	2.000		56	40-140			
Triacontane (C30)	1.4	0.5	mg/kg wet	2.000		71	40-140			
Surrogate: 1-Chlorooctadecane	*1.74*		mg/kg wet	*2.000*		*87*	*40-140*			
LCS										
2-Methylnaphthalene	1.12	0.20	mg/kg wet	2.000		56	40-140			
Acenaphthene	1.34	0.40	mg/kg wet	2.000		67	40-140			
Acenaphthylene	1.24	0.20	mg/kg wet	2.000		62	40-140			
Anthracene	1.53	0.40	mg/kg wet	2.000		77	40-140			
Benzo(a)anthracene	1.37	0.40	mg/kg wet	2.000		69	40-140			
Benzo(a)pyrene	1.36	0.40	mg/kg wet	2.000		68	40-140			
Benzo(b)fluoranthene	1.35	0.40	mg/kg wet	2.000		68	40-140			
Benzo(g,h,i)perylene	1.42	0.40	mg/kg wet	2.000		71	40-140			
Benzo(k)fluoranthene	1.41	0.40	mg/kg wet	2.000		71	40-140			
C11-C22 Unadjusted Aromatics1	24.1	15.0	mg/kg wet	34.00		71	40-140			
Chrysene	1.45	0.40	mg/kg wet	2.000		73	40-140			
Dibenzo(a,h)Anthracene	1.44	0.20	mg/kg wet	2.000		72	40-140			
Fluoranthene	1.53	0.40	mg/kg wet	2.000		76	40-140			
Fluorene	1.40	0.40	mg/kg wet	2.000		70	40-140			
Indeno(1,2,3-cd)Pyrene	1.40	0.40	mg/kg wet	2.000		70	40-140			
Naphthalene	1.09	0.40	mg/kg wet	2.000		55	40-140			
Phenanthrene	1.49	0.40	mg/kg wet	2.000		75	40-140			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 21L1079

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
MADEP-EPH Extractable Petroleum Hydrocarbons										
Batch DA20331 - 3546										
Pyrene	1.53	0.40	mg/kg wet	2.000		77	40-140			
Surrogate: 2-Bromonaphthalene	*1.51*		mg/kg wet	*2.000*		*75*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*1.46*		mg/kg wet	*2.000*		*73*	*40-140*			
Surrogate: O-Terphenyl	*1.67*		mg/kg wet	*2.000*		*83*	*40-140*			
LCS										
2-Methylnaphthalene Breakthrough	0.0		%				0-5			
Naphthalene Breakthrough	0.0		%				0-5			
LCS Dup										
C19-C36 Aliphatics1	12.7	15.0	mg/kg wet	16.00		79	40-140	3	25	
C9-C18 Aliphatics1	6.8	15.0	mg/kg wet	12.00		57	40-140	0.9	25	
Decane (C10)	0.9	0.5	mg/kg wet	2.000		47	40-140	0.3	25	
Docosane (C22)	1.4	0.5	mg/kg wet	2.000		71	40-140	2	25	
Dodecane (C12)	1.0	0.5	mg/kg wet	2.000		50	40-140	0.6	25	
Eicosane (C20)	1.4	0.5	mg/kg wet	2.000		68	40-140	2	25	
Hexacosane (C26)	1.4	0.5	mg/kg wet	2.000		71	40-140	2	25	
Hexadecane (C16)	1.3	0.5	mg/kg wet	2.000		64	40-140	0.1	25	
Hexatriacontane (C36)	1.5	0.5	mg/kg wet	2.000		75	40-140	2	25	
Nonadecane (C19)	1.4	0.5	mg/kg wet	2.000		68	40-140	2	25	
Nonane (C9)	0.8	0.5	mg/kg wet	2.000		40	30-140	0.3	25	
Octacosane (C28)	1.4	0.5	mg/kg wet	2.000		69	40-140	2	25	
Octadecane (C18)	1.3	0.5	mg/kg wet	2.000		65	40-140	2	25	
Tetracosane (C24)	1.3	0.5	mg/kg wet	2.000		64	40-140	2	25	
Tetradecane (C14)	1.1	0.5	mg/kg wet	2.000		57	40-140	0.08	25	
Triacontane (C30)	1.4	0.5	mg/kg wet	2.000		70	40-140	2	25	
Surrogate: 1-Chlorooctadecane	*1.70*		mg/kg wet	*2.000*		*85*	*40-140*			
LCS Dup										
2-Methylnaphthalene	1.12	0.20	mg/kg wet	2.000		56	40-140	0.6	30	
Acenaphthene	1.30	0.40	mg/kg wet	2.000		65	40-140	3	30	
Acenaphthylene	1.17	0.20	mg/kg wet	2.000		58	40-140	6	30	
Anthracene	1.51	0.40	mg/kg wet	2.000		76	40-140	1	30	
Benzo(a)anthracene	1.35	0.40	mg/kg wet	2.000		68	40-140	1	30	
Benzo(a)pyrene	1.39	0.40	mg/kg wet	2.000		69	40-140	2	30	
Benzo(b)fluoranthene	1.36	0.40	mg/kg wet	2.000		68	40-140	0.8	30	
Benzo(g,h,i)perylene	1.40	0.40	mg/kg wet	2.000		70	40-140	2	30	
Benzo(k)fluoranthene	1.43	0.40	mg/kg wet	2.000		71	40-140	1	30	
C11-C22 Unadjusted Aromatics1	25.7	15.0	mg/kg wet	34.00		76	40-140	6	25	
Chrysene	1.49	0.40	mg/kg wet	2.000		74	40-140	2	30	
Dibenzo(a,h)Anthracene	1.46	0.20	mg/kg wet	2.000		73	40-140	1	30	
Fluoranthene	1.50	0.40	mg/kg wet	2.000		75	40-140	2	30	
Fluorene	1.37	0.40	mg/kg wet	2.000		68	40-140	2	30	
Indeno(1,2,3-cd)Pyrene	1.41	0.40	mg/kg wet	2.000		70	40-140	0.6	30	
Naphthalene	1.09	0.40	mg/kg wet	2.000		54	40-140	0.4	30	
Phenanthrene	1.49	0.40	mg/kg wet	2.000		74	40-140	0.4	30	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 21L1079

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
MADEP-EPH Extractable Petroleum Hydrocarbons										
Batch DA20331 - 3546										
Pyrene	1.53	0.40	mg/kg wet	2.000		77	40-140	0.3	30	
Surrogate: 2-Bromonaphthalene	*1.54*		mg/kg wet	*2.000*		*77*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*1.47*		mg/kg wet	*2.000*		*74*	*40-140*			
Surrogate: O-Terphenyl	*1.67*		mg/kg wet	*2.000*		*83*	*40-140*			
LCS Dup										
2-Methylnaphthalene Breakthrough	0.0		%				0-5		200	
Naphthalene Breakthrough	0.0		%				0-5		200	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 21L1079

Notes and Definitions

Z15	See Project Narrative
Z-08	See Attached
U	Analyte included in the analysis, but not detected
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probable Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 21L1079

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

THIELSCH ENGINEERING
195 Frances Avenue
Cranston RI, 02910
Phone: (401)-467-6454
Fax: (401)-467-2398
thielsch.com
Let's Build a Solid Foundation

Client Information:
Tighe & Bond
Providence, RI
PM: Matthew Abraham
Assigned By: ESS
Collected By: Client

Project Information:
National Grid - 131 Morse Street
Foxborough, MA
ESS Project Number: 21L01079
Summary Page: 1 of 1
Report Date: 01.12.22

LABORATORY TESTING DATA SHEET, Report No.: 7422-A-105

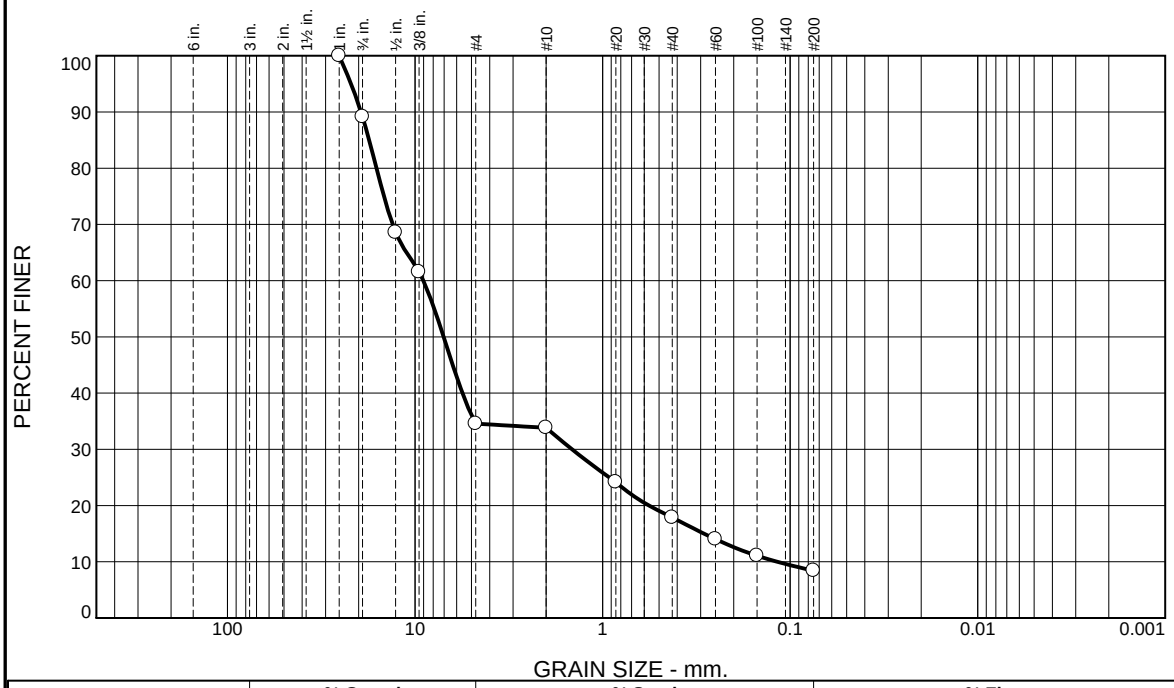
Source	Sample No.	Depth (Ft)	Laboratory No.	Identification Tests								Proctor / CBR / Permeability Tests								Laboratory Log and Soil Description
				As Received Moisture Content %	LL %	PL %	Gravel %	Sand %	Fines %	Org. %	G_s	Dry unit wt. pcf	Test Moisture Content %	γ_d MAX (pcf) W_{opt} (%)	γ_d MAX (pcf) W_{opt} (%) (Corr.)	Target Test Setup as % of Proctor	CBR @ 0.1"	CBR @ 0.2"	Permeability cm/sec	
				D2216	D4318		D6913			D2974	D854			D1557						
Soil Composite	B-3	2-5	21L01079-01				65.4	26.2	8.4											Brown well-graded gravel with silt and sand

Date Received: *1.04.22*

Reviewed By:

Date Reviewed: *1.12.22*

Particle Size Distribution Report



% +3"	% Gravel		% Sand			% Fines	
	Coarse	Fine	Coarse	Medium	Fine	Silt	Clay
0.0	10.9	54.5	0.8	15.9	9.5	8.4	

TEST RESULTS (D6913)

Opening Size	Percent Finer	Spec.* (Percent)	Pass? (X=Fail)
1"	100.0		
0.75"	89.1		
0.5"	68.6		
0.375"	61.6		
#4	34.6		
#10	33.8		
#20	24.2		
#40	17.9		
#60	14.0		
#100	11.1		
#200	8.4		

* (no specification provided)

Material Description

Brown well-graded gravel with silt and sand

Atterberg Limits (ASTM D 4318)

PL= NP **LL=** NV **PI=** NP

Classification

USCS (D 2487)= **AASHTO (M 145)=** A-1-a

Coefficients

D_{90}= 19.4069 D_{85}= 17.5766 D_{60}= 9.0312
D_{50}= 7.0362 D_{30}= 1.4547 D_{15}= 0.2877
D_{10}= 0.1172 C_u= 77.06 C_c= 2.00

Remarks

Date Received: 1.04.22 **Date Tested:** 1.6.22

Tested By: SF

Checked By: Kris Roland

Title: Laboratory Supervisor

Source of Sample: Soil Composite **Depth:** 2-5' **Date Sampled:** 12.29.21
Sample Number: B-3

Thielsch Engineering Inc.

Cranston, RI

Client: ESS

Project: National Grid - 131 Morse Street
Foxborough, MA

Project No: 21L1079 **Figure** L01079-01

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Tighe & Bond - KPB/TB

Shipped/Delivered Via: Client

ESS Project ID: 21L1079
Date Received: 12/30/2021
Project Due Date: 1/7/2022
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: -1 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / (No)
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	246888	Yes	N/A	Yes	4 oz. Jar	NP	
2	246889	Yes	N/A	Yes	4 oz. Jar	NP	
3	246890	Yes	N/A	Yes	4 oz. Jar	NP	
4	246891	Yes	N/A	Yes	4 oz. Jar	NP	
5	246892	Yes	N/A	Yes	4 oz. Jar	NP	

2nd Review
Were all containers scanned into storage/lab? Initials TD
Are barcode labels on correct containers? (Yes) / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: Date & Time: 12/30/21 1553
Reviewed

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Tighe & Bond - KPB/TB

ESS Project ID: 21L1079

Date Received: 12/30/2021

By: Clayton Davis

Date & Time: 12/30/21 1600

185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 21L1079 | Page 1 of 1

Turn Time (Days): ☐ > 5 ☑ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Massachusetts **Criteria:** S-1/GW-2, S-1/GW-3

Is this project for any of the following?:

☐ CT RCP ☑ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)

☑ Limit Checker ☐ State Forms ☐ EQuIS
☑ Excel ☐ Hard Copy ☑ Enviro Data
☐ CLP-Like Package ☐ Other (Specify) →

CLIENT INFORMATION

Client: Tighe & Bond
Address: 300 West Exchange Street, Suite 300
Providence, RI 02903
Phone: 401-455-4306

Email Distribution List:
smarokhovsky@tighebond.com
jharvey@tighebond.com
maabraham@tighebond.com

PROJECT INFORMATION

Project Name: National Grid - 131 Morse St
Project Location: Foxborough, MA
Project Number: N5067-084
Project Manager: Matthew Abraham
Bill to:
PO#:
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

hdm 1/3/22

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	EPH Carbon Ranges	Fingerprint	Total Number of Bottles
1	12/29/2021	0940	Composite	Soil	B-1 (2.5-5')	X		1
2	12/29/2021	0920	Composite	Soil	B-2 (2.5-5')	X		1
3	12/29/2021	0948	Composite	Soil	B-2 (5-7')	X		1
4	12/29/2021	1122	Composite	Soil	B-3 (2-5')	X		1
5	12/29/2021	1145	Composite	Soil	B-3 (5-7')	X	X	1

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 9

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 1

Total Number of Bottles: 5

Sampled by : Shelby Miller Marokhovsky

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only

Cooler Temperature (°C): 4 ICE

Comments: * Please specify "Other" preservative and containers types in this space

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration

☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
Shelby Miller Marokhovsky	12/30/21	1550	Clayton Davis				
Relinquished by (Signature)	**Date**	**Time**	**Received by (Signature)**	**Relinquished by (Signature)**	**Date**	**Time**	**Received by (Signature)**

185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
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CHAIN OF CUSTODY

ESS Lab # 21L1079 | Page 1 of 1

Turn Time (Days) ☐ > 5 ☑ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Massachusetts **Criteria:** S-1/GW-2, S-1/GW-3

Is this project for any of the following?:

☐ CT RCP ☑ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)

☑ Limit Checker ☐ State Forms ☐ EQuIS
☑ Excel ☐ Hard Copy ☑ Enviro Data
☐ CLP-Like Package ☐ Other (Specify) →

CLIENT INFORMATION

Client: Tighe & Bond
Address: 300 West Exchange Street, Suite 300
Providence, RI 02903
Phone: 401-455-4306
Email Distribution List: smarokhovsky@tighebond.com, jharvey@tighebond.com, maabraham@tighebond.com

PROJECT INFORMATION

Project Name: National Grid - 131 Morse St
Project Location: Foxborough, MA
Project Number: N5067-084
Project Manager: Matthew Abraham
Bill to:
PO#:
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	EPH Carbon Ranges	Fingerprint	Grain Size	Total Number of Bottles
1	12/29/2021	0940	Composite	Soil	B-1 (2.5-5')	X			1
2	12/29/2021	0920	Composite	Soil	B-2 (2.5-5')	X			1
3	12/29/2021	0948	Composite	Soil	B-2 (5-7')	X			1
4	12/29/2021	1122	Composite	Soil	B-3 (2-5')	X		X	1
5	12/29/2021	1145	Composite	Soil	B-3 (5-7')	X	X		1
Container Type:	AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial					AG		AG	
Container Volume:	1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*					9		10	5
Preservation Code:	1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*					1		1	

Sampled by : Shelby Miller Marokhovsky

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only

Cooler Temperature (°C): -1 ICE

Comments: * Please specify "Other" preservative and containers types in this space

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
Shelby Miller Marokhovsky	12/30/21	1550	Clayton Davis		1/7/22	17:01	
Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)

CERTIFICATE OF ANALYSIS

Matt Abraham
Tighe & Bond
120 Front Street, Suite 7
Worcester, MA 01608

RE: NGrid - 131 Morse St (N-5067-084)
ESS Laboratory Work Order Number: 22A0128

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 5:29 pm, Jan 13, 2022

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 22A0128

SAMPLE RECEIPT

The following samples were received on January 06, 2022 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been performed and achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Limit Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

Question I: All samples for EPH were analyzed for a subset of the required MCP list per the client's request.

Lab Number	Sample Name	Matrix	Analysis
22A0128-01	BW-1	Ground Water	EPH8270, MADEP-EPH
22A0128-02	BW-2	Ground Water	EPH8270, MADEP-EPH
22A0128-03	BW-3	Ground Water	EPH8270, MADEP-EPH

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 22A0128

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 22A0128

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH
MADEP 18-2.1 - VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 22A0128

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **22A0128-01 through 22A0128-03**

Matrices: (X) Ground Water/Surface Water ( ) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) MassDEP VPH (GC/PID/FID) CAM IV A	( ) 8082 PCB CAM V A	( ) 9014 Total Cyanide/PAC CAM VI A	( ) 6860 Perchlorate CAM VIII B
( ) 8270 SVOC CAM II B	( ) 7010 Metals CAM III C	( ) MassDEP VPH (GC/MS) CAM IV C	( ) 8081 Pesticides CAM V B	( ) 7196 Hex Cr CAM VI B	( ) MassDEP APH CAM IX A
( ) 6010 Metals CAM III A	( ) 6020 Metals CAM III D	(X) MassDEP EPH CAM IV B	( ) 8151 Herbicides CAM V C	( ) Explosives CAM VIII A	( ) TO-15 VOC CAM IX B

Affirmative responses to questions A through F are 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 (X) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (X) 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 (X) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (X) No ( )
E	VPH, EPH, APH and TO-15 only: a. Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes (X) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (X) No ( )

Responses to Questions G, H and I below are required for '"Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)?	Yes (X) No ( )*
	***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.**	
H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	Yes (X) No ( )*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes ( ) No (X)*

****All negative responses must be addressed in an attached laboratory narrative.***

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Laurel Stoddard Date: January 13, 2022

Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St
Client Sample ID: BW-1
Date Sampled: 01/06/22 10:50
Percent Solids: N/A
Initial Volume: 1010
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 22A0128
ESS Laboratory Sample ID: 22A0128-01
Sample Matrix: Ground Water
Units: ug/L

Prepared: 1/10/22 16:20

MADEP-EPH Extractable Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C9-C18 Aliphatics1	ND (99)		MADEP-EPH		1	MJV	01/11/22 19:58	D2A0140	DA21001
C19-C36 Aliphatics1	ND (99)		MADEP-EPH		1	MJV	01/11/22 19:58	D2A0140	DA21001
C11-C22 Unadjusted Aromatics1	ND (99.0)		EPH8270		1	MJV	01/11/22 23:37	D2A0142	DA21001
C11-C22 Aromatics1,2	ND (99.0)		EPH8270			MJV	01/11/22 23:37		[CALC]
Preservative:	**pH <= 2**		MADEP-EPH			MJV			DA21001

	%Recovery	Qualifier	Limits
Surrogate: 1-Chlorooctadecane	*54 %*		*40-140*
Surrogate: 2-Bromonaphthalene	*90 %*		*40-140*
Surrogate: 2-Fluorobiphenyl	*92 %*		*40-140*
Surrogate: O-Terphenyl	*99 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St
Client Sample ID: BW-2
Date Sampled: 01/06/22 11:45
Percent Solids: N/A
Initial Volume: 1020
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 22A0128
ESS Laboratory Sample ID: 22A0128-02
Sample Matrix: Ground Water
Units: ug/L

Prepared: 1/10/22 16:20

MADEP-EPH Extractable Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C9-C18 Aliphatics1	ND (98)		MADEP-EPH		1	MJV	01/11/22 20:33	D2A0140	DA21001
C19-C36 Aliphatics1	ND (98)		MADEP-EPH		1	MJV	01/11/22 20:33	D2A0140	DA21001
C11-C22 Unadjusted Aromatics1	ND (98.0)		EPH8270		1	MJV	01/12/22 0:15	D2A0142	DA21001
C11-C22 Aromatics1,2	ND (98.0)		EPH8270			MJV	01/12/22 0:15		[CALC]
Preservative:	**pH <= 2**		MADEP-EPH			MJV			DA21001

	%Recovery	Qualifier	Limits
Surrogate: 1-Chlorooctadecane	*77 %*		*40-140*
Surrogate: 2-Bromonaphthalene	*94 %*		*40-140*
Surrogate: 2-Fluorobiphenyl	*93 %*		*40-140*
Surrogate: O-Terphenyl	*101 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St
Client Sample ID: BW-3
Date Sampled: 01/06/22 13:10
Percent Solids: N/A
Initial Volume: 1020
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 22A0128
ESS Laboratory Sample ID: 22A0128-03
Sample Matrix: Ground Water
Units: ug/L

Prepared: 1/10/22 16:20

MADEP-EPH Extractable Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C9-C18 Aliphatics1	ND (98)		MADEP-EPH		1	MJV	01/11/22 21:08	D2A0140	DA21001
C19-C36 Aliphatics1	ND (98)		MADEP-EPH		1	MJV	01/11/22 21:08	D2A0140	DA21001
C11-C22 Unadjusted Aromatics1	ND (98.0)		EPH8270		1	MJV	01/12/22 0:52	D2A0142	DA21001
C11-C22 Aromatics1,2	ND (98.0)		EPH8270			MJV	01/12/22 0:52		[CALC]
Preservative:	**pH <= 2**		MADEP-EPH			MJV			DA21001

	%Recovery	Qualifier	Limits
Surrogate: 1-Chlorooctadecane	*73 %*		*40-140*
Surrogate: 2-Bromonaphthalene	*92 %*		*40-140*
Surrogate: 2-Fluorobiphenyl	*97 %*		*40-140*
Surrogate: O-Terphenyl	*101 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 22A0128

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
MADEP-EPH Extractable Petroleum Hydrocarbons										
Batch DA21001 - 3510C										
Blank										
C19-C36 Aliphatics1	ND	100	ug/L							
C9-C18 Aliphatics1	ND	100	ug/L							
Surrogate: 1-Chlorooctadecane	*43.6*		ug/L	*50.00*		*87*	*40-140*			
Blank										
2-Methylnaphthalene	ND	5.0	ug/L							
Acenaphthene	ND	5.0	ug/L							
Acenaphthylene	ND	5.0	ug/L							
Anthracene	ND	5.0	ug/L							
Benzo(a)anthracene	ND	5.0	ug/L							
Benzo(a)pyrene	ND	10.0	ug/L							
Benzo(b)fluoranthene	ND	5.0	ug/L							
Benzo(g,h,i)perylene	ND	10.0	ug/L							
Benzo(k)fluoranthene	ND	10.0	ug/L							
C11-C22 Unadjusted Aromatics1	ND	100	ug/L							
Chrysene	ND	10.0	ug/L							
Dibenzo(a,h)Anthracene	ND	5.0	ug/L							
Fluoranthene	ND	10.0	ug/L							
Fluorene	ND	5.0	ug/L							
Indeno(1,2,3-cd)Pyrene	ND	5.0	ug/L							
Naphthalene	ND	10.0	ug/L							
Phenanthrene	ND	5.0	ug/L							
Pyrene	ND	5.0	ug/L							
Surrogate: 2-Bromonaphthalene	*42.2*		ug/L	*50.00*		*84*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*43.3*		ug/L	*50.00*		*87*	*40-140*			
Surrogate: O-Terphenyl	*46.1*		ug/L	*50.00*		*92*	*40-140*			
LCS										
C19-C36 Aliphatics1	360	100	ug/L	400.0		90	40-140			
C9-C18 Aliphatics1	212	100	ug/L	300.0		71	40-140			
Surrogate: 1-Chlorooctadecane	*47.9*		ug/L	*50.00*		*96*	*40-140*			
LCS										
2-Methylnaphthalene	36.6	5.0	ug/L	50.00		73	40-140			
Acenaphthene	42.3	5.0	ug/L	50.00		85	40-140			
Acenaphthylene	39.5	5.0	ug/L	50.00		79	40-140			
Anthracene	47.5	5.0	ug/L	50.00		95	40-140			
Benzo(a)anthracene	41.6	5.0	ug/L	50.00		83	40-140			
Benzo(a)pyrene	41.3	10.0	ug/L	50.00		83	40-140			
Benzo(b)fluoranthene	39.3	5.0	ug/L	50.00		79	40-140			
Benzo(g,h,i)perylene	43.8	10.0	ug/L	50.00		88	40-140			
Benzo(k)fluoranthene	40.6	10.0	ug/L	50.00		81	40-140			
C11-C22 Unadjusted Aromatics1	815	100	ug/L	850.0		96	40-140			
Chrysene	43.7	10.0	ug/L	50.00		87	40-140			
Dibenzo(a,h)Anthracene	43.1	5.0	ug/L	50.00		86	40-140			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 22A0128

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
MADEP-EPH Extractable Petroleum Hydrocarbons										
Batch DA21001 - 3510C										
Fluoranthene	45.3	10.0	ug/L	50.00		91	40-140			
Fluorene	41.7	5.0	ug/L	50.00		83	40-140			
Indeno(1,2,3-cd)Pyrene	42.6	5.0	ug/L	50.00		85	40-140			
Naphthalene	34.5	10.0	ug/L	50.00		69	40-140			
Phenanthrene	44.6	5.0	ug/L	50.00		89	40-140			
Pyrene	44.8	5.0	ug/L	50.00		90	40-140			
Surrogate: 2-Bromonaphthalene	*46.4*		ug/L	*50.00*		*93*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*48.2*		ug/L	*50.00*		*96*	*40-140*			
Surrogate: O-Terphenyl	*51.1*		ug/L	*50.00*		*102*	*40-140*			
LCS										
2-Methylnaphthalene Breakthrough	0.0		%				0-5			
Naphthalene Breakthrough	0.0		%				0-5			
LCS Dup										
C19-C36 Aliphatics1	358	100	ug/L	400.0		90	40-140	0.5	25	
C9-C18 Aliphatics1	215	100	ug/L	300.0		72	40-140	2	25	
Surrogate: 1-Chlorooctadecane	*48.3*		ug/L	*50.00*		*97*	*40-140*			
LCS Dup										
2-Methylnaphthalene	34.4	5.0	ug/L	50.00		69	40-140	6	20	
Acenaphthene	42.7	5.0	ug/L	50.00		85	40-140	0.9	20	
Acenaphthylene	40.6	5.0	ug/L	50.00		81	40-140	3	20	
Anthracene	46.0	5.0	ug/L	50.00		92	40-140	3	20	
Benzo(a)anthracene	40.1	5.0	ug/L	50.00		80	40-140	4	20	
Benzo(a)pyrene	39.8	10.0	ug/L	50.00		80	40-140	3	20	
Benzo(b)fluoranthene	39.2	5.0	ug/L	50.00		78	40-140	0.3	20	
Benzo(g,h,i)perylene	42.1	10.0	ug/L	50.00		84	40-140	4	20	
Benzo(k)fluoranthene	41.5	10.0	ug/L	50.00		83	40-140	2	20	
C11-C22 Unadjusted Aromatics1	788	100	ug/L	850.0		93	40-140	3	25	
Chrysene	42.7	10.0	ug/L	50.00		85	40-140	2	20	
Dibenzo(a,h)Anthracene	43.0	5.0	ug/L	50.00		86	40-140	0.3	20	
Fluoranthene	43.0	10.0	ug/L	50.00		86	40-140	5	20	
Fluorene	41.4	5.0	ug/L	50.00		83	40-140	0.9	20	
Indeno(1,2,3-cd)Pyrene	41.4	5.0	ug/L	50.00		83	40-140	3	20	
Naphthalene	35.7	10.0	ug/L	50.00		71	40-140	3	20	
Phenanthrene	43.4	5.0	ug/L	50.00		87	40-140	3	20	
Pyrene	45.4	5.0	ug/L	50.00		91	40-140	1	20	
Surrogate: 2-Bromonaphthalene	*46.3*		ug/L	*50.00*		*93*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*48.5*		ug/L	*50.00*		*97*	*40-140*			
Surrogate: O-Terphenyl	*50.8*		ug/L	*50.00*		*102*	*40-140*			
LCS Dup										
2-Methylnaphthalene Breakthrough	0.0		%				0-5		200	
Naphthalene Breakthrough	0.0		%				0-5		200	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 22A0128

Notes and Definitions

Z-06	pH <= 2
U	Analyte included in the analysis, but not detected
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probable Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: NGrid - 131 Morse St

ESS Laboratory Work Order: 22A0128

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Tighe & Bond - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 22A0128
Date Received: 1/6/2022
Project Due Date: 1/13/2022
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.5 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	247894	Yes	N/A	Yes	1L Amber	HCl	
1	247895	Yes	N/A	Yes	1L Amber	HCl	
2	247896	Yes	N/A	Yes	1L Amber	HCl	
2	247897	Yes	N/A	Yes	1L Amber	HCl	
3	247898	Yes	N/A	Yes	1L Amber	HCl	
3	247899	Yes	N/A	Yes	1L Amber	HCl	

2nd Review
Were all containers scanned into storage/lab? Initials KL
Are barcode labels on correct containers? Yes / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: Date & Time: 1.6.22 1533

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Tighe & Bond - KPB/TB

ESS Project ID: 22A0128

Date Received: 1/6/2022

Reviewed By: Taylor Dawes

Date & Time: 1530 1/6/22

KL 1.6.22 22A0128

185 Frances Avenue
Cranston, RI 02910
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 22A0128 | Page 1 of 1

Turn Time (Days): ☐ > 5 ☑ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Massachusetts **Criteria:** GW-2 & GW-3

Is this project for any of the following?:

☐ CT RCP ☑ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)

☑ Limit Checker ☐ State Forms ☐ EQuIS
☑ Excel ☐ Hard Copy ☑ Enviro Data
☐ CLP-Like Package ☐ Other (Specify) →

CLIENT INFORMATION

Client: Tighe & Bond
Address: 300 West Exchange Street, Suite 300
Providence, RI 02903
Phone: 401-455-4306

Email Distribution List: smarokhovsky@tighebond.com, jharvey@tighebond.com, maabraham@tighebond.com

PROJECT INFORMATION

Project Name: National Grid - 131 Morse St
Project Location: Foxborough, MA
Project Number: N5067-084
Project Manager: Matthew Abraham
Bill to:
PO#: 2350067084
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	EPH Carbon Ranges	Total Number of Bottles
1	01/06/22	1050	Grab	GW	BW-1	X	2
2	01/06/22	1145	Grab	GW	BW-2	X	2
3	01/06/22	1310	Grab	GW	BW-3	X	2

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — AG

Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 6

Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 2

Total Number of Bottles: 6

Sampled by : Ellie Petraccione

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only

Cooler Temperature (°C): 3.5
Ice

Comments: * Please specify "Other" preservative and containers types in this space

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration

☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
Ellie Petraccione	01/06/22	1428	1/6/22 14:28		1/6/22	15:23	

CERTIFICATE OF ANALYSIS

Matt Abraham
Tighe & Bond
120 Front Street, Suite 7
Worcester, MA 01608

RE: MEC - 131 Morse St Foxborough MA (N-5067-084)
ESS Laboratory Work Order Number: 20L0353

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 12:51 pm, Dec 24, 2020

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 20L0353

SAMPLE RECEIPT

The following samples were received on December 10, 2020 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been performed and achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Limit Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

Question I: All samples for EPH were analyzed for a subset of the required MCP list per the client's request.

Revision 1 December 24, 2020: This report has been revised to exclude quantitative TPH result for 20L0353-02.

Lab Number	Sample Name	Matrix	Analysis
20L0353-01	SW-1	Surface Water	EPH8270, MADEP-EPH
20L0353-02	SW-2	Surface Water	8100M
20L0353-03	SW-3	Surface Water	EPH8270, MADEP-EPH

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA ESS Laboratory Work Order: 20L0353

PROJECT NARRATIVE

MADEP-EPH Extractable Petroleum Hydrocarbons
D0L0303-CCV2 **Continuing Calibration %Diff/Drift is below control limit (CD-).**
Hexatriacontane (C36) (33% @ 25%)

No other observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 20L0353

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH
MADEP 18-2.1 - VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 20L0353

MassDEP Analytical Protocol Certification Form

MADEP RTN: _____

This form provides certification for the following data set: **20L0353-01 through 20L0353-03**

Matrices: (x) Ground Water/Surface Water ( ) Soil/Sediment ( ) Drinking Water ( ) Air ( ) Other:_____

CAM Protocol (check all that apply below):

( ) 8260 VOC CAM II A	( ) 7470/7471 Hg CAM III B	( ) MassDEP VPH (GC/PID/FID) CAM IV A	( ) 8082 PCB CAM V A	( ) 9014 Total Cyanide/PAC CAM VI A	( ) 6860 Perchlorate CAM VIII B
( ) 8270 SVOC CAM II B	( ) 7010 Metals CAM III C	( ) MassDEP VPH (GC/MS) CAM IV C	( ) 8081 Pesticides CAM V B	( ) 7196 Hex Cr CAM VI B	( ) MassDEP APH CAM IX A
( ) 6010 Metals CAM III A	( ) 6020 Metals CAM III D	(x) MassDEP EPH CAM IV B	( ) 8151 Herbicides CAM V C	( ) Explosives CAM VIII A	( ) TO-15 VOC CAM IX B

Affirmative responses to questions A through F are 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 (x) No ( )
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	Yes (x) 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 (x) No ( )
D	Does the laboratory report comply with all the reporting requirements specified in the CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?	Yes (x) No ( )
E	VPH, EPH, APH and TO-15 only: a. Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications).	Yes (x) No ( )
	b. APH and TO-15 Methods only: Was the complete analyte list reported for each method?	Yes ( ) No ( )
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 (x) No ( )

Responses to Questions G, H and I below are required for '"Presumptive Certainty" status

G	Were the reporting limits at or below all CAM reporting limits specified in the selected CAM protocols(s)? ***Data User Note:*** ***Data that achieve "Presumptive Certainty" status may not necessarily meet the data usability and representativeness requirements described in 310 CMR 40. 1056 (2)(k) and WSC-07-350.***	Yes (x) No ( )*
H	Were **all** QC performance standards specified in the CAM protocol(s) achieved?	Yes (x) No ( )*
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	Yes ( ) No (x)*

****All negative responses must be addressed in an attached laboratory narrative.***

I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.

Signature: Laurel Stoddard Date: December 21, 2020

Printed Name: Laurel Stoddard Position: Laboratory Director

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA
Client Sample ID: SW-1
Date Sampled: 12/09/20 09:50
Percent Solids: N/A
Initial Volume: 1000
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 20L0353
ESS Laboratory Sample ID: 20L0353-01
Sample Matrix: Surface Water
Units: ug/L

Prepared: 12/14/20 13:48

MADEP-EPH Extractable Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C9-C18 Aliphatics1	ND (100)		MADEP-EPH		1	AMF	12/16/20 0:27	D0L0303	DL01408
C19-C36 Aliphatics1	ND (100)		MADEP-EPH		1	AMF	12/16/20 0:27	D0L0303	DL01408
C11-C22 Unadjusted Aromatics1	ND (100)		EPH8270		1	AMF	12/19/20 3:28	D0L0364	DL01408
C11-C22 Aromatics1,2	ND (100)		EPH8270			AMF	12/19/20 3:28		[CALC]
Preservative:	**pH <= 2**		MADEP-EPH			AMF			DL01408

	%Recovery	Qualifier	Limits
Surrogate: 1-Chlorooctadecane	*49 %*		*40-140*
Surrogate: 2-Bromonaphthalene	*79 %*		*40-140*
Surrogate: 2-Fluorobiphenyl	*91 %*		*40-140*
Surrogate: O-Terphenyl	*73 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA
Client Sample ID: SW-2
Date Sampled: 12/09/20 09:20
Percent Solids: N/A
Initial Volume: 1050
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 20L0353
ESS Laboratory Sample ID: 20L0353-02
Sample Matrix: Surface Water
Units: ug/L
Analyst: AMF
Prepared: 12/16/20 16:10

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Fingerprint	**Resembles: Transformer Oil Range.**							
	%Recovery		*Qualifier*	*Limits*				
Surrogate: O-Terphenyl	*100 %*			*40-140*				

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA
Client Sample ID: SW-3
Date Sampled: 12/09/20 09:15
Percent Solids: N/A
Initial Volume: 1050
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 20L0353
ESS Laboratory Sample ID: 20L0353-03
Sample Matrix: Surface Water
Units: ug/L

Prepared: 12/14/20 13:48

MADEP-EPH Extractable Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C9-C18 Aliphatics1	ND (95)		MADEP-EPH		1	AMF	12/16/20 1:16	D0L0303	DL01408
C19-C36 Aliphatics1	ND (95)		MADEP-EPH		1	AMF	12/16/20 1:16	D0L0303	DL01408
C11-C22 Unadjusted Aromatics1	ND (95.2)		EPH8270		1	AMF	12/19/20 5:55	D0L0364	DL01408
C11-C22 Aromatics1,2	ND (95.2)		EPH8270			AMF	12/19/20 5:55		[CALC]
Preservative:	**pH <= 2**		MADEP-EPH			AMF			DL01408

	%Recovery	Qualifier	Limits
Surrogate: 1-Chlorooctadecane	*49 %*		*40-140*
Surrogate: 2-Bromonaphthalene	*74 %*		*40-140*
Surrogate: 2-Fluorobiphenyl	*84 %*		*40-140*
Surrogate: O-Terphenyl	*70 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 20L0353

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8100M Total Petroleum Hydrocarbons										
Batch DL01604 - 3510C										
Blank										
Decane (C10)	ND	5.00	ug/L							
Docosane (C22)	ND	5.00	ug/L							
Dodecane (C12)	ND	5.00	ug/L							
Eicosane (C20)	ND	5.00	ug/L							
Hexacosane (C26)	ND	5.00	ug/L							
Hexadecane (C16)	ND	5.00	ug/L							
Hexatriacontane (C36)	ND	5.00	ug/L							
Nonadecane (C19)	ND	5.00	ug/L							
Nonane (C9)	ND	5.00	ug/L							
Octacosane (C28)	ND	5.00	ug/L							
Octadecane (C18)	ND	5.00	ug/L							
Tetracosane (C24)	ND	5.00	ug/L							
Tetradecane (C14)	ND	5.00	ug/L							
Total Petroleum Hydrocarbons	ND	100	ug/L							
Triacontane (C30)	ND	5.00	ug/L							
Surrogate: O-Terphenyl	*103*		ug/L	*100.0*		*103*	*40-140*			
LCS										
Decane (C10)	35.5	5.00	ug/L	50.00		71	40-140			
Docosane (C22)	44.4	5.00	ug/L	50.00		89	40-140			
Dodecane (C12)	40.5	5.00	ug/L	50.00		81	40-140			
Eicosane (C20)	44.4	5.00	ug/L	50.00		89	40-140			
Hexacosane (C26)	43.9	5.00	ug/L	50.00		88	40-140			
Hexadecane (C16)	41.3	5.00	ug/L	50.00		83	40-140			
Hexatriacontane (C36)	46.6	5.00	ug/L	50.00		93	40-140			
Nonadecane (C19)	45.6	5.00	ug/L	50.00		91	40-140			
Nonane (C9)	30.1	5.00	ug/L	50.00		60	30-140			
Octacosane (C28)	44.3	5.00	ug/L	50.00		89	40-140			
Octadecane (C18)	42.4	5.00	ug/L	50.00		85	40-140			
Tetracosane (C24)	44.1	5.00	ug/L	50.00		88	40-140			
Tetradecane (C14)	40.0	5.00	ug/L	50.00		80	40-140			
Total Petroleum Hydrocarbons	592	100	ug/L	700.0		85	40-140			
Triacontane (C30)	43.4	5.00	ug/L	50.00		87	40-140			
Surrogate: O-Terphenyl	*95.4*		ug/L	*100.0*		*95*	*40-140*			
LCS Dup										
Decane (C10)	37.0	5.00	ug/L	50.00		74	40-140	4	25	
Docosane (C22)	45.2	5.00	ug/L	50.00		90	40-140	2	25	
Dodecane (C12)	43.0	5.00	ug/L	50.00		86	40-140	6	25	
Eicosane (C20)	45.5	5.00	ug/L	50.00		91	40-140	2	25	
Hexacosane (C26)	44.9	5.00	ug/L	50.00		90	40-140	2	25	
Hexadecane (C16)	43.6	5.00	ug/L	50.00		87	40-140	5	25	
Hexatriacontane (C36)	47.7	5.00	ug/L	50.00		95	40-140	2	25	
Nonadecane (C19)	46.1	5.00	ug/L	50.00		92	40-140	1	25	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 20L0353

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8100M Total Petroleum Hydrocarbons										
Batch DL01604 - 3510C										
Nonane (C9)	31.1	5.00	ug/L	50.00		62	30-140	3	25	
Octacosane (C28)	45.3	5.00	ug/L	50.00		91	40-140	2	25	
Octadecane (C18)	44.1	5.00	ug/L	50.00		88	40-140	4	25	
Tetracosane (C24)	45.1	5.00	ug/L	50.00		90	40-140	2	25	
Tetradecane (C14)	41.3	5.00	ug/L	50.00		83	40-140	3	25	
Total Petroleum Hydrocarbons	610	100	ug/L	700.0		87	40-140	3	25	
Triacontane (C30)	44.4	5.00	ug/L	50.00		89	40-140	2	25	
Surrogate: O-Terphenyl	*95.4*		ug/L	*100.0*		*95*	*40-140*			
MADEP-EPH Extractable Petroleum Hydrocarbons										
Batch DL01408 - 3510C										
Blank										
C19-C36 Aliphatics1	ND	100	ug/L							
C9-C18 Aliphatics1	ND	100	ug/L							
Decane (C10)	ND	5	ug/L							
Docosane (C22)	ND	5	ug/L							
Dodecane (C12)	ND	5	ug/L							
Eicosane (C20)	ND	5	ug/L							
Hexacosane (C26)	ND	5	ug/L							
Hexadecane (C16)	ND	5	ug/L							
Hexatriacontane (C36)	ND	5	ug/L							
Nonadecane (C19)	ND	5	ug/L							
Nonane (C9)	ND	5	ug/L							
Octacosane (C28)	ND	5	ug/L							
Octadecane (C18)	ND	5	ug/L							
Tetracosane (C24)	ND	5	ug/L							
Tetradecane (C14)	ND	5	ug/L							
Triacontane (C30)	ND	5	ug/L							
Surrogate: 1-Chlorooctadecane	*31.0*		ug/L	*50.00*		*62*	*40-140*			
Blank										
2-Methylnaphthalene	ND	5.0	ug/L							
Acenaphthene	ND	5.0	ug/L							
Acenaphthylene	ND	5.0	ug/L							
Anthracene	ND	5.0	ug/L							
Benzo(a)anthracene	ND	5.0	ug/L							
Benzo(a)pyrene	ND	10.0	ug/L							
Benzo(b)fluoranthene	ND	5.0	ug/L							
Benzo(g,h,i)perylene	ND	10.0	ug/L							
Benzo(k)fluoranthene	ND	10.0	ug/L							
C11-C22 Unadjusted Aromatics1	172	100	ug/L							
Chrysene	ND	10.0	ug/L							
Dibenzo(a,h)Anthracene	ND	5.0	ug/L							
Fluoranthene	ND	10.0	ug/L							

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 20L0353

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
MADEP-EPH Extractable Petroleum Hydrocarbons										
Batch DL01408 - 3510C										
Fluorene	ND	5.0	ug/L							
Indeno(1,2,3-cd)Pyrene	ND	5.0	ug/L							
Naphthalene	ND	10.0	ug/L							
Phenanthrene	ND	5.0	ug/L							
Pyrene	ND	5.0	ug/L							
Surrogate: 2-Bromonaphthalene	*40.8*		ug/L	*50.00*		*82*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*47.6*		ug/L	*50.00*		*95*	*40-140*			
Surrogate: O-Terphenyl	*39.4*		ug/L	*50.00*		*79*	*40-140*			
LCS										
C19-C36 Aliphatics1	339	100	ug/L	400.0		85	40-140			
C9-C18 Aliphatics1	213	100	ug/L	300.0		71	40-140			
Decane (C10)	23	5	ug/L	50.00		46	40-140			
Docosane (C22)	44	5	ug/L	50.00		87	40-140			
Dodecane (C12)	27	5	ug/L	50.00		53	40-140			
Eicosane (C20)	43	5	ug/L	50.00		86	40-140			
Hexacosane (C26)	43	5	ug/L	50.00		86	40-140			
Hexadecane (C16)	40	5	ug/L	50.00		79	40-140			
Hexatriacontane (C36)	33	5	ug/L	50.00		66	40-140			
Nonadecane (C19)	43	5	ug/L	50.00		85	40-140			
Nonane (C9)	18	5	ug/L	50.00		35	30-140			
Octacosane (C28)	44	5	ug/L	50.00		87	40-140			
Octadecane (C18)	42	5	ug/L	50.00		84	40-140			
Tetracosane (C24)	44	5	ug/L	50.00		87	40-140			
Tetradecane (C14)	34	5	ug/L	50.00		67	40-140			
Triacontane (C30)	42	5	ug/L	50.00		84	40-140			
Surrogate: 1-Chlorooctadecane	*33.1*		ug/L	*50.00*		*66*	*40-140*			
LCS										
2-Methylnaphthalene	40.4	5.0	ug/L	50.00		81	40-140			
Acenaphthene	43.4	5.0	ug/L	50.00		87	40-140			
Acenaphthylene	43.5	5.0	ug/L	50.00		87	40-140			
Anthracene	48.3	5.0	ug/L	50.00		97	40-140			
Benzo(a)anthracene	41.2	5.0	ug/L	50.00		82	40-140			
Benzo(a)pyrene	42.1	10.0	ug/L	50.00		84	40-140			
Benzo(b)fluoranthene	37.7	5.0	ug/L	50.00		75	40-140			
Benzo(g,h,i)perylene	42.0	10.0	ug/L	50.00		84	40-140			
Benzo(k)fluoranthene	42.5	10.0	ug/L	50.00		85	40-140			
C11-C22 Unadjusted Aromatics1	942	100	ug/L	850.0		111	40-140			
Chrysene	41.1	10.0	ug/L	50.00		82	40-140			
Dibenzo(a,h)Anthracene	42.9	5.0	ug/L	50.00		86	40-140			
Fluoranthene	41.8	10.0	ug/L	50.00		84	40-140			
Fluorene	43.0	5.0	ug/L	50.00		86	40-140			
Indeno(1,2,3-cd)Pyrene	43.8	5.0	ug/L	50.00		88	40-140			
Naphthalene	38.3	10.0	ug/L	50.00		77	40-140			
Phenanthrene	43.1	5.0	ug/L	50.00		86	40-140			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 20L0353

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
MADEP-EPH Extractable Petroleum Hydrocarbons										
Batch DL01408 - 3510C										
Pyrene	42.6	5.0	ug/L	50.00		85	40-140			
Surrogate: 2-Bromonaphthalene	*41.8*		ug/L	*50.00*		*84*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*52.1*		ug/L	*50.00*		*104*	*40-140*			
Surrogate: O-Terphenyl	*41.5*		ug/L	*50.00*		*83*	*40-140*			
LCS										
2-Methylnaphthalene Breakthrough	0.0		%				0-5			
Naphthalene Breakthrough	0.0		%				0-5			
LCS Dup										
C19-C36 Aliphatics1	340	100	ug/L	400.0		85	40-140	0.3	25	
C9-C18 Aliphatics1	205	100	ug/L	300.0		68	40-140	4	25	
Decane (C10)	23	5	ug/L	50.00		46	40-140	0.2	25	
Docosane (C22)	44	5	ug/L	50.00		88	40-140	0.3	25	
Dodecane (C12)	26	5	ug/L	50.00		52	40-140	2	25	
Eicosane (C20)	43	5	ug/L	50.00		87	40-140	0.3	25	
Hexacosane (C26)	43	5	ug/L	50.00		87	40-140	0.4	25	
Hexadecane (C16)	40	5	ug/L	50.00		80	40-140	0.8	25	
Hexatriacontane (C36)	33	5	ug/L	50.00		66	40-140	0.003	25	
Nonadecane (C19)	43	5	ug/L	50.00		85	40-140	0.3	25	
Nonane (C9)	18	5	ug/L	50.00		35	30-140	0.006	25	
Octacosane (C28)	44	5	ug/L	50.00		87	40-140	0.5	25	
Octadecane (C18)	42	5	ug/L	50.00		84	40-140	0.4	25	
Tetracosane (C24)	44	5	ug/L	50.00		88	40-140	0.4	25	
Tetradecane (C14)	34	5	ug/L	50.00		67	40-140	0.1	25	
Triacontane (C30)	42	5	ug/L	50.00		84	40-140	0.6	25	
Surrogate: 1-Chlorooctadecane	*35.2*		ug/L	*50.00*		*70*	*40-140*			
LCS Dup										
2-Methylnaphthalene	37.5	5.0	ug/L	50.00		75	40-140	8	20	
Acenaphthene	41.0	5.0	ug/L	50.00		82	40-140	6	20	
Acenaphthylene	38.5	5.0	ug/L	50.00		77	40-140	12	20	
Anthracene	46.7	5.0	ug/L	50.00		93	40-140	3	20	
Benzo(a)anthracene	38.1	5.0	ug/L	50.00		76	40-140	8	20	
Benzo(a)pyrene	38.6	10.0	ug/L	50.00		77	40-140	9	20	
Benzo(b)fluoranthene	36.9	5.0	ug/L	50.00		74	40-140	2	20	
Benzo(g,h,i)perylene	40.3	10.0	ug/L	50.00		81	40-140	4	20	
Benzo(k)fluoranthene	40.3	10.0	ug/L	50.00		81	40-140	5	20	
C11-C22 Unadjusted Aromatics1	876	100	ug/L	850.0		103	40-140	7	25	
Chrysene	39.7	10.0	ug/L	50.00		79	40-140	4	20	
Dibenzo(a,h)Anthracene	41.7	5.0	ug/L	50.00		83	40-140	3	20	
Fluoranthene	38.8	10.0	ug/L	50.00		78	40-140	8	20	
Fluorene	38.9	5.0	ug/L	50.00		78	40-140	10	20	
Indeno(1,2,3-cd)Pyrene	43.7	5.0	ug/L	50.00		87	40-140	0.3	20	
Naphthalene	36.5	10.0	ug/L	50.00		73	40-140	5	20	
Phenanthrene	41.0	5.0	ug/L	50.00		82	40-140	5	20	
Pyrene	41.5	5.0	ug/L	50.00		83	40-140	3	20	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 20L0353

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
MADEP-EPH Extractable Petroleum Hydrocarbons										
Batch DL01408 - 3510C										
Surrogate: 2-Bromonaphthalene	*39.8*		ug/L	*50.00*		*80*	*40-140*			
Surrogate: 2-Fluorobiphenyl	*48.8*		ug/L	*50.00*		*98*	*40-140*			
Surrogate: O-Terphenyl	*39.0*		ug/L	*50.00*		*78*	*40-140*			
LCS Dup										
2-Methylnaphthalene Breakthrough	0.0		%				0-5		200	
Naphthalene Breakthrough	0.0		%				0-5		200	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA ESS Laboratory Work Order: 20L0353

Notes and Definitions

Z-06	pH <= 2
Z-01	Resembles: Transformer Oil Range.
U	Analyte included in the analysis, but not detected
CD-	Continuing Calibration %Diff/Drift is below control limit (CD-).
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 20L0353

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Tighe & Bond - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 20L0353
Date Received: 12/10/2020
Project Due Date: 12/17/2020
Days for Project: 5 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.6 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	117944	Yes	N/A	Yes	1L Amber	HCl	
1	118711	Yes	N/A	Yes	1L Amber	HCl	
2	117945	Yes	N/A	Yes	1L Amber	HCl	
2	118712	Yes	N/A	Yes	1L Amber	HCl	
3	117946	Yes	N/A	Yes	1L Amber	HCl	
3	118713	Yes	N/A	Yes	1L Amber	HCl	

2nd Review
Were all containers scanned into storage/lab? Initials
Are barcode labels on correct containers? Yes / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: Date & Time: 12/11/20 11:01
Reviewed By: Date & Time: 12/11/20 1344

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Tighe & Bond - KPB/TB

ESS Project ID: 20L0353

Date Received: 12/10/2020

Delivered By: 12/11/20 1344

CHAIN OF CUSTODY

185 Frances Avenue
Cranston, RI 02921
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

ESS Lab # 200353 | Page 1 of 1

Turn Time (Days) ☐ > 5 ☑ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: MA Criteria:

Is this project for any of the following?:

☐ CT RCP ☑ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)

☑ Limit Checker ☐ State Forms ☐ EQuIS
☑ Excel ☐ Hard Copy ☐ Enviro Data
☐ CLP-Like Package ☐ Other (Specify) → PDF

CLIENT INFORMATION

Client: Tighe & Bond
Address: 120 Front street
Worcester, MA 01608
Phone:
Email: MAAbraham@Tighebond.com
Distribution List: CBieksha@Tighebond.com

PROJECT INFORMATION

Project Name: 131 Morse Street
Project Location: Foxborough, MA
Project Number: N-5067-084
Project Manager: Matt Abraham
Bill to: MEC
PO#:
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	EPH present	EPH w/ Carbon Ranges	TPH Fingerprint Only	Total Number of Bottles
1	12/9/20	0950	G	W	SW-1	X	X		2
2	12/9/20	0920	G	W	SW-2	X		X	2
3	12/9/20	0915	G	W	SW-3	X	X		2

per Matt Abraham 12/10/20

Container Type: AC-Air Cassette (AG-Amber Glass) B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial — 46
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL (6-1L) 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other* — 6
Preservation Code: 1-Non Preserved (2-HCl) 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other* — 2

Sampled by: CJB cell- 978-503-8055

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only

Cooler Temperature (°C): 3.6°

Comments: * Please specify "Other" preservative and containers types in this space

Do not need ppm amount. Only need to know if EPH is present.

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration

☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
[signature]	12/9/20	11:15	Refrigerator	Abraham Ramos	12/10/20	10:00	Abraham. R
Abraham Ramos	12/10	17:48	[signature]				

Laboratory Analysis Report

244916

Tighe & Bond

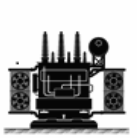
CUSTOMER INFORMATION		ORDER INFORMATION		REPORT AUTHORIZATION	
Address:	Tighe & Bond 53 S Hampton Road Westfield, MA 01085	**Purchase Order:**	235067	**Authorized By:**	Flecker, Ben
		Submitter Ref:		**Email:**	BFlecker@doble.com
		Date Received:	10/05/2020	**Authorization Signature:**	
		Report Revision:			
Primary Contact:	Ryan Basting				
Primary Email:	rmbasting@tighebond.com			**Date Report Issued:**	10/05/2020

Thank you for using Doble Engineering analytical laboratory services, we greatly appreciate the opportunity to serve you and value your business. In accordance with your request, we have performed testing on the sample(s) provided. If the sampling date is not provided, the sample receipt date is used to provide chronological information. Should you have any comments, suggestions or questions please feel free to contact us at the Email listed above.

Samples Requiring Immediate Attention

APPARATUS DETAIL

TRANSFORMER



Serial Number: 83JL073026	**Cooling:**	**Temp Rise C:**	**Syringe No:**
Equipment No:	**Max KV:**	**Preservation:**	**Misc. ID:**
XFMR/TRN Name:	**Max MVA:**	**Liquid Type:**	**Work Order:**
Substation:	**XFMR/TRN Type:**	**Volume:**	**Sample Date:** 10/04/2020
Manufacturer: Westinghouse Electric	**Design Type:**	**Vol Units:**	**Sample Time:** 2:35 pm
Year Made:	**1 or 3 Phase:**	**Limit Set:** Doble	**Sampling Reason:**

SAMPLING INFORMATION

Sampled By:
Sample Point: Bottom
Top Oil Temp C:
Humidity:
Amb Temp C:

Sample Id: 244916-001 **Serial Number:** 83JL073026 **Misc Id:**

Miscellaneous Tests

	Sample Date:	10/4/2020
	Analysis Date:	10/5/2020
	Doble Sample Id:	244916-001
	Top Oil Temperature:	
PCB Content	D4059 (ppm)^	<2
Aroclor Detected	^	ND

^These samples were performed under the Doble and Morgan Schaffer laboratories ISO 17025 accreditation. (Accreditation Date: 10/1/2018)
*Imported results from non-Doble or Morgan Schaffer sources, the accuracy of the results cannot be determined

Comments: This sample is considered to be 'Non-PCB' (<50 ppm) per EPA regulations listed in 40 CFR part 761.

CERTIFICATE OF ANALYSIS

Matt Abraham
Tighe & Bond
120 Front Street, Suite 7
Worcester, MA 01608

RE: MEC - 131 Morse St Foxborough MA (N-5067-084)
ESS Laboratory Work Order Number: 21C0376

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 4:17 pm, Mar 17, 2021

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 21C0376

SAMPLE RECEIPT

The following samples were received on March 10, 2021 for the analyses specified on the enclosed Chain of Custody Record.

To achieve CAM compliance for MCP data, ESS Laboratory has reviewed all QA/QC Requirements and Performance Standards listed in each method. Holding times and preservation have also been reviewed. All CAM requirements have been performed and achieved unless noted in the project narrative.

Each method has been set-up in the laboratory to reach required MCP standards. The methods for aqueous VOA and Soil Methanol VOA have known limitations for certain analytes. The regulatory standards may not be achieved due to these limitations. In addition, for all methods, matrix interferences, dilutions, and %Solids may elevate method reporting limits above regulatory standards. ESS Laboratory can provide, upon request, a Limit Checker (regulatory standard comparison spreadsheet) electronic deliverable which will highlight these exceedances.

Question I: All samples for EPH were analyzed for a subset of the required MCP list per the client's request.

GC-FID Fingerprint
Sample Emulsified Product (21C0376-01) contained a mixture of material eluting in the mid to heavy molecular weight ranges of the chromatogram. This material is similar to a combination of near equal parts of transformer oil and a heavier molecular weight material eluting in the lubricating oil range. Examples of this heavier material are waste, lubricating and motor oils.

Lab Number	Sample Name	Matrix	Analysis
21C0376-01	Emulsified Product	Aqueous	8100M

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA ESS Laboratory Work Order: 21C0376

PROJECT NARRATIVE

No unusual observations noted.

End of Project Narrative.

DATA USABILITY LINKS

To ensure you are viewing the most current version of the documents below, please clear your internet cookies for www.ESSLaboratory.com. Consult your IT Support personnel for information on how to clear your internet cookies.

Definitions of Quality Control Parameters

Semivolatile Organics Internal Standard Information

Semivolatile Organics Surrogate Information

Volatile Organics Internal Standard Information

Volatile Organics Surrogate Information

EPH and VPH Alkane Lists

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 21C0376

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH
MADEP 18-2.1 - VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035A - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA
Client Sample ID: Emulsified Product
Date Sampled: 03/09/21 12:30
Percent Solids: N/A
Initial Volume: 10
Final Volume: 1
Extraction Method: 3510C

ESS Laboratory Work Order: 21C0376
ESS Laboratory Sample ID: 21C0376-01
Sample Matrix: Aqueous
Units: ug/L
Analyst: TLW
Prepared: 3/11/21 16:28

8100M Total Petroleum Hydrocarbons

Analyte	Results (MRL)	MDL	Method	Limit	DF	Analyzed	Sequence	Batch
Total Petroleum Hydrocarbons	**16400** (10000)		8100M		1	03/16/21 13:33	D1C0277	DC11107
Fingerprint	**Resembles: See Narrative..**							

	%Recovery	Qualifier	Limits
Surrogate: O-Terphenyl	*123 %*		*40-140*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 21C0376

Quality Control Data

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
8100M Total Petroleum Hydrocarbons										
Batch DC11107 - 3510C										
Blank										
Decane (C10)	ND	5.00	ug/L							
Docosane (C22)	ND	5.00	ug/L							
Dodecane (C12)	ND	5.00	ug/L							
Eicosane (C20)	ND	5.00	ug/L							
Hexacosane (C26)	ND	5.00	ug/L							
Hexadecane (C16)	ND	5.00	ug/L							
Hexatriacontane (C36)	ND	5.00	ug/L							
Nonadecane (C19)	ND	5.00	ug/L							
Nonane (C9)	ND	5.00	ug/L							
Octacosane (C28)	ND	5.00	ug/L							
Octadecane (C18)	ND	5.00	ug/L							
Tetracosane (C24)	ND	5.00	ug/L							
Tetradecane (C14)	ND	5.00	ug/L							
Total Petroleum Hydrocarbons	ND	100	ug/L							
Triacontane (C30)	ND	5.00	ug/L							
Surrogate: O-Terphenyl	*103*		ug/L	*100.0*		*103*	*40-140*			
LCS										
Decane (C10)	35.4	5.00	ug/L	50.00		71	40-140			
Docosane (C22)	43.0	5.00	ug/L	50.00		86	40-140			
Dodecane (C12)	40.9	5.00	ug/L	50.00		82	40-140			
Eicosane (C20)	43.0	5.00	ug/L	50.00		86	40-140			
Hexacosane (C26)	43.0	5.00	ug/L	50.00		86	40-140			
Hexadecane (C16)	42.5	5.00	ug/L	50.00		85	40-140			
Hexatriacontane (C36)	48.8	5.00	ug/L	50.00		98	40-140			
Nonadecane (C19)	43.0	5.00	ug/L	50.00		86	40-140			
Nonane (C9)	30.1	5.00	ug/L	50.00		60	30-140			
Octacosane (C28)	43.1	5.00	ug/L	50.00		86	40-140			
Octadecane (C18)	42.5	5.00	ug/L	50.00		85	40-140			
Tetracosane (C24)	43.2	5.00	ug/L	50.00		86	40-140			
Tetradecane (C14)	42.1	5.00	ug/L	50.00		84	40-140			
Total Petroleum Hydrocarbons	605	100	ug/L	700.0		86	40-140			
Triacontane (C30)	42.6	5.00	ug/L	50.00		85	40-140			
Surrogate: O-Terphenyl	*92.0*		ug/L	*100.0*		*92*	*40-140*			
LCS Dup										
Decane (C10)	44.1	5.00	ug/L	50.00		88	40-140	22	25	
Docosane (C22)	54.8	5.00	ug/L	50.00		110	40-140	24	25	
Dodecane (C12)	51.6	5.00	ug/L	50.00		103	40-140	23	25	
Eicosane (C20)	54.8	5.00	ug/L	50.00		110	40-140	24	25	
Hexacosane (C26)	54.8	5.00	ug/L	50.00		110	40-140	24	25	
Hexadecane (C16)	53.7	5.00	ug/L	50.00		107	40-140	23	25	
Hexatriacontane (C36)	60.8	5.00	ug/L	50.00		122	40-140	22	25	
Nonadecane (C19)	54.4	5.00	ug/L	50.00		109	40-140	23	25	

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 21C0376

Quality Control Data

8100M Total Petroleum Hydrocarbons

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
Batch DC11107 - 3510C										
Nonane (C9)	36.5	5.00	ug/L	50.00		73	30-140	19	25	
Octacosane (C28)	54.8	5.00	ug/L	50.00		110	40-140	24	25	
Octadecane (C18)	54.1	5.00	ug/L	50.00		108	40-140	24	25	
Tetracosane (C24)	54.9	5.00	ug/L	50.00		110	40-140	24	25	
Tetradecane (C14)	53.3	5.00	ug/L	50.00		107	40-140	23	25	
Total Petroleum Hydrocarbons	769	100	ug/L	700.0		110	40-140	24	25	
Triacontane (C30)	54.3	5.00	ug/L	50.00		109	40-140	24	25	
Surrogate: O-Terphenyl	*116*		ug/L	*100.0*		*116*	*40-140*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA ESS Laboratory Work Order: 21C0376

Notes and Definitions

Z-01	Resembles: See Narrative..
U	Analyte included in the analysis, but not detected
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report
RL	Reporting Limit
EDL	Estimated Detection Limit
MF	Membrane Filtration
MPN	Most Probably Number
TNTC	Too numerous to Count
CFU	Colony Forming Units

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: MEC - 131 Morse St Foxborough MA

ESS Laboratory Work Order: 21C0376

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

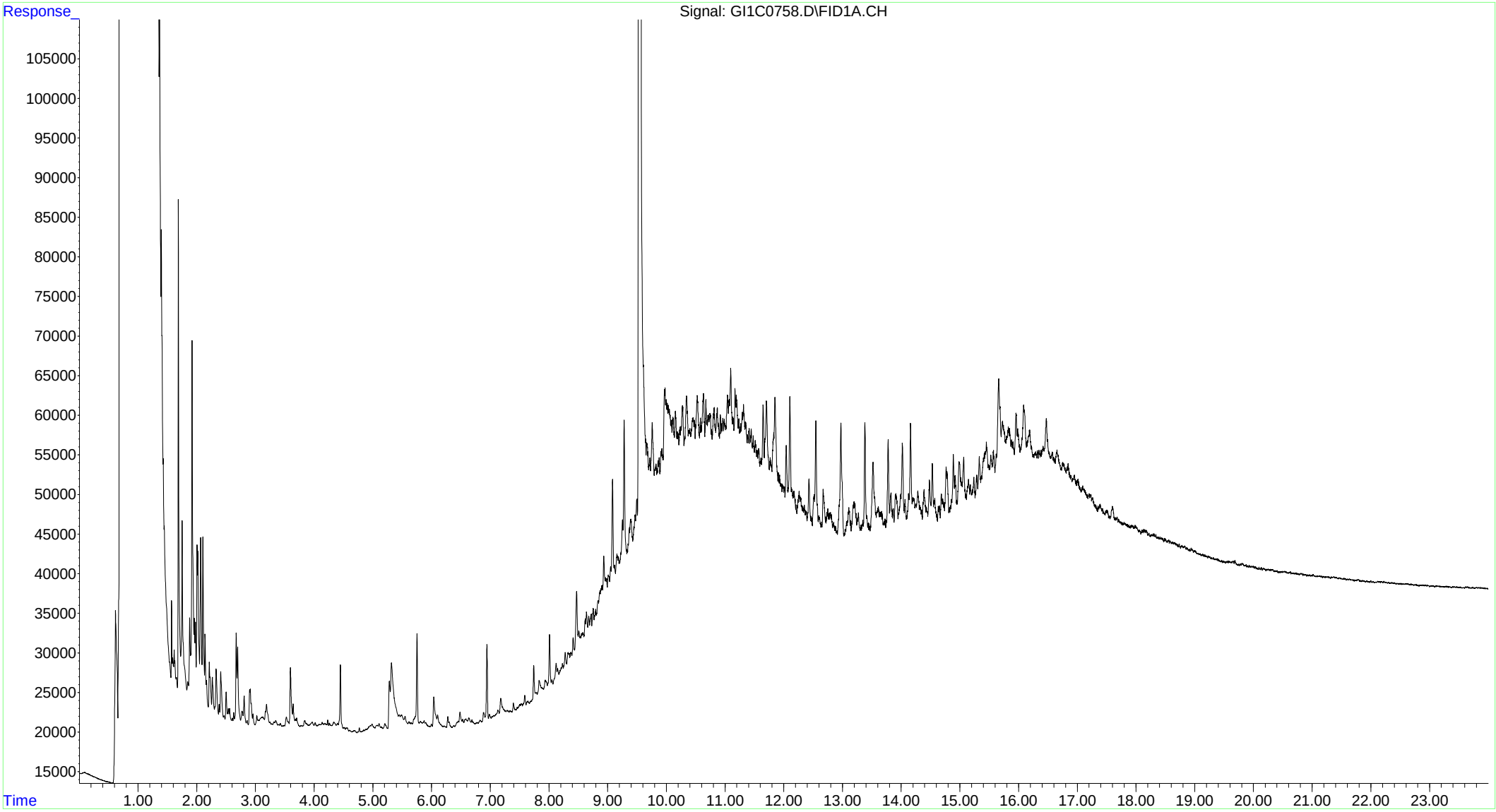
New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

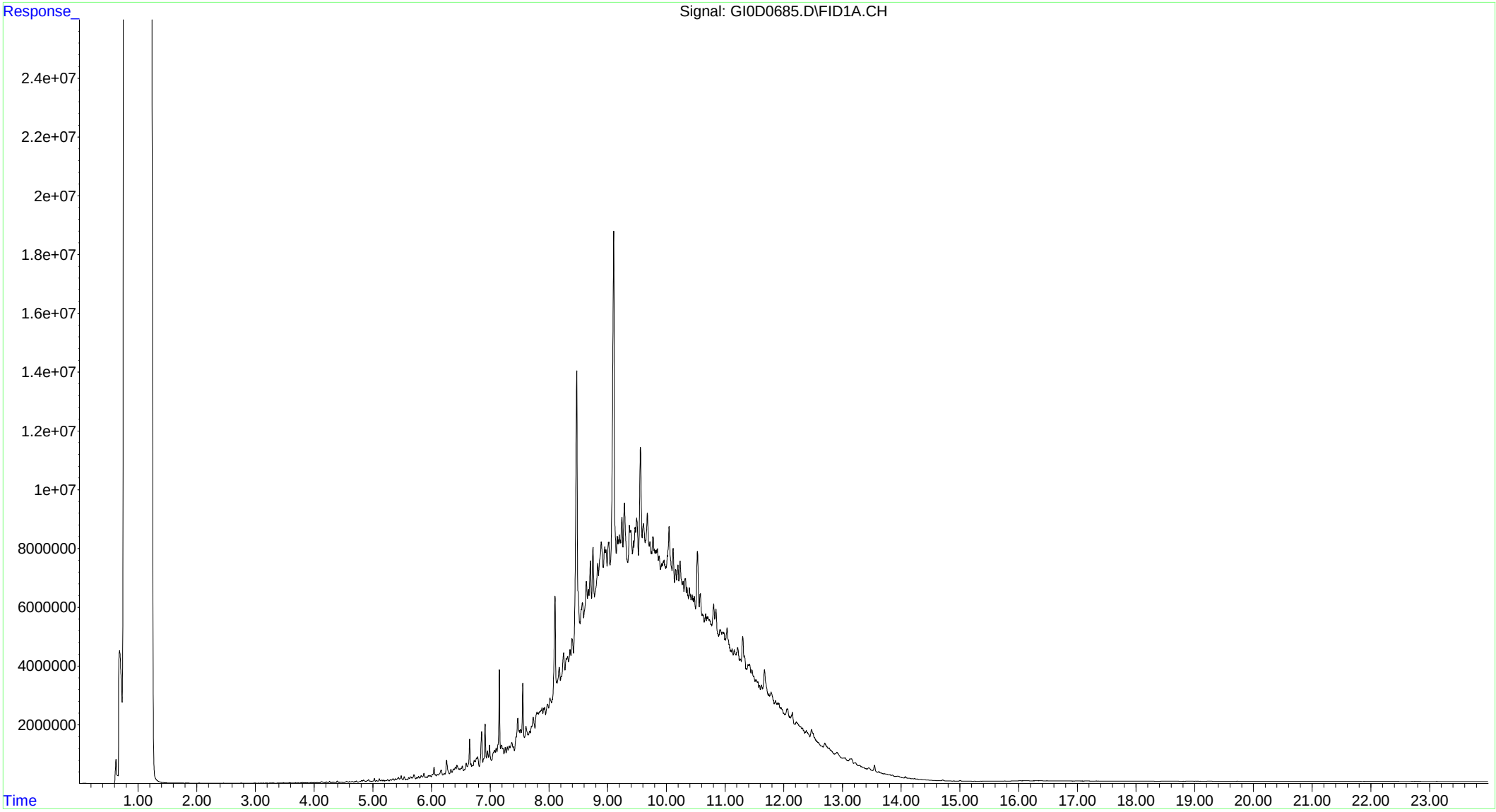
United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

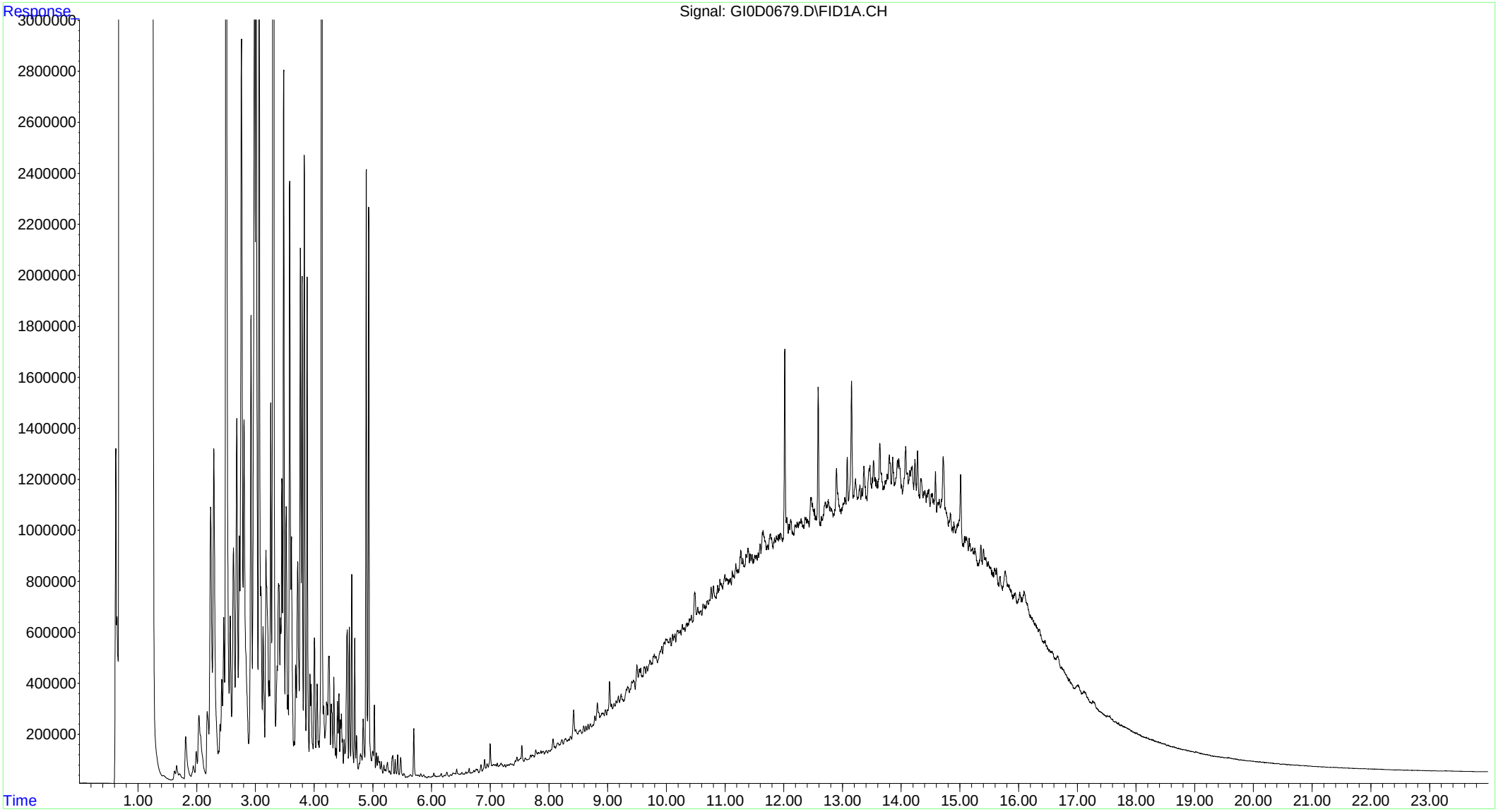
File :Q:\SVOA\GC9_GK\Data\031621\GI1C0758.D
Operator : TLW
Acquired : 16 Mar 2021 1:33 pm using AcqMethod TPH9ACQF.M
Instrument : SVOAGC9
Sample Name: 21C0376-01
Misc Info :
Vial Number: 3



File :Q:\SVOA\GC9_GK\FP Standards\FP Overlay 042820\GI0D0685.D
Operator : CAD
Acquired : 29 Apr 2020 1:21 am using AcqMethod TPH9T1.M
Instrument : SVOAGC9
Sample Name: Transformer Oil
Misc Info :
Vial Number: 29



File :Q:\SVOA\GC9_GK\FP Standards\FP Overlay 042820\GI0D0679.D
Operator : CAD
Acquired : 28 Apr 2020 10:05 pm using AcqMethod TPH9T1.M
Instrument : SVOAGC9
Sample Name: Used Motor Oil
Misc Info :
Vial Number: 23



ESS Laboratory Sample and Cooler Receipt Checklist

Client: Tighe & Bond - KPB/TB

Shipped/Delivered Via: ESS Courier

ESS Project ID: 21C0376
Date Received: 3/10/2021
Project Due Date: 3/15/2021
Days for Project: 3 Day

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.2 Iced with: Ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / NA
10. Were any analyses received outside of hold time? Yes / No

11. Any Subcontracting needed? Yes / No
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / No
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? Yes / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / No
    a. Was there a need to contact the client? Yes / No
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608 Pesticides)
1	142114	Yes	N/A	Yes	8 oz jar	NP	

2nd Review

Were all containers scanned into storage/lab? Initials

Are barcode labels on correct containers? Yes / No
Are all Flashpoint stickers attached/container ID # circled? Yes / No / NA
Are all Hex Chrome stickers attached? Yes / No / NA
Are all QC stickers attached? Yes / No / NA
Are VOA stickers attached if bubbles noted? Yes / No / NA

Completed By: Taylor Davis Date & Time: 18:57 3/10/21

Reviewed By: Date & Time: 3/10/21 1904

185 Frances Avenue
Cranston, RI 02921
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

CHAIN OF CUSTODY

ESS Lab # 21C0376 | Page 1 of 1

Turn Time: ☐ > 5 ☒ 5 ☐ 4 ☒ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: MA Criteria: S-1 / S-2 / S-3

Is this project for any of the following?: ☐ CT RCP ☒ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)

☒ Limit Checker ☐ State Forms ☐ EQuIS
☒ Excel ☐ Hard Copy ☒ Enviro Data
☐ CLP-Like Package ☐ Other (Specify) →

CLIENT INFORMATION

Client: Tighe + Bond
Address: 120 Front St
Worcester MA 01608
Phone:
Email Distribution List: KLewis@Tighebond.com
MAAbraham@Tighebond.com

PROJECT INFORMATION

Project Name: 131 Morse St. Foxborough MA
Project Location: " "
Project Number: N-5067-034
Project Manager: Keri Lewis / Matthew Abraham
Bill to:
PO#:
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	X TPH Fingerprint	Total Number of Bottles
1	3/9/21	1230	G	O	Emulsified Product	X	

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*

Sampled by :

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 3.2

Comments: * Please specify "Other" preservative and containers types in this space

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration ☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
[signature]	3/10/21	930	[signature]	[signature]	3/10/21	935	[signature] 3/10/21 16:48
[signature]	3/10/21	18:23	[signature] 18:23 3/10/21				

CERTIFICATE OF ANALYSIS

Matt Abraham
Tighe & Bond
4 Barlows Landing Rd., Unit 15
Pocasset, MA 02559

RE: 131 Morse St. Foxborough MA (N-5067-084)
ESS Laboratory Work Order Number: F210005

This signed Certificate of Analysis is our approved release of your analytical results. These results are only representative of sample aliquots received at the laboratory. ESS Laboratory expects its clients to follow all regulatory sampling guidelines. Beginning with this page, the entire report has been paginated. This report should not be copied except in full without the approval of the laboratory. Samples will be disposed of thirty days after the final report has been delivered. If you have any questions or concerns, please feel free to call our Customer Service Department.

Laurel Stoddard
Laboratory Director

REVIEWED
By ESS Laboratory at 12:40 pm, Apr 13, 2021

Analytical Summary
The project as described above has been analyzed in accordance with the ESS Quality Assurance Plan. This plan utilizes the following methodologies: US EPA SW-846, US EPA Methods for Chemical Analysis of Water and Wastes per 40 CFR Part 136, APHA Standard Methods for the Examination of Water and Wastewater, American Society for Testing and Materials (ASTM), and other recognized methodologies. The analyses with these noted observations are in conformance to the Quality Assurance Plan. In chromatographic analysis, manual integration is frequently used instead of automated integration because it produces more accurate results.

The test results present in this report are in compliance with TNI and relative state standards, and/or client Quality Assurance Project Plans (QAPP). The laboratory has reviewed the following: Sample Preservations, Hold Times, Initial Calibrations, Continuing Calibrations, Method Blanks, Blank Spikes, Blank Spike Duplicates, Duplicates, Matrix Spikes, Matrix Spike Duplicates, Surrogates and Internal Standards. Any results which were found to be outside of the recommended ranges stated in our SOPs will be noted in the Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: 131 Morse St. Foxborough MA

ESS Laboratory Work Order: F210005

SAMPLE RECEIPT

The following samples were received on April 02, 2021 for the analyses specified on the enclosed Chain of Custody Record.

Lab Number	Sample Name	Matrix	Analysis
F210005-01	emulsified product 4/2/21	Net	8015 Mod
F210005-02	PX-5	Soil	8015 Mod

Client Name: Tighe & Bond

Client Project ID: 131 Morse St. Foxborough, MA ESS Laboratory Work Order: F210005

PROJECT NARRATIVE

1 net sample was received on 04-02-2021. 1 reference soil sample was received on 03/02/2021 and held in frozen storage.

The net and soil sample were prepared by solvent extraction (EPA 3570) using dichloromethane (DCM). The extracts were spiked with internal standard and analyzed by GC/FID (EPA 8015M) for fingerprinting.

Total Petroleum Hydrocarbons (GC-FID Fingerprint)

Sample emulsified product 4/2/21 (F210005-01) contained material eluting in the n-tetradecane (c14) to n-tetracontane (c40) hydrocarbon range. The material present appears to be similar to a dielectric fluid/transformer oil. The distribution of alkanes and slight unresolved complex mixture (UCM) at the end of the chromatogram indicates the presence of humic material. It was noted prior to extraction that the sheen sampler had the presence of soil/sediment and plant material.

The sample was compared to reference soil sample PX-5 (F210005-02). The material present in both samples appear to be from similar sources. Chromatographic differences could be contributed but not limited to the differences in matrix, solubility and water washing of the material present on the sheen sampler and potential weathering differences of each sample. These differences do not allow for a definitive chromatographic determination to be made.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: 131 Morse St. Foxborough MA

ESS Laboratory Work Order: F210005

PROJECT NARRATIVE

All quality control parameters met the specified criteria.

End of Project Narrative.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: 131 Morse St. Foxborough MA

ESS Laboratory Work Order: F210005

CURRENT SW-846 METHODOLOGY VERSIONS

Analytical Methods

1010A - Flashpoint
6010C - ICP
6020A - ICP MS
7010 - Graphite Furnace
7196A - Hexavalent Chromium
7470A - Aqueous Mercury
7471B - Solid Mercury
8011 - EDB/DBCP/TCP
8015B Mod - TPH by GCFID
8015C - GRO/DRO
8081B - Pesticides
8082A - PCB
8100M - TPH
8151A - Herbicides
8260B - VOA
8270D - SVOA
8270D Mod - Alkylated PAHs and Benzenes
8270D SIM - SVOA Low Level
9014 - Cyanide
9038 - Sulfate
9040C - Aqueous pH
9045D - Solid pH (Corrosivity)
9050A - Specific Conductance
9056A - Anions (IC)
9060A - TOC
9095B - Paint Filter
MADEP 04-1.1 - EPH / VPH

Prep Methods

3005A - Aqueous ICP Digestion
3020A - Aqueous Graphite Furnace / ICP MS Digestion
3050B - Solid ICP / Graphite Furnace / ICP MS Digestion
3060A - Solid Hexavalent Chromium Digestion
3510C - Separatory Funnel Extraction
3511 - Microsolvent Extraction Aqueous
3520C - Liquid / Liquid Extraction
3540C - Manual Soxhlet Extraction
3541 - Automated Soxhlet Extraction
3546 - Microwave Extraction
3570 - Microsolvent Extraction Soild
3580A - Waste Dilution
5030B - Aqueous Purge and Trap
5030C - Aqueous Purge and Trap
5035 - Solid Purge and Trap

SW846 Reactivity Methods 7.3.3.2 (Reactive Cyanide) and 7.3.4.1 (Reactive Sulfide) have been withdrawn by EPA. These methods are reported per client request and are not NELAP accredited.

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: 131 Morse St. Foxborough MA
Client Sample ID: emulsified product 4/2/21
Date Sampled: 04/02/21 10:00
Percent Solids: N/A
Initial Volume: 1
Final Volume: 2
Extraction Method: 3570

ESS Laboratory Work Order: F210005
ESS Laboratory Sample ID: F210005-01
Sample Matrix: Net
Units: ug/Net
Analyst: NXL
Prepared: 4/7/21 6:50

Saturated Hydrocarbons by GC/FID

Analyte	Results (RL)	EDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C-8	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-9	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-10	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-11	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-12	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-13	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
2,6,10-trimethyldodecane (1380)	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-14	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
2,6,10-trimethyltridecane (1470)	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-15	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-16	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
2,6,10-trimethylpentadecane (1650)	**J 5.36** (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-17	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
Pristane	**17.4** (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-18	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
Phytane	**40.7** (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-19	**J 9.92** (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-20	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-21	**22.3** (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-22	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-23	**10.3** (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-24	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-25	**41.6** (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-26	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-27	**39.9** (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-28	**J 5.82** (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-29	**141** (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-30	**J 9.31** (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-31	**60.2** (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-32	**J 8.63** (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-33	**28.4** (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-34	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: 131 Morse St. Foxborough MA
Client Sample ID: emulsified product 4/2/21
Date Sampled: 04/02/21 10:00
Percent Solids: N/A
Initial Volume: 1
Final Volume: 2
Extraction Method: 3570

ESS Laboratory Work Order: F210005
ESS Laboratory Sample ID: F210005-01
Sample Matrix: Net
Units: ug/Net
Analyst: NXL
Prepared: 4/7/21 6:50

Saturated Hydrocarbons by GC/FID

Analyte	Results (RL)	EDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C-35	**J 8.22** (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-36	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-37	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-38	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-39	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
C-40	ND (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701
TPH (C8-C40)	**22300** (10.0)	5.00	8015 Mod		5	NXL	04/08/21 9:02	F1D0005	FD10701

	%Recovery	Qualifier	Limits
Surrogate: o-Terphenyl	*63 %*		*50-120*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: 131 Morse St. Foxborough MA
Client Sample ID: PX-5
Date Sampled: 02/24/21 14:20
Percent Solids: 83
Initial Volume: 2.6
Final Volume: 2
Extraction Method: 3570

ESS Laboratory Work Order: F210005
ESS Laboratory Sample ID: F210005-02
Sample Matrix: Soil
Units: mg/Kg dry
Analyst: NXL
Prepared: 4/7/21 6:50

Saturated Hydrocarbons by GC/FID

Analyte	Results (RL)	EDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C-8	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-9	**J 3.34** (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-10	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-11	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-12	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-13	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
2,6,10-trimethyldodecane (1380)	**J 2.57** (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-14	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
2,6,10-trimethyltridecane (1470)	**18.0** (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-15	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-16	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
2,6,10-trimethylpentadecane (1650)	**25.9** (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-17	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
Pristane	**53.6** (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-18	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
Phytane	**80.8** (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-19	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-20	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-21	**24.2** (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-22	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-23	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-24	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-25	**J 3.15** (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-26	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-27	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-28	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-29	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-30	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-31	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-32	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-33	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-34	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: 131 Morse St. Foxborough MA
Client Sample ID: PX-5
Date Sampled: 02/24/21 14:20
Percent Solids: 83
Initial Volume: 2.6
Final Volume: 2
Extraction Method: 3570

ESS Laboratory Work Order: F210005
ESS Laboratory Sample ID: F210005-02
Sample Matrix: Soil
Units: mg/Kg dry
Analyst: NXL
Prepared: 4/7/21 6:50

Saturated Hydrocarbons by GC/FID

Analyte	Results (RL)	EDL	Method	Limit	DF	Analyst	Analyzed	Sequence	Batch
C-35	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-36	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-37	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-38	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-39	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
C-40	ND (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702
TPH (C8-C40)	**36800** (4.63)	2.31	8015 Mod		5	NXL	04/08/21 6:14	F1D0001	FD10702

	%Recovery	Qualifier	Limits
Surrogate: o-Terphenyl	*89 %*		*50-120*

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: 131 Morse St. Foxborough MA

ESS Laboratory Work Order: F210005

Quality Control Data

Saturated Hydrocarbons by GC/FID

Batch FD10701 - 3570

Blank

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
C-8	ND	2.00	ug/Net							
C-9	1.43	2.00	ug/Net							J
C-10	ND	2.00	ug/Net							
C-11	ND	2.00	ug/Net							
C-12	ND	2.00	ug/Net							
C-13	ND	2.00	ug/Net							
2,6,10-trimethyldodecane (1380)	ND	2.00	ug/Net							
C-14	ND	2.00	ug/Net							
2,6,10-trimethyltridecane (1470)	ND	2.00	ug/Net							
C-15	ND	2.00	ug/Net							
C-16	ND	2.00	ug/Net							
2,6,10-trimethylpentadecane (1650)	ND	2.00	ug/Net							
C-17	ND	2.00	ug/Net							
Pristane	ND	2.00	ug/Net							
C-18	ND	2.00	ug/Net							
Phytane	ND	2.00	ug/Net							
C-19	ND	2.00	ug/Net							
C-20	ND	2.00	ug/Net							
C-21	ND	2.00	ug/Net							
C-22	ND	2.00	ug/Net							
C-23	ND	2.00	ug/Net							
C-24	ND	2.00	ug/Net							
C-25	ND	2.00	ug/Net							
C-26	ND	2.00	ug/Net							
C-27	ND	2.00	ug/Net							
C-28	ND	2.00	ug/Net							
C-29	ND	2.00	ug/Net							
C-30	ND	2.00	ug/Net							
C-31	ND	2.00	ug/Net							
C-32	ND	2.00	ug/Net							
C-33	ND	2.00	ug/Net							
C-34	ND	2.00	ug/Net							
C-35	ND	2.00	ug/Net							
C-36	ND	2.00	ug/Net							
C-37	ND	2.00	ug/Net							
C-38	ND	2.00	ug/Net							
C-39	ND	2.00	ug/Net							
C-40	ND	2.00	ug/Net							
TPH (C8-C40)	ND	2.00	ug/Net							
Surrogate: o-Terphenyl	*44.7*		ug/Net	*50.00*		*89*	*50-120*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: 131 Morse St. Foxborough MA

ESS Laboratory Work Order: F210005

Quality Control Data

Saturated Hydrocarbons by GC/FID

Batch FD10701 - 3570

LCS

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
C-8	39.1	2.00	ug/Net	50.00		78	60-130			
C-9	38.8	2.00	ug/Net	50.00		78	60-130			
C-10	40.0	2.00	ug/Net	50.00		80	60-130			
C-11	41.2	2.00	ug/Net	50.00		82	60-130			
C-12	42.0	2.00	ug/Net	50.00		84	60-130			
C-13	40.9	2.00	ug/Net	50.00		82	60-130			
C-14	40.9	2.00	ug/Net	50.00		82	60-130			
C-15	42.4	2.00	ug/Net	50.00		85	60-130			
C-16	40.4	2.00	ug/Net	50.00		81	60-130			
C-17	40.4	2.00	ug/Net	50.00		81	60-130			
Pristane	39.9	2.00	ug/Net	50.00		80	60-130			
C-18	39.0	2.00	ug/Net	50.00		78	60-130			
Phytane	40.7	2.00	ug/Net	50.00		81	60-130			
C-19	39.8	2.00	ug/Net	50.00		80	60-130			
C-20	39.0	2.00	ug/Net	50.00		78	60-130			
C-21	39.4	2.00	ug/Net	50.00		79	60-130			
C-22	37.9	2.00	ug/Net	50.00		76	60-130			
C-23	38.8	2.00	ug/Net	50.00		78	60-130			
C-24	38.9	2.00	ug/Net	50.00		78	60-130			
C-25	40.9	2.00	ug/Net	50.00		82	60-130			
C-26	38.8	2.00	ug/Net	50.00		78	60-130			
C-27	38.7	2.00	ug/Net	50.00		77	60-130			
C-28	36.8	2.00	ug/Net	50.00		74	60-130			
C-29	38.3	2.00	ug/Net	50.00		77	60-130			
C-30	38.2	2.00	ug/Net	50.00		76	60-130			
C-31	38.1	2.00	ug/Net	50.00		76	60-130			
C-32	38.1	2.00	ug/Net	50.00		76	60-130			
C-33	38.0	2.00	ug/Net	50.00		76	60-130			
C-34	38.0	2.00	ug/Net	50.00		76	60-130			
C-35	38.1	2.00	ug/Net	50.00		76	60-130			
C-36	38.2	2.00	ug/Net	50.00		76	60-130			
C-37	37.7	2.00	ug/Net	50.00		75	60-130			
C-38	38.8	2.00	ug/Net	50.00		78	60-130			
C-39	37.5	2.00	ug/Net	50.00		75	60-130			
C-40	39.2	2.00	ug/Net	50.00		78	60-130			
Surrogate: o-Terphenyl	*42.9*		ug/Net	*50.00*		*86*	*50-120*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: 131 Morse St. Foxborough MA

ESS Laboratory Work Order: F210005

Quality Control Data

Saturated Hydrocarbons by GC/FID

Batch FD10702 - 3570

Blank

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
C-8	ND	0.400	mg/Kg wet							
C-9	0.286	0.400	mg/Kg wet							J
C-10	ND	0.400	mg/Kg wet							
C-11	ND	0.400	mg/Kg wet							
C-12	ND	0.400	mg/Kg wet							
C-13	ND	0.400	mg/Kg wet							
2,6,10-trimethyldodecane (1380)	ND	0.400	mg/Kg wet							
C-14	ND	0.400	mg/Kg wet							
2,6,10-trimethyltridecane (1470)	ND	0.400	mg/Kg wet							
C-15	ND	0.400	mg/Kg wet							
C-16	ND	0.400	mg/Kg wet							
2,6,10-trimethylpentadecane (1650)	ND	0.400	mg/Kg wet							
C-17	ND	0.400	mg/Kg wet							
Pristane	ND	0.400	mg/Kg wet							
C-18	ND	0.400	mg/Kg wet							
Phytane	ND	0.400	mg/Kg wet							
C-19	ND	0.400	mg/Kg wet							
C-20	ND	0.400	mg/Kg wet							
C-21	ND	0.400	mg/Kg wet							
C-22	ND	0.400	mg/Kg wet							
C-23	ND	0.400	mg/Kg wet							
C-24	ND	0.400	mg/Kg wet							
C-25	ND	0.400	mg/Kg wet							
C-26	ND	0.400	mg/Kg wet							
C-27	ND	0.400	mg/Kg wet							
C-28	ND	0.400	mg/Kg wet							
C-29	ND	0.400	mg/Kg wet							
C-30	ND	0.400	mg/Kg wet							
C-31	ND	0.400	mg/Kg wet							
C-32	ND	0.400	mg/Kg wet							
C-33	ND	0.400	mg/Kg wet							
C-34	ND	0.400	mg/Kg wet							
C-35	ND	0.400	mg/Kg wet							
C-36	ND	0.400	mg/Kg wet							
C-37	ND	0.400	mg/Kg wet							
C-38	ND	0.400	mg/Kg wet							
C-39	ND	0.400	mg/Kg wet							
C-40	ND	0.400	mg/Kg wet							
TPH (C8-C40)	ND	0.400	mg/Kg wet							
Surrogate: o-Terphenyl	*8.94*		mg/Kg wet	*10.00*		*89*	*50-120*			

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: 131 Morse St. Foxborough MA

ESS Laboratory Work Order: F210005

Quality Control Data

Saturated Hydrocarbons by GC/FID

Batch FD10702 - 3570

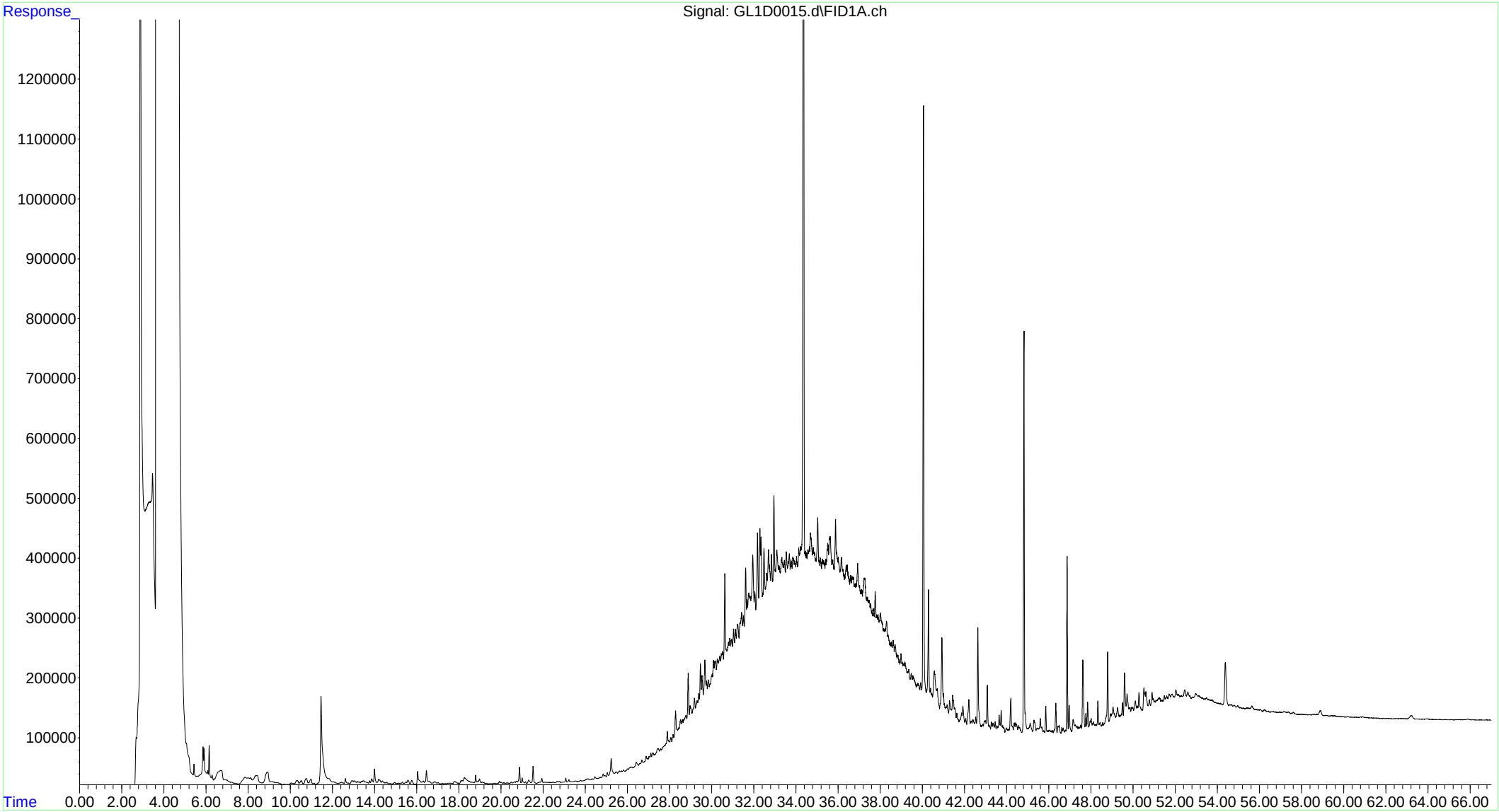
LCS

Analyte	Result	MRL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifier
C-8	7.82	0.400	mg/Kg wet	10.00		78	60-130			
C-9	7.76	0.400	mg/Kg wet	10.00		78	60-130			
C-10	8.01	0.400	mg/Kg wet	10.00		80	60-130			
C-11	8.23	0.400	mg/Kg wet	10.00		82	60-130			
C-12	8.41	0.400	mg/Kg wet	10.00		84	60-130			
C-13	8.18	0.400	mg/Kg wet	10.00		82	60-130			
C-14	8.18	0.400	mg/Kg wet	10.00		82	60-130			
C-15	8.47	0.400	mg/Kg wet	10.00		85	60-130			
C-16	8.09	0.400	mg/Kg wet	10.00		81	60-130			
C-17	8.07	0.400	mg/Kg wet	10.00		81	60-130			
Pristane	7.97	0.400	mg/Kg wet	10.00		80	60-130			
C-18	7.79	0.400	mg/Kg wet	10.00		78	60-130			
Phytane	8.15	0.400	mg/Kg wet	10.00		81	60-130			
C-19	7.95	0.400	mg/Kg wet	10.00		80	60-130			
C-20	7.80	0.400	mg/Kg wet	10.00		78	60-130			
C-21	7.89	0.400	mg/Kg wet	10.00		79	60-130			
C-22	7.58	0.400	mg/Kg wet	10.00		76	60-130			
C-23	7.77	0.400	mg/Kg wet	10.00		78	60-130			
C-24	7.78	0.400	mg/Kg wet	10.00		78	60-130			
C-25	8.18	0.400	mg/Kg wet	10.00		82	60-130			
C-26	7.75	0.400	mg/Kg wet	10.00		78	60-130			
C-27	7.75	0.400	mg/Kg wet	10.00		77	60-130			
C-28	7.36	0.400	mg/Kg wet	10.00		74	60-130			
C-29	7.67	0.400	mg/Kg wet	10.00		77	60-130			
C-30	7.64	0.400	mg/Kg wet	10.00		76	60-130			
C-31	7.63	0.400	mg/Kg wet	10.00		76	60-130			
C-32	7.62	0.400	mg/Kg wet	10.00		76	60-130			
C-33	7.60	0.400	mg/Kg wet	10.00		76	60-130			
C-34	7.61	0.400	mg/Kg wet	10.00		76	60-130			
C-35	7.63	0.400	mg/Kg wet	10.00		76	60-130			
C-36	7.65	0.400	mg/Kg wet	10.00		76	60-130			
C-37	7.55	0.400	mg/Kg wet	10.00		75	60-130			
C-38	7.76	0.400	mg/Kg wet	10.00		78	60-130			
C-39	7.49	0.400	mg/Kg wet	10.00		75	60-130			
C-40	7.85	0.400	mg/Kg wet	10.00		78	60-130			
Surrogate: o-Terphenyl	*8.57*		mg/Kg wet	*10.00*		*86*	*50-120*			

GC-FID Chromatograms

```
File       :Q:\SVOA\GC12_GL\Data\GL0421\040721\GL1D0015.d
Operator   : NXL
Acquired   :  8 Apr 2021   9:02 am using AcqMethod GC12-DATA-ACQUISITION-4.M
Instrument :   SVOA-GC12
Sample Name: F210005-01
Misc Info  : 5
Vial Number: 25
```

emulsified product 4/2/21 [ESS Lab ID: F210005-01]



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File       :Q:\SVOA\GC12_GL\Data\GL0421\040721\GL1D0019.d
Operator   : NXL
Acquired   :  8 Apr 2021   2:22 pm using AcqMethod GC12-DATA-ACQUISITION-4.M
Instrument :   SVOA-GC12
Sample Name: F210005-02
Misc Info  : 20
Vial Number: 24
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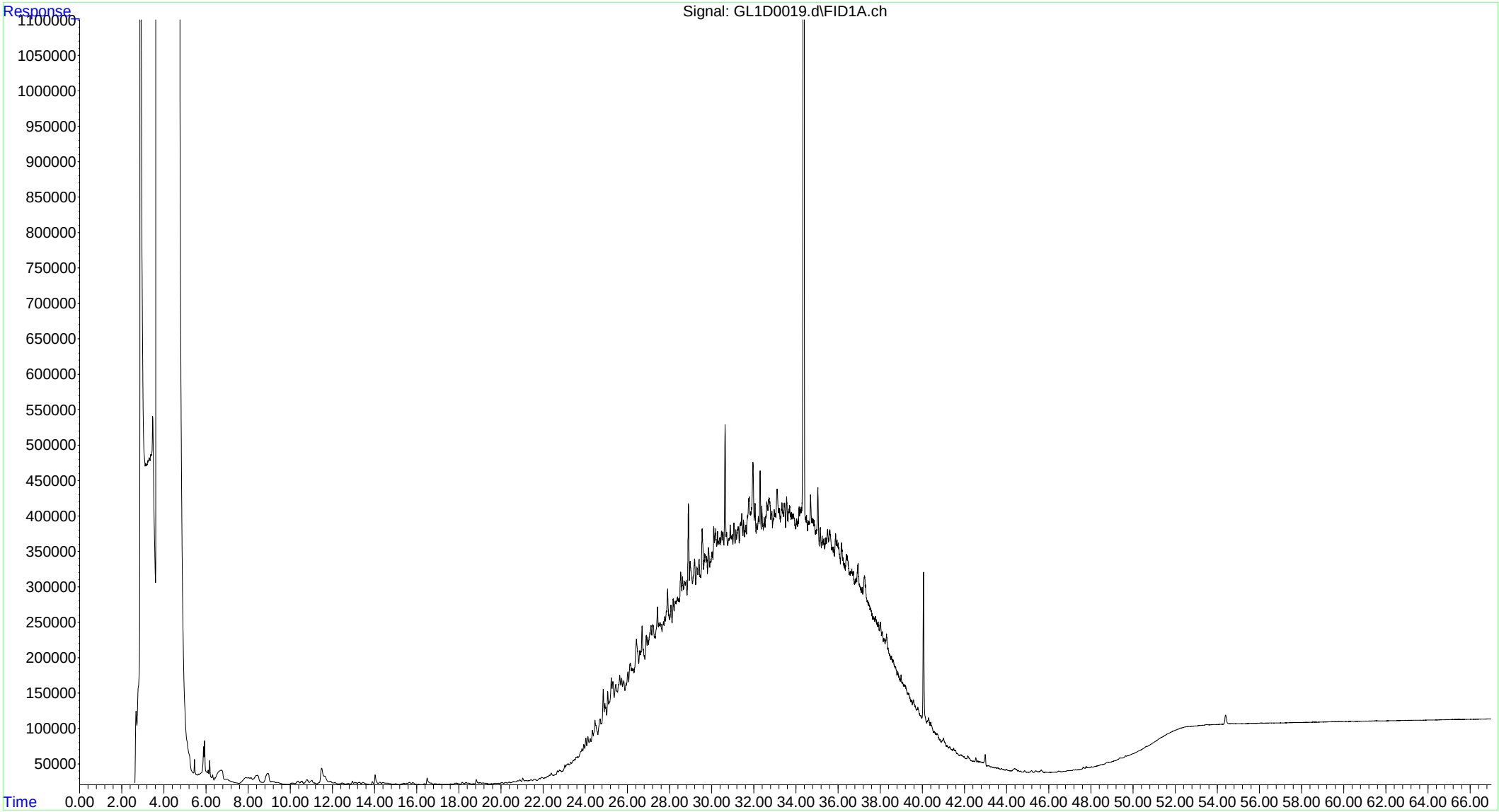
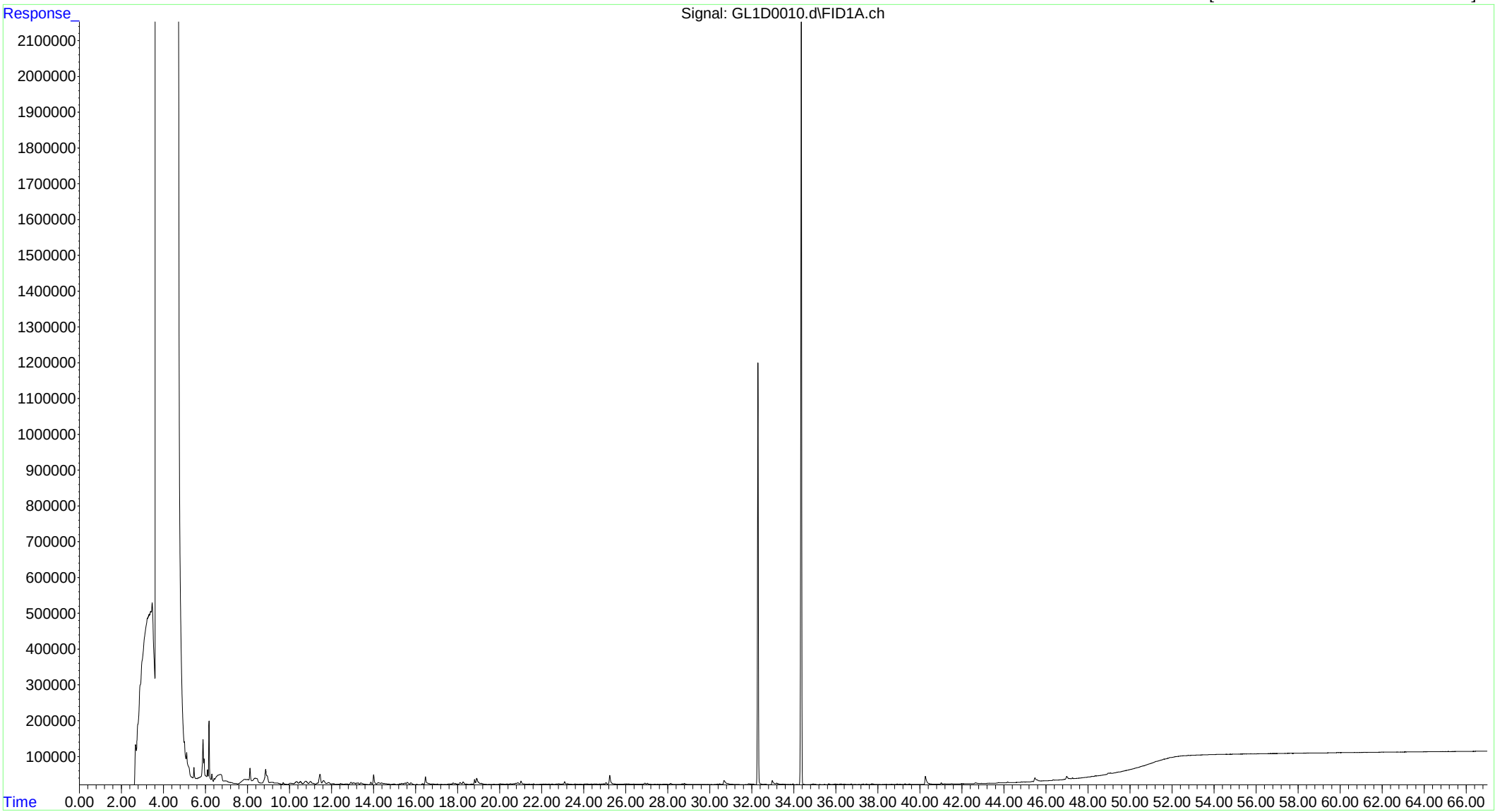
PX-5 [ESS Lab ID: F210005-02]



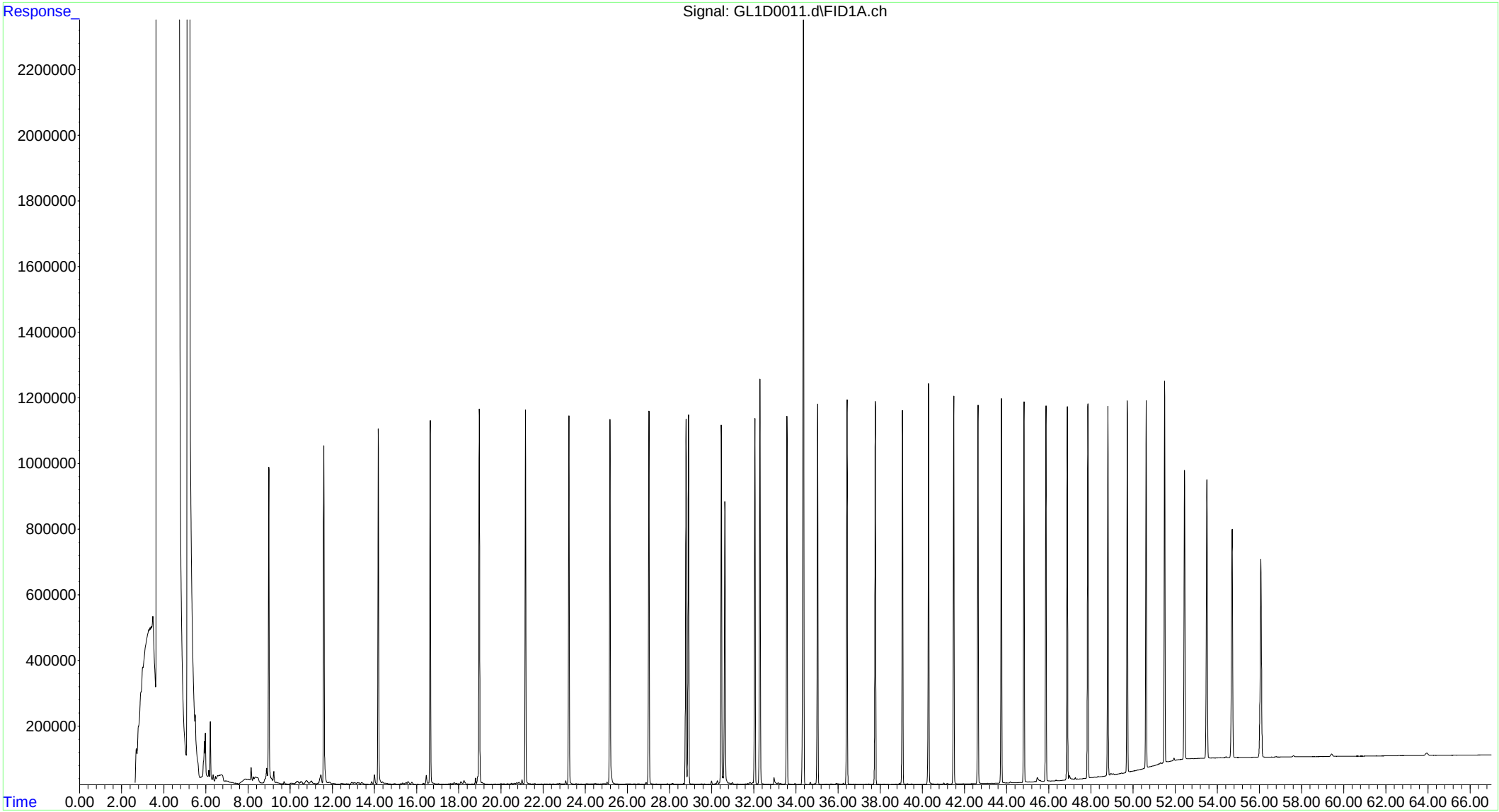
File :Q:\SVOA\GC12_GL\Data\GL0421\040721\GL1D0010.d
Operator : NXL
Acquired : 8 Apr 2021 2:15 am using AcqMethod GC12-DATA-ACQUISITION-4.M
Instrument : SVOA-GC12
Sample Name: FD10701-BLK1
Misc Info :
Vial Number: 7

Method Blank [ESS Lab ID: FD10701-BLK1]



File :Q:\SVOA\GC12_GL\Data\GL0421\040721\GL1D0011.d
Operator : NXL
Acquired : 8 Apr 2021 3:35 am using AcqMethod GC12-DATA-ACQUISITION-4.M
Instrument : SVOA-GC12
Sample Name: FD10701-BS1
Misc Info :
Vial Number: 8

Blank Spike [ESS Lab ID: FD10701-BS1]



Reference Chromatograms

Quantitation Report (QT Reviewed)

Data Path : Q:\SVOA\GC12_GL\Data\GL0421\040721\
Data File : GL1D0006.d
Signal(s) : FID1A.ch
Acq On : 7 Apr 2021 8:54 pm
Operator : NXL
Sample : F1D0001-CCV1
Misc :
InstName : SVOA-GC12
ALS Vial : 4 Sample Multiplier: 1

Integration File: events.e
Quant Time: Apr 09 07:40:08 2021
Quant Method : Q:\SVOA\GC12_GL\Data\GL0421\040721\SHC12AA.M
Quant Title : n-C8 - n-C40 normal alkanes w/ isoprenoids
QLast Update : Tue Jan 05 14:18:19 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.32

	Compound	R.T.	Response	Conc Units
Internal Standards				
1) I	5a-Androstane	34.365	63410599	50.000 µg/mLm
System Monitoring Compounds				
2) S	o-Terphenyl	32.309	68926394	47.756 µg/mLm
Spiked Amount	25.000	Range 50 - 120	Recovery =	191.02%#
Target Compounds				
3)	C-8	9.003	28255493	26.344 µg/mLm
4)	C-9	11.603	29697785	24.231 µg/mLm
5)	C-10	14.188	30161417	24.866 µg/mLm
6)	C-11	16.652	29862943	25.246 µg/mLm
7)	C-12	18.980	30476376	25.288 µg/mLm
8) J1	C-13	21.171	30360434	25.183 µg/mLm
10) J1	C-14	23.235	30722742	24.936 µg/mLm
12)	C-15	25.186	30934242	24.746 µg/mLm
13) J1	C-16	27.038	31001433	24.416 µg/mLm
15)	C-17	28.796	30623971	24.339 µg/mLm
16)	Pristane	28.909	31755235	24.445 µg/mLm
17)	C-18	30.466	31248258	24.168 µg/mLm
18)	Phytane	30.636	29001650	25.037 µg/mLm
19)	C-19	32.063	31541270	24.579 µg/mLm
20)	C-20	33.584	31378534	24.109 µg/mLm
21)	C-21	35.042	31333430	24.096 µg/mLm
22)	C-22	36.438	31873079	23.637 µg/mLm
23)	C-23	37.778	31448328	23.811 µg/mLm
24)	C-24	39.065	28697443	21.872 µg/mLm
25)	C-25	40.305	31168511	23.917 µg/mLm
26)	C-26	41.498	32674514	24.653 µg/mLm
27)	C-27	42.651	30921580	23.812 µg/mLm
28)	C-28	43.764	31443895	22.244 µg/mLm
29)	C-29	44.839	31150724	23.282 µg/mLm
30)	C-30	45.881	31364964	23.090 µg/mLm
31)	C-31	46.885	30309683	22.693 µg/mLm
32)	C-32	47.867	31790046	24.226 µg/mLm
33)	C-33	48.813	30257686	23.239 µg/mLm
34)	C-34	49.734	30059737	22.589 µg/mLm
35)	C-35	50.631	29967512	23.275 µg/mLm
36)	C-36	51.508	31675095	22.159 µg/mLm
37)	C-37	52.456	29967304	23.303 µg/mLm
38)	C-38	53.517	30293968	22.957 µg/mLm
39)	C-39	54.721	31101664	24.228 µg/mLm
40)	C-40	56.086	29051918	24.202 µg/mLm

SemiQuant Compounds - Not Calibrated on this Instrument

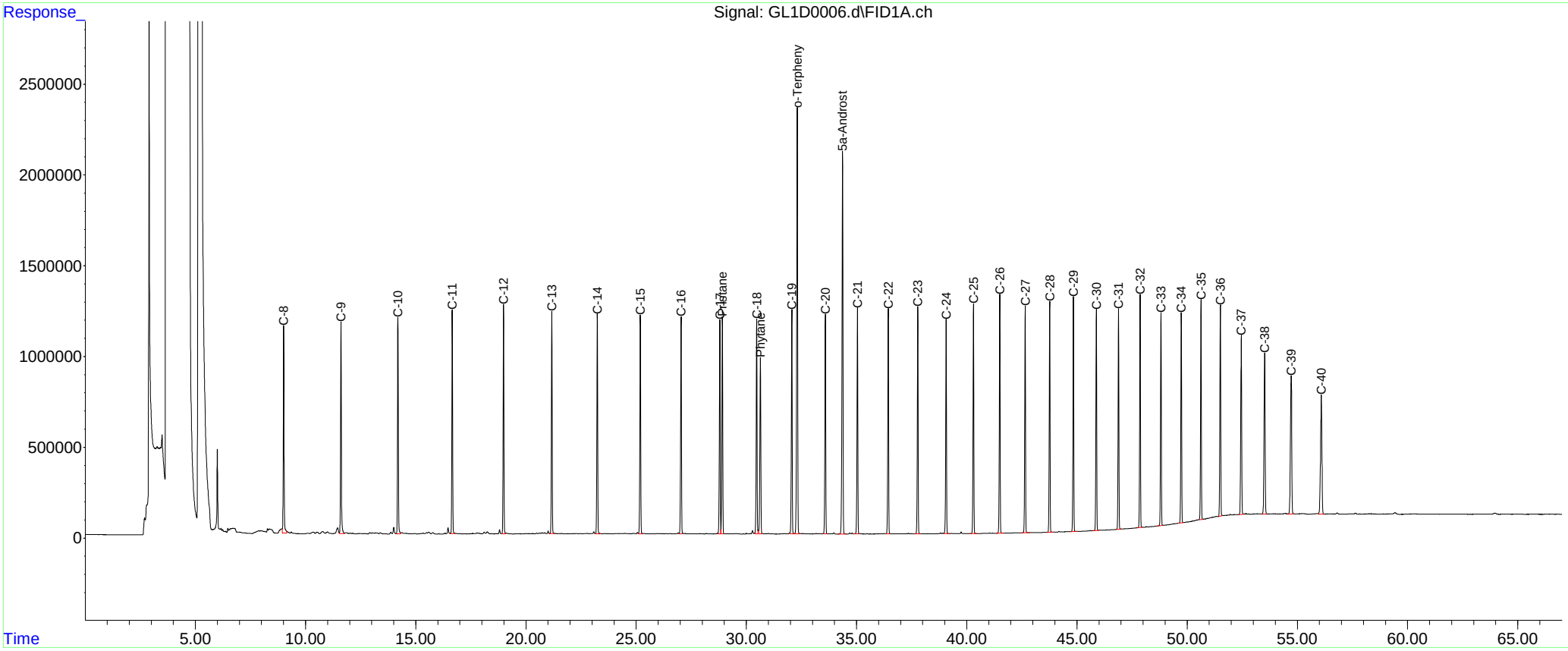
(f)=RT Delta > 1/2 Window (m)=manual int.

Quantitation Report (QT Reviewed)

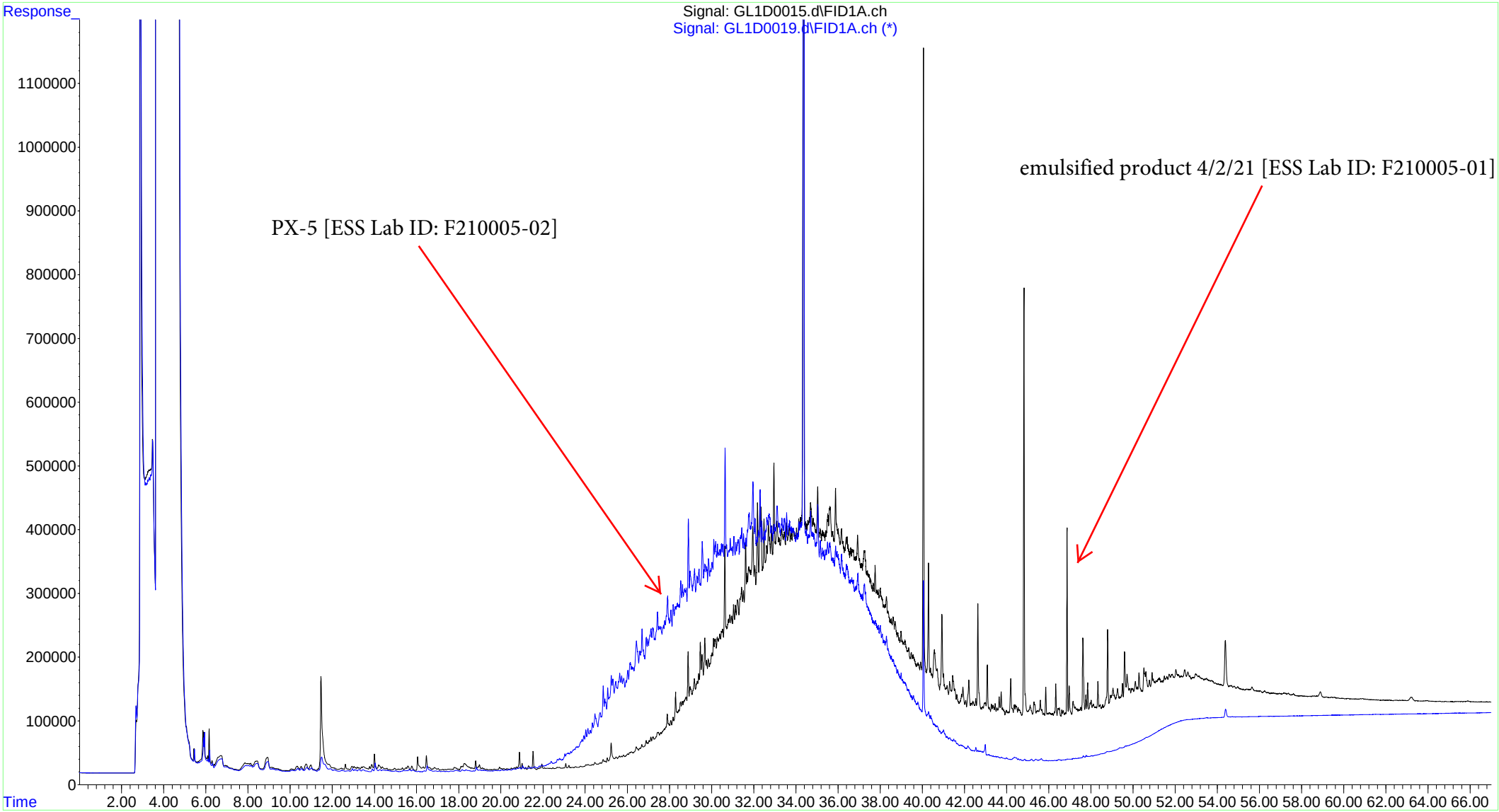
Data Path : Q:\SVOA\GC12_GL\Data\GL0421\040721\
Data File : GL1D0006.d
Signal(s) : FID1A.ch
Acq On : 7 Apr 2021 8:54 pm
Operator : NXL
Sample : F1D0001-CCV1
Misc :
InstName : SVOA-GC12
ALS Vial : 4 Sample Multiplier: 1

Integration File: events.e
Quant Time: Apr 09 07:40:08 2021
Quant Method : Q:\SVOA\GC12_GL\Data\GL0421\040721\SHC12AA.M
Quant Title : n-C8 - n-C40 normal alkanes w/ isoprenoids
QLast Update : Tue Jan 05 14:18:19 2021
Response via : Initial Calibration
Integrator: ChemStation

Volume Inj. : 1.0
Signal Phase : Rtx-5
Signal Info : 0.32



```
File       :Q:\SVOA\GC12_GL\Data\GL0421\040721\GL1D0015.d
Operator   : NXL
Acquired   :  8 Apr 2021   9:02 am using AcqMethod GC12-DATA-ACQUISITION-4.M
Instrument :   SVOA-GC12
Sample Name: F210005-01
Misc Info  : 5
Vial Number: 25
```



CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: 131 Morse St. Foxborough MA ESS Laboratory Work Order: F210005

Notes and Definitions

U	Analyte included in the analysis, but not detected
J	Reported between MDL and MRL
D	Diluted.
ND	Analyte NOT DETECTED at or above the MRL (LOQ), LOD for DoD Reports, MDL for J-Flagged Analytes
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
MDL	Method Detection Limit
MRL	Method Reporting Limit
LOD	Limit of Detection
LOQ	Limit of Quantitation
DL	Detection Limit
I/V	Initial Volume
F/V	Final Volume
§	Subcontracted analysis; see attached report
1	Range result excludes concentrations of surrogates and/or internal standards eluting in that range.
2	Range result excludes concentrations of target analytes eluting in that range.
3	Range result excludes the concentration of the C9-C10 aromatic range.
Avg	Results reported as a mathematical average.
NR	No Recovery
[CALC]	Calculated Analyte
SUB	Subcontracted analysis; see attached report
RL	Reporting Limit
EDL	Estimated Detection Limit

CERTIFICATE OF ANALYSIS

Client Name: Tighe & Bond
Client Project ID: 131 Morse St. Foxborough MA

ESS Laboratory Work Order: F210005

ESS LABORATORY CERTIFICATIONS AND ACCREDITATIONS

ENVIRONMENTAL

Rhode Island Potable and Non Potable Water: LAI00179
http://www.health.ri.gov/find/labs/analytical/ESS.pdf

Connecticut Potable and Non Potable Water, Solid and Hazardous Waste: PH-0750
http://www.ct.gov/dph/lib/dph/environmental_health/environmental_laboratories/pdf/OutofStateCommercialLaboratories.pdf

Maine Potable and Non Potable Water, and Solid and Hazardous Waste: RI00002
http://www.maine.gov/dhhs/mecdc/environmental-health/dwp/partners/labCert.shtml

Massachusetts Potable and Non Potable Water: M-RI002
http://public.dep.state.ma.us/Labcert/Labcert.aspx

New Hampshire (NELAP accredited) Potable and Non Potable Water, Solid and Hazardous Waste: 2424
http://des.nh.gov/organization/divisions/water/dwgb/nhelap/index.htm

New York (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: 11313
http://www.wadsworth.org/labcert/elap/comm.html

New Jersey (NELAP accredited) Non Potable Water, Solid and Hazardous Waste: RI006
http://datamine2.state.nj.us/DEP_OPRA/OpraMain/pi_main?mode=pi_by_site&sort_order=PI_NAMEA&Select+a+Site:=58715

United States Department of Agriculture Soil Permit: P330-12-00139

Pennsylvania: 68-01752
http://www.dep.pa.gov/Business/OtherPrograms/Labs/Pages/Laboratory-Accreditation-Program.aspx

TD412

CHAIN OF CUSTODY

ESS Lab # 49 F210005 | Page 1 of 1

185 Frances Avenue
Cranston, RI 02921
Phone: 401-461-7181
Fax: 401-461-4486
www.esslaboratory.com

Turn Time: ☐ >5 ☒ 5 ☐ 4 ☐ 3 ☐ 2 ☐ 1 ☐ Same Day

Regulatory State: Criteria:

Is this project for any of the following?:
☐ CT RCP ☒ MA MCP ☐ RGP ☐ Permit ☐ 401 WQ

ELECTRONIC DELIVERABLES (Final Reports are PDF)
☒ Limit Checker ☐ State Forms ☐ EQuIS
☒ Excel ☐ Hard Copy ☒ Enviro Data
☐ CLP-Like Package ☐ Other (Specify) →

CLIENT INFORMATION

Client: Tighe & Bond
Address: 120 Front St
Worcester MA 01608
Phone:
Email Distribution List: KLewis@Tighebond.com
MAHornbrook@Tighebond.com

PROJECT INFORMATION

Project Name: 131 Morse St. Foxborough MA
Project Location: "
Project Number: N-5067-084
Project Manager: Keri Lewis
Bill to:
PO#:
Quote#:

Client acknowledges that sampling is compliant with all EPA / State regulatory programs

REQUESTED ANALYSES

ESS Lab ID	Collection Date	Collection Time	Sample Type	Sample Matrix	Sample ID	Forensics Fingerprint	Total Number of Bottles
1	4/2/21	10:00	G	O	emulsified product 4/2/21	X	

Container Type: AC-Air Cassette AG-Amber Glass B-BOD Bottle C-Cubitainer J-Jar O-Other P-Poly S-Sterile V-Vial
Container Volume: 1-100 mL 2-2.5 gal 3-250 mL 4-300 mL 5-500 mL 6-1L 7-VOA 8-2 oz 9-4 oz 10-8 oz 11-Other*
Preservation Code: 1-Non Preserved 2-HCl 3-H2SO4 4-HNO3 5-NaOH 6-Methanol 7-Na2S2O3 8-ZnAce, NaOH 9-NH4Cl 10-DI H2O 11-Other*

Sampled by :

Chain needs to be filled out neatly and completely for on time delivery.

Laboratory Use Only
Cooler Temperature (°C): 3.8

Comments: * Please specify "Other" preservative and containers types in this space
Attn: Norm Lavranno
Please compare product w/ soils associated w/ WO # 21C0073

All samples submitted are subject to ESS Laboratory's payment terms and conditions.

Dissolved Filtration
☐ Lab Filter

Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
	4/2/21	1144	Refridgerator	Refridgerator	4/2/21	1145	4/2/21 13:22
Relinquished by (Signature)	Date	Time	Received by (Signature)	Relinquished by (Signature)	Date	Time	Received by (Signature)
	4/2/21	18:12	Taylor Davis 4/2/21 1892				

ESS Laboratory Sample and Cooler Receipt Checklist

Client: Tighe and Bond

Shipped/Delivered Via: Courier

ESS Project ID: F210005
Date Received: 4/2/2021
Project Due Date: 4/9/2021
Days for Project: 5

1. Air bill manifest present? No
   Air No.: NA
2. Were custody seals present? No
3. Is radiation count <100 CPM? Yes
4. Is a Cooler Present? Yes
   Temp: 3.8 Iced with: ice
5. Was COC signed and dated by client? Yes
6. Does COC match bottles? Yes
7. Is COC complete and correct? Yes
8. Were samples received intact? Yes
9. **Were labs informed about short holds & rushes?** Yes / No / (NA)
10. Were any analyses received outside of hold time? Yes / (No)

11. Any Subcontracting needed? Yes / (No)
    ESS Sample IDs:
    Analysis:
    TAT:
12. Were VOAs received? Yes / (No)
    a. Air bubbles in aqueous VOAs? Yes / No
    b. Does methanol cover soil completely? Yes / No / NA

13. Are the samples properly preserved? (Yes) / No
    a. If metals preserved upon receipt: Date: Time: By:
    b. Low Level VOA vials frozen: Date: Time: By:

Sample Receiving Notes:

14. Was there a need to contact Project Manager? Yes / (No)
    a. Was there a need to contact the client? Yes / (No)
    Who was contacted? Date: Time: By:

Sample Number	Container ID	Proper Container	Air Bubbles Present	Sufficient Volume	Container Type	Preservative	Record pH (Cyanide and 608.3 Pesticides)
1	1	Yes	N/A	Yes	8 oz. Jar	NP	

2nd Review
All containers scanned into storage/lab Initials: AC 4/2/21
Are barcode labels on correct containers? Yes / No
Are all necessary stickers attached? Yes / No

Completed By: Taylor Davis Date & Time: 4/2/21 1830
Reviewed By: Amber Ferris Date & Time: 4/2/21 19:31
Delivered By: Amber Ferris 4/2/21 19:31

APPENDIX C

TABLE 1
Soil Analytical Results
National Grid
Pad-Mounted Transformer Release
131 Morse Street
Foxborough, Massachusetts

			Post-Excavation Soil Samples						Soil Boring Samples				
Sample ID	MassDEP Method 1 S-2/GW-2	MassDEP Method 1 S-2/GW-3	PX-1	PX-2	PX-3	PX-4	PX-5	PX-6	B-1	B-2	B-2	B-3	B-3
Sample Depth (feet)			1	1	1	2.5	2.5	2.5	2.5-5	2.5-5	5-7	2.5-5	5-7
Sample Date			02/24/21	02/24/21	02/24/21	02/24/21	02/24/21	02/24/21	12/29/21	12/29/21	12/29/21	12/29/21	12/29/21
Petroflag (ppm)			1,158	305	88	825	1,150	944	17	47	97	161	637
EPH Carbon Ranges (mg/kg)													
C_9-C_{18} Aliphatics	3,000	3,000	417	41.5	< 16.2	**5,670**	**7,170**	**3,990**	< 18.1	< 18.4	< 21.3	85.1	128
C_{19}-C_{36} Aliphatics	5,000	5,000	512	66.8	20.3	**7,490**	**8,980**	**5,260**	< 18.1	< 18.4	< 21.3	99.9	145
C_{11}-C_{22} Aromatics	3,000	3,000	276	46.9	135	**5,740**	**7,030**	2,310	< 18.1	< 18.4	151	53.7	86.1

Notes:
ppm = parts per million
mg/kg = milligrams per kilogram (equivalent to ppm)
< XX - Not Detected Above Laboratory Method Detection Limit
Bold concentrations exceed one or more MassDEP Method 1 criteria

TABLE 2
Groundwater Analytical Results
National Grid
Pad-Mounted Transformer Release
131 Morse Street
Foxborough, Massachusetts

Sample ID	MassDEP Method 1 GW-2 Standard	MassDEP Method 1 GW-3 Standard	MW-1	MW-2	MW-3
Sample Date			1/6/2022	1/6/2022	1/6/2022
Top of PVC Elevation (ft.)			98.67	99.54	99.30
Depth to Water (feet)			2.18	3.73	3.60
Groundwater Elevation			96.49	95.81	95.70
EPH Carbon Ranges (µg/L)					
C_9-C_{18} Aliphatics	5,000	50,000	< 99	< 98	< 98
C_{11}-C_{22} Aromatics	50,000	5,000	< 99	< 98	< 98
C_{19}-C_{36} Aliphatics	NS	50,000	< 99	< 98	< 98

Notes:
<XX indicates analyte was not detected above method reporting limit provided.
µg/L = micrograms per liter

TABLE 3
Surface Water Analytical Results
National Grid
Pad-Mounted Transformer Release
131 Morse Street
Foxborough, Massachusetts

Sample ID Sample Date	**Recommended Surface Water Quality Guidelines**	**SW-1** 12/9/2020	**SW-2** 12/9/2020	**SW-3** 12/9/2020
EPH Carbon Ranges (µg/L)				
C9-C18 Aliphatics	1,800	< 100	NA	< 95
C19-C36 Aliphatics	2,100	< 100	NA	< 95
C11-C22 Aromatics, Adjusted	NS	< 100	NA	< 95.2
TPH Fingerprint	NS	NA	Resembles Transformer Oil Range	NA

Notes:
EPH = extractable petroleum hydrocarbons
TPH = total petroleum hydrocarbons
µg/L = micrograms per liter
NS = no standard
NA = not analyzed
< XX - Not detected above laboratory Method Detection Limit
Surface Water sample concentrations were compared to the Recommended Surface Water Quality Guidelines contained in Table 4-12 of the Implementation of the MassDEP VPH/EPH Approach Policy #WSC-02-411

APPENDIX D

Tighe&Bond
Engineers | Environmental Specialists

Boring No. **B-1/MW-1**
Page 1 of 1
File No. N5067-084
Checked by:

Project: Pad-Mounted Transformer
Location: 131 Morse Street, Foxborough MA
Client: National Grid

Drilling Co. Martin GeoEnvironmental
Foreman: Jeremy Martin
T&B Rep.: S. Marokhovsky
Date Start: 12/29/21 End: 12/29/2021
Location See Exploration Location Plan
GS. Elev. Datum:

	Casing	Sampler
Type	Macro	
I.D./O.D.		
Length	5"	
Rig Make/Model	GeoProbe	6620DT
Other		

Groundwater Readings

Date	Time	Depth	Casing	Sta. Time
12/29/21	1200	2.23'	-	~1.5 hours
1/6/22	1050	2.18'	-	8 days

Depth (ft.)	Sample No. / Rec.(in)	Sample Depth (ft.)	Dexsil	Sample Description	General Stratigraphy	Notes	Well Construction
	S-1	0-1	-	0-1.5': Concrete and cobbles			Riser 1' / Bentonite 1'
	S-2	1-2	-	1.5-2.5': Tan, fine to coarse SAND, little Gravel, trace Silt, wet			
	S-3	2-3	17				
	S-4	3-4		2.5-5': Tan, fine to coarse SAND, some wood debris, little Gravel, trace Silt, wet			
	S-5	4-5					
5				5-10': Gray, fine to coarse SAND and GRAVEL, trace Silt, wet	**FILL**	1	2" PVC Screen / Filter Sand
	S-6/36"	5-10	0				
10				End of Boring at 10 feet bgs			
15							
20							
25							
30							

Notes:
1. Pre-Cleared to 5' with vacuum excavation. Samples collected with hand auger.

Proportions Used

TRACE (TR.)	0 - <10%
LITTLE (LI.)	10 - <20%
SOME (SO.)	20 - <35%
AND	35 - <50%

Tighe&Bond
Engineers | Environmental Specialists

Boring No. **B-2/MW-2**
Page 1 of 1
File No. N5067-084
Checked by:

Project: Pad-Mounted Transformer
Location: 131 Morse Street, Foxborough MA
Client: National Grid

Drilling Co. Martin GeoEnvironmental
Foreman: Jeremy Martin
T&B Rep.: S. Marokhovsky
Date Start: 12/29/21 End: 12/29/2021
Location See Exploration Location Plan
GS. Elev. Datum:

	Casing	Sampler
Type	Macro	
I.D./O.D.		
Length	5"	
Rig Make/Model	GeoProbe	6620DT
Other		

Groundwater Readings

Date	Time	Depth	Casing	Sta. Time
12/29/21	1200	3.63'	-	~2.5 hours
1/6/22	1145	3.73'	-	8 days

Depth (ft.)	Sample No. / Rec.(in)	Sample Depth (ft.)	Dexsil	Sample Description	General Stratigraphy	Notes	Well Construction
5	S-1	0-1	-	0-2.5': Imported processed gravel (backfill from previous soil excavation) and concrete pieces	**FILL**	2	Riser 1' / Bentonite 1'
	S-2	1-2	-				
	S-3	2-3	47	2.5-5': Brown, fine to coarse SAND, some Gravel, trace Silt, damp, faint petroleum-like and organic odors noted			
	S-4	3-4					
	S-5	4-5		5-7': Black, fine to coarse SAND, some Gravel, trace Silt, trace brick, wet, petroleum-like odor		1	2" PVC Screen / Filter Sand
	S-6/40"	5-7	97				
10		7-10	7	7-10': Tan, fine to coarse SAND, some Gravel, trace Silt, wet			
				End of boring at 10 feet bgs			
15							
20							
25							
30							

Notes:
1. Pre-Cleared to 5' with vacuum excavation. Samples collected with hand auger.
2. Soil appears to have a faint sheen.

Proportions Used

TRACE (TR.)	0 - <10%
LITTLE (LI.)	10 - <20%
SOME (SO.)	20 - <35%
AND	35 - <50%

Tighe&Bond
Engineers | Environmental Specialists

Boring No. **B-3/MW-3**
Page 1 of 1
File No. N5067-084
Checked by:

Project: Pad-Mounted Transformer
Location: 131 Morse Street, Foxborough MA
Client: National Grid

Drilling Co. Martin GeoEnvironmental
Foreman: Jeremy Martin
T&B Rep.: S. Marokhovsky
Date Start: 12/29/21 End: 12/29/2021
Location See Exploration Location Plan
GS. Elev. Datum:

	Casing	Sampler
Type	Macro	
I.D./O.D.		
Length	5"	
Rig Make/Model	GeoProbe	6620DT
Other		

Groundwater Readings

Date	Time	Depth	Casing	Sta. Time
12/29/21	1200	3.59'	-	~30 minutes
1/6/22	1310	3.60'	-	8 days

Depth (ft.)	Sample No. / Rec.(in)	Sample Depth (ft.)	Dexsil	Sample Description	General Stratigraphy	Notes	Well Construction
5	S-1	0-1	-	0-2.5': Concrete and cobbles	**FILL**	1	Riser 1' / Bentonite 1' / 2" PVC Screen / Filter Sand
	S-2	1-2	-	2.5-5': Brown, fine to coarse SAND and GRAVEL, trace Silt, wet			
	S-3	2-3	161	5-7': Black, fine to coarse SAND, some Gravel, trace Silt, wet, faint petroleum-like and organic odors			
	S-4	3-4					
	S-5	4-5					
10	S-6/40"	5-7	637	7-10': Tan, fine to coarse SAND, some Gravel, trace Silt, wet			
		7-10	116				
15							
20							
25							
30							

Notes:
1. Pre-Cleared to 5' with vacuum excavation. Soil samples collected with hand auger.

Proportions Used

TRACE (TR.)	0 - <10%
LITTLE (LI.)	10 - <20%
SOME (SO.)	20 - <35%
AND	35 - <50%

Tighe&Bond

APPENDIX E

Appendix E - Photographic Log

Client: Massachusetts Electric Company d/b/a National Grid **Job Number:** N5067-084

Site: 131 Morse Street
Foxborough, Massachusetts

Photograph No.: 1	**Date:** 1/26/2022	**Direction Taken:** North
Description: View of the downstream boom segments and organic foaming.		

Photograph No.: 2	**Date:** 1/26/2022	**Direction Taken:** NA
Description: View of the petroleum staining on the upstream booms recovered from the sluiceway.		

APPENDIX F

40219

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
MAC300012655		(800) 483-3718	011032243 FLE

GENERATOR

5. Generator's Name and Mailing Address
MASSACHUSETTS ELECTRIC COMPANY
40 SYLVAN ROAD
WALTHAM, MA 02451
Generator's Phone: (781) 907-3647 ATTN: SUSAN BROCHU

Generator's Site Address (if different than mailing address)
SITE ADDRESS: 131 Morse st
Foxborough Ma 02035

6. Transporter 1 Company Name: CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.
U.S. EPA ID Number: MAD039322250

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
CLEAN HARBORS OF BRAINTREE, INC.
1 HILL AVENUE
BRAINTREE, MA 02184
Facility's Phone: (781) 380-7100
U.S. EPA ID Number: MAD053452637

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON-DOT REGULATED MATERIAL, (OILY SOLIDS)	0001	TT	4	Y	MA01
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information

WASTE PROFILE# R40179B

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Walter Nutting agent for Meco
Signature: Walter Nutting
Month: 10 Day: 4 Year: 20

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Walter Nutting
Signature: Walter Nutting
Month: 10 Day: 4 Year: 20

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: David S Melms
Signature:
Month: 10 Day: 05 Year: 20

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

2005122795

Tr# 4017

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MAC300012655
2. Page 1 of 1
3. Emergency Response Phone: (800) 483-3718
4. Manifest Tracking Number: 015188123 FLE

GENERATOR

5. Generator's Name and Mailing Address:
Massachusetts Electric Company
40 Sylvan Road
Waltham, MA 02451
Generator's Phone: (781) 907-3647

Generator's Site Address (if different than mailing address):
131 Morse Street
Foxboro, MA 02035

6. Transporter 1 Company Name: Clean Harbors Environmental Services Inc,
U.S. EPA ID Number: MAD039322250

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address:
Clean Harbors of Braintree Inc.
1 Hill Avenue
Braintree, MA 02184
Facility's Phone: (781) 380-7100
U.S. EPA ID Number: MAD053452637

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Non DOT Regulated Material, (Mineral oil Dielectric Fluid)	xx1	TT	129	G	MA01
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1.S53711.B

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Erik Smith (on behalf of MECO)
Signature:
Month: 10 Day: 04 Year: 20

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Erik Smith
Signature:
Month: 10 Day: 04 Year: 20

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Hueyen Hoang
Signature:
Month: 10 Day: 5 Year: 20

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

2005122795

TR80619

Please print or type. Generator acknowledges that no material change has occurred either in the characteristics or in the process generating the waste. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
MAC300012655	1	(800) 483-3718	015188146 FLE

GENERATOR

5. Generator's Name and Mailing Address
Massachusetts Electric Company
40 Sylvan Road
Waltham, MA 02451
Generator's Phone: (781) 907-3647 ATTN: Susan Brochu

Generator's Site Address (if different than mailing address)
131 Morse Street
Foxboro, MA 02035

6. Transporter 1 Company Name
Clean Harbors Environmental Services, Inc.

U.S. EPA ID Number
MAD039322250

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Harbors El Dorado LLC
309 American Circle
El Dorado, AR 71730
Facility's Phone: (870) 863-7173

U.S. EPA ID Number
ARD069748192

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. NON DOT REGULATED MATERIAL, (OILY DEBRIS)	002	DM	300	P	MA01		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1. R40179. 2 X 55 DM

Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf for purposes of transportation efficiency, convenience or safety

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: VOS DERISIAN
Signature:
Month: 10 Day: 6 Year: 20

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: VOS DERISIAN
Signature:
Month: 10 Day: 6 Year: 20

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H040			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Haylie Tittle
Signature: Haylie Tittle
Month: 11 Day: 4 Year: 20

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

SB 20051227795-001 PPW

#80619

Please print or type. **Generator acknowledges that no material change has occurred either in the characteristics or in the process generating the material.** Form Approved. OMB No. 2050-003

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	MAC300012655	1	(800) 483-3718	015189992 FLE

GENERATOR

5. Generator's Name and Mailing Address
Massachusetts Electric Company
40 Sylvan Road
Waltham, MA 02451
Generator's Phone: (781)907-3647 ATTN:Susan Brochu

Generator's Site Address (if different than mailing address)
131 Morse Street
Foxboro,MA 02035

6. Transporter 1 Company Name
Clean Harbors Environmental Services, Inc.
U.S. EPA ID Number
MAD039322250

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Harbors Grassy Mountain LLC
3 Miles East 7 Miles North of Knolls
Grantsville, UT 84029
Facility's Phone: (435) 884-8900
U.S. EPA ID Number
UTD991301748

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No	Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. NON DOT REGULATED MATERIAL, (OILY DEBRIS)	#3 RMD	DM	240	P	MA01		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information RMD
1.R40179.
3#x55 DM @ 240P

Contract retained by generator confers agenc
authority on initial transporter to add or substitute additional transporters on generator's behalf for purposes of transportation efficiency,convenience,or safe

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Agent for MECO / Robert Bartlett — Signature: Robert Bartlett — Month: 10 Day: 22 Year: 20

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Robert Bartlett — Signature: Robert M Bartlett — Month: 10 Day: 22 Year: 20
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name — Signature — Month Day Year

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM
SB 2005122795-001 PPW

TR- 80619

Generator acknowledges that no material change has occurred either in the characteristics or in the process generating the material.

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
MAC300012655	1	(800) 483-3718	015188520 FLE

GENERATOR

5. Generator's Name and Mailing Address
Massachusetts Electric Company
40 Sylvan Road
Waltham, MA 02451
Generator's Phone: (781) 907-3647 ATTN:Susan Brochu

Generator's Site Address (if different than mailing address)
131 Morse Street
Foxboro, MA 02035

6. Transporter 1 Company Name
Clean Harbors Environmental Services, Inc.

U.S. EPA ID Number
MAD039322250

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Harbors El Dorado LLC
309 American Circle
El Dorado, AR 71730
Facility's Phone: (870) 863-7173

U.S. EPA ID Number
ARD069748192

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. NON DOT REGULATED MATERIAL, (OILY DEBRIS)	XX2	DM	200	P	MA01		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1.R40179.
DM2x55

Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf for purposes of transportation efficiency convenience or safety

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Sean Eustace as agent for Mass Electric Co. Signature: [signature] Month: 11 Day: 20 Year: 20

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Sean Eustace Signature: [signature] Month: 11 Day: 20 Year: 20

Transporter 2 Printed/Typed Name: Signature: Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H040			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Signature: Month: Day: Year:

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

SB 20051227795-001 PPW

2005122795 TRA80619

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	MAC300012655		(800) 483-3718	011026028 FLE

GENERATOR

5. Generator's Name and Mailing Address
MASSACHUSETTS ELECTRIC COMPANY
40 SYLVAN ROAD
WALTHAM, MA 02451
Generator's Phone: (781) 907-3647

Generator's Site Address (if different than mailing address)
SITE ADDRESS: 131 MORSE ST
FOXBOROUGH - MA 02035

6. Transporter 1 Company Name
CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.

U.S. EPA ID Number
MAD039322250

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
CLEAN HARBORS GRASSY MOUNTAIN LLC
3 MILES EAST 7 MILES NORTH OF KNOLLS
GRANTSVILLE, UT 84029
Facility's Phone: (435) 884-8900

U.S. EPA ID Number
UTD991301748

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. NON DOT REGULATED MATERIAL, (OILY SOLIDS)	003	DM	300	P	MA01		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
WASTE PROFILE # R40179 3X55DM

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: VOS MERISIER
Signature:
Month: 12 Day: 9 Year: 20

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: VOS MERISIER
Signature:
Month: 12 Day: 9 Year: 20
Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name
Signature
Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

(9) #5435

Generator acknowledges that no material change has occurred either in the characteristics or in the process generating the material.

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MAC300012655
2. Page 1 of: 1
3. Emergency Response Phone: (800) 483-3718
4. Manifest Tracking Number: 015519517 FLE

5. Generator's Name and Mailing Address:
Massachusetts Electric Company
40 Sylvan Road
Waltham, MA 02451

Generator's Site Address (if different than mailing address):
131 Morse Street
Foxboro,MA 02035

Generator's Phone: (781) 907-3647 ATTN:Susan Brochu

6. Transporter 1 Company Name: Clean Harbors Environmental Services, Inc. — U.S. EPA ID Number: MAD039322250

7. Transporter 2 Company Name: Clean Harbors Env Svcs Inc — U.S. EPA ID Number: MAD039322250

8. Designated Facility Name and Site Address:
Clean Harbors Grassy Mountain LLC
3 Miles East 7 Miles North of Knolls
Grantsville, UT 84029
Facility's Phone: (435) 884-8900

U.S. EPA ID Number: UTD991301748

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON DOT REGULATED MATERIAL, (OILY DEBRIS)	002	DM	250	P	MA01
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. 240179.

2X55

Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf for purposes of transportation efficiency,convenience,or safety

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: on behalf of Jim Bracken — Signature: [signature] — Month/Day/Year: 12 31 20

16. International Shipments: ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: ______ Date leaving U.S.: ______
Transporter signature (for exports only):

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Jim Bracken — Signature: [signature] — Month/Day/Year: 12 31 20
Transporter 2 Printed/Typed Name: Thomas Clark — Signature: Thomas Clark — Month/Day/Year: 01 25 21

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) — U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H132 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

2021001112

Printed/Typed Name: Cathy Sothel — Signature: Cathy Sothel — Month/Day/Year: 2 4 21

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

SB 2008656864-001 PPW

9

5435

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	MAC300012655	1	(800) 483-3718	011026040 FLE

GENERATOR

5. Generator's Name and Mailing Address
MASSACHUSETTS ELECTRIC COMPANY
40 SYLVAN ROAD
WALTHAM, MA 02451
Generator's Phone: (781) 907-3647

Generator's Site Address (if different than mailing address)
SITE ADDRESS: 131 Moorse Street
Foxboro, MA 02035

6. Transporter 1 Company Name
CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.

U.S. EPA ID Number
MAD039322250

7. Transporter 2 Company Name
Clean Harbors Env Svcs Inc

U.S. EPA ID Number
MAD039322250

8. Designated Facility Name and Site Address
CLEAN HARBORS GRASSY MOUNTAIN LLC
3 MILES EAST 7 MILES NORTH OF KNOLLS
GRANTSVILLE, UT 84029
Facility's Phone: (435) 884-8900

U.S. EPA ID Number
UTD991301748

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. NON DOT REGULATED MATERIAL, (OILY SOLIDS)	002	DM	300	P	MA01		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
(2x55)

WASTE PROFILE # R40179

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Samuel DiCicco
ONBehalf of FMECC
Signature: Samuel DiCicco
Month: 1 Day: 22 Year: 21

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Samuel DiCicco
Signature: Samuel DiCicco
Month: 1 Day: 22 Year: 21

Transporter 2 Printed/Typed Name: Thomas Clark
Signature:
Month: 2 Day: 12 Year: 21

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1. H132 2. 3. 4. 2021001441

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a.

Printed/Typed Name: Ashton Matthews
Signature:
Month: 3 Day: 1 Year: 21

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)
2006656864

Please print or type.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST (Continuation Sheet)

21. Generator ID Number: MAC300012655

22. Page: 2

23. Manifest Tracking Number: 011026040 FLE

24. Generator's Name: MASS. ELECTRIC

25. Transporter 2 Company Name

U.S. EPA ID Number

26. Transporter 4 Company Name

U.S. EPA ID Number

27a. HM	27b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	28. Containers No.	28. Containers Type	29. Total Quantity	30. Unit Wt./Vol.	31. Waste Codes

32. Special Handling Instructions and Additional Information

33. Transporter 2 Acknowledgment of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

34. Transporter 4 Acknowledgment of Receipt of Materials

Printed/Typed Name | Signature | Month | Day | Year

35. Discrepancy

36. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

GENERATOR

TRANSPORTER

DESIGNATED FACILITY

TR#80825

Generator acknowledges that no material change has occurred either in the characteristics or in the process generating the material.

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	MAC300012655	1	(800) 483-3718	015513221 FLE

GENERATOR

5. Generator's Name and Mailing Address
Massachusetts Electric Company
40 Sylvan Road
Waltham, MA 02451
Generator's Phone: (781) 907-3647 ATTN:Susan Brochu

Generator's Site Address (if different than mailing address)
131 Morse Street
Foxboro,MA 02035

6. Transporter 1 Company Name
Clean Harbors Environmental Services, Inc.
U.S. EPA ID Number
MAD039322250

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Harbors of Braintree Inc
1 Hill Avenue
Braintree, MA 02184
Facility's Phone: (781) 380-7100
U.S. EPA ID Number
MAD053452637

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. NON DOT REGULATED MATERIAL, (OILY DEBRIS)	003	DM	150	P	MA01		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1.240179 - (5X55)

Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf for purposes of transportation efficiency,convenience,or safety

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: DAVID ACCARDI on behalf of MASSACHUSETTS ELECTRIC COMPANY
Signature: D I A
Month: 2 Day: 11 Year: 21

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: DAVID ACCARDI
Signature: D I A
Month: 2 Day: 11 Year: 21
Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H141 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: David S Medina
Signature:
Month: 02 Day: 12 Year: 21

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. SE 20051227795-001 PPW

80825

Please print or type. Generator acknowledges that no material change has occurred either in the characteristics or in the process generating the material. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	MAC300012655	1	(800) 483-3718	015513162 FLE

5. Generator's Name and Mailing Address
Massachusetts Electric Company
40 Sylvan Road
Waltham, MA 02451
Generator's Phone: **(781) 907-3647 ATTN: Susan Brooks**

Generator's Site Address (if different than mailing address)
131 MORSE STREET
FOXBOROUGH, MA 02035

6. Transporter 1 Company Name: **Clean Harbors Environmental Services, Inc.** U.S. EPA ID Number: **MAD039322250**

7. Transporter 2 Company Name: U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Clean Harbors of Braintree Inc
1 Hill Avenue
Braintree, MA 02184
Facility's Phone: **(781) 380-7100**
U.S. EPA ID Number: **MAD053452637**

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. **NON DOT REGULATED MATERIAL, (OILY DEBRIS)**	XX2	DM	300	P	MA01
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1.B40179.
2 x 55 DM

Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf for purposes of transportation, offering for transportation, or storage.

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: S. Eustace as agent for Mass. Electric Co. Signature: [signature] Month: 02 Day: 22 Year: 21

INTL
16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER
17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Sean Eustace Signature: [signature] Month: 02 Day: 22 Year: 21
Transporter 2 Printed/Typed Name: Signature: Month: Day: Year:

DESIGNATED FACILITY
18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month: Day: Year:
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. **H141** 2. 3. 4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Huyen Hoang Signature: [signature] Month: 2 Day: 22 Year: 21

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete. DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping. SB 2100480226-001 PPW

5403

Generator acknowledges that no material change has occurred either in the characteristics or in the process generating the material.

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	MAC300012655	1	(800) 483-3718	015513164 FLE

GENERATOR

5. Generator's Name and Mailing Address
Massachusetts Electric Company
40 Sylvan Road
Waltham, MA 02451
Generator's Phone: (781) 907-3647 ATTN: Susan Brochu

Generator's Site Address (if different than mailing address)
131 MORSE STREET
FOXBOROUGH, MA 02035

6. Transporter 1 Company Name
Clean Harbors Environmental Services, Inc.
U.S. EPA ID Number
MAD039322250

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Harbors of Braintree Inc
1 Hill Avenue
Braintree, MA 02184
Facility's Phone: (781) 380-7100
U.S. EPA ID Number
MAD053452027

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. NON DOT REGULATED MATERIAL, (OILY SOLIDS)	001	DT	003	Y	MA01		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1. R40179 .B

Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf for purposes of transportation efficiency, convenience or safety

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Agent for MECO — Brian Harrington
Signature: Brian Harrington
Month: 2 Day: 23 Year: 21

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Brian Harrington
Signature: Brian Harrington
Month: 2 Day: 23 Year: 21

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Huyen Hoang
Signature
Month: 2 Day: 23 Year: 21

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

SB 2100480226-001

#40219

Generator acknowledges that no material change has occurred either in the characteristics or in the process generating the material.

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MAC300012655
2. Page 1 of: 1
3. Emergency Response Phone: (800) 483-3718
4. Manifest Tracking Number: 015519880 FLE

GENERATOR

5. Generator's Name and Mailing Address
Massachusetts Electric Company
40 Sylvan Road
Waltham, MA 02451
Generator's Phone: (781) 907-3647 ATTN:Susan Brochu

Generator's Site Address (if different than mailing address)
131 MORSE STREET
FOXBOROUGH,MA 02035

6. Transporter 1 Company Name: Clean Harbors Environmental Services, Inc.
U.S. EPA ID Number: MAD039322250

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Clean Harbors of Braintree Inc
1 Hill Avenue
Braintree, MA 02184
Facility's Phone: (781) 380-7100
U.S. EPA ID Number: MAD053452637

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON DOT REGULATED MATERIAL, (OILY SOLIDS)	XX 1	TT	4	Y	MA01
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1240179.0

Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf for purposes of transportation efficiency,convenience,or safety

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true. Agent for

Generator's/Offeror's Printed/Typed Name: Cody Hamilton
Signature: Cy Hamilton
Month: 2 Day: 24 Year: 2021

INTL

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Cody Hamilton
Signature: Cy Hamilton
Month: 2 Day: 24 Year: 2021

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Huyen Thang
Signature: Huyen Thang
Month: 2 Day: 24 Year: 21

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

5403

Generator acknowledges that no material change has occurred either in the characteristics or in the process generating the material.

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	MAC300012655	1	(800) 483-3718	015519881 FLE

5. Generator's Name and Mailing Address
Massachusetts Electric Company
40 Sylvan Road
Waltham, MA 02451
Generator's Phone: (781) 907-3647 ATTN:Susan Brochu

Generator's Site Address (if different than mailing address)
131 MORSE STREET
FOXBOROUGH,MA 02035

6. Transporter 1 Company Name
Clean Harbors Environmental Services, Inc.
U.S. EPA ID Number
MAD039322250

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Harbors of Braintree Inc
1 Hill Avenue
Braintree, MA 02184
Facility's Phone: (781) 380-7100
U.S. EPA ID Number
MAD053462637

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON DOT REGULATED MATERIAL, (OILY SOLIDS)	001	DT	003	Y	MA01
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1.240179.B

Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf for purposes of transportation efficiency convenience or safety

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Christopher E Bowen
Signature: On behalf of: [signature]
Month 02 Day 24 Year 21

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Christopher E Bowen
Signature: [signature]
Month 02 Day 24 Year 21
Transporter 2 Printed/Typed Name
Signature
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Huyen Hoang
Signature: [signature]
Month 2 Day 24 Year 21

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Form 8700-22 (Rev. 12-17). Previous editions are obsolete.

SE 21004802226-001 PPW

TK#5435

Generator acknowledges that no material change has occurred either in the characteristics or in the process generating the material.

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	MAC300012655	1	(800) 483-3718	015520454 FLE

GENERATOR

5. Generator's Name and Mailing Address
Massachusetts Electric Company
40 Sylvan Road
Waltham, MA 02451
Generator's Phone: (781) 907-3647 ATTN: Susan Brochu

Generator's Site Address (if different than mailing address)
131 Morse Street
Foxboro, MA 02035

6. Transporter 1 Company Name
Clean Harbors Environmental Services, Inc.
U.S. EPA ID Number
MAD039322250

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Harbors of Braintree Inc
1 Hill Avenue
Braintree, MA 02184
Facility's Phone: (781) 380-7100
U.S. EPA ID Number
MAD053452637

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. NON DOT REGULATED MATERIAL, (OILY DEBRIS)	001	DM	200	P	MA01		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1240179. TXSS

Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf for purposes of transportation efficiency, convenience, or safety

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: SAMUEL DICICCO ON BEHALF OF MASSACHUSETTS Electric Company
Signature: Samuel DiCicco
Month: 3 Day: 11 Year: 21

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Samuel DiCicco
Signature: Samuel DiCicco
Month: 3 Day: 11 Year: 21

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Anthony Ross
Signature: Anthony Ross
Month: 3 Day: 12 Year: 21

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM
SB 20051227795-001 PPW

TR# 80825

Generator acknowledges that no material change has occurred either in the characteristics or in the process generating the material.

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MAC300012655 | 2. Page 1 of 1 | 3. Emergency Response Phone: (800) 483-3718 | 4. Manifest Tracking Number: 015519986 FLE

GENERATOR

Massachusetts Electric Company
40 Sylvan Road
Waltham, MA 02451
Generator's Phone: (781) 907-3647 ATTN:Susan Brochu

Generator's Site Address (if different than mailing address)
131 Morse Street
Foxboro,MA 02035

6. Transporter 1 Company Name: Clean Harbors Environmental Services, Inc.
U.S. EPA ID Number: MAD039322250

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Harbors of Braintree Inc
1 Hill Avenue
Braintree, MA 02184
Facility's Phone: (781) 380-7100
U.S. EPA ID Number: MAD053452637

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON DOT REGULATED MATERIAL, (OILY DEBRIS)	003	DM	300	P	MA01
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1:R40179: (3X55)

Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf for purposes of transportation efficiency,convenience or safety

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: DAVID ACCARD ON BEHALF OF MASSACHUSETTS ELECTRIC COMPANY | Signature: DAA | Month: 4 | Day: 2 | Year: 21

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: David Accard: | Signature: DAA | Month: 4 | Day: 2 | Year: 21

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator) | U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: David S Medina | Signature | Month: 04 | Day: 02 | Year: 21

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

SB 2005122795-001 PPW

#80619

Generator acknowledges that no material change has occurred either in the characteristics or in the process generating the material.

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	MAC300012655	1	(800) 483-3718	015829497 FLE

GENERATOR

5. Generator's Name and Mailing Address
Massachusetts Electric Company
40 Sylvan Road
Waltham, MA 02451
Generator's Phone: (781) 907-3647 ATTN: Susan Brochu

Generator's Site Address (if different than mailing address)
131 Morse Street
Foxborough, MA 02035

6. Transporter 1 Company Name
Clean Harbors Environmental Services, Inc.

U.S. EPA ID Number
MAD039322250

7. Transporter 2 Company Name

U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Harbors of Braintree Inc
1 Hill Avenue
Braintree, MA 02184
Facility's Phone: (781) 380-7100

U.S. EPA ID Number
MAD053452637

9a. HM	9b. U.S. DOT Description (Including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON DOT REGULATED MATERIAL. (OILY DEBRIS)	XX3	DM	300	P	MA01
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1.240179.
(3 x 55)
Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf for purposes of transportation efficiency, convenience, or safety

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: On behalf of Mass Electric Co. Agent for Christian Urena
Signature:
Month: 05 Day: 11 Year: 21

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Christian Urena
Signature:
Month: 05 Day: 11 Year: 21

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)

U.S. EPA ID Number

Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Huyey Hoang
Signature:
Month: 5 Day: 11 Year: 21

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

SB 21024 3805-001 PPW

#80425

Generator acknowledges that no material change has occurred either in the characteristics or in the process generating the material.

Please print or type. Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MAC300012655
2. Page 1 of: 1
3. Emergency Response Phone: (800) 483-3718
4. Manifest Tracking Number: 015834702 FLE

GENERATOR

Massachusetts Electric Company
40 Sylvan Road
Waltham, MA 02451
Generator's Phone: (781) 907-3647 ATTN:Susan Brochu

Generator's Site Address (if different than mailing address)
131 Morse Street
Foxborough,MA 02035

6. Transporter 1 Company Name: Clean Harbors Environmental Services, Inc.
U.S. EPA ID Number: MAD039322250

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Clean Harbors of Braintree Inc
1 Hill Avenue
Braintree, MA 02184
Facility's Phone: (781) 380-7100
U.S. EPA ID Number: MAD053452637

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. NON-RCRA HAZARDOUS WASTE, SOLIDS, (OILY SOLIDS)	XX4	DM	350	P	MA01		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
(4 X 55)

Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf for purposes of transportation efficiency, convenience, or safety

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Christian Urena On behalf of Mass Electric
Signature:
Month: 06 Day: 10 Year: 21

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Christian Urena
Signature:
Month: 06 Day: 10 Year: 21

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Rick Kinsella
Signature:
Month: 6 Day: 10 Year: 21

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

80619

Please print or type. Generator acknowledges that no material change has occurred, either in the characteristics or in the process generating the material.

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	MAC300012655	1	(800) 483-3718	016455987 FLE

GENERATOR

5. Generator's Name and Mailing Address
Massachusetts Electric Company
40 Sylvan Road
Waltham, MA 02451
Generator's Phone: (781) 907-3647 ATTN: Susan Brochu

Generator's Site Address (if different than mailing address)
131 Morse Street
Foxborough, MA 02035

6. Transporter 1 Company Name
Clean Harbors Environmental Services, Inc.
U.S. EPA ID Number: MAD039322250

7. Transporter 2 Company Name
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Clean Harbors El Dorado LLC
309 American Circle
El Dorado, AR 71730
Facility's Phone: (870) 863-7173
U.S. EPA ID Number: ARD069748192

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NON DOT REGULATED MATERIAL, (OILY SOLIDS)	004	DM	500	P	MA01
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1.240179-1
4X17H Drums

Contract retained by generator confers agency authority on initial transporter to add or substitute additional transporters on generator's behalf for purposes of transportation efficiency, convenience or safety

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: On Behalf of Mass Electric — Signature: Craig Bloem — Month: 09 Day: 08 Year: 21

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Craig Bloem — Signature — Month: 09 Day: 08 Year: 21
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H040			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name — Signature — Month: 09 Day: 18 Year: 21

EPA Form 8700-22 (Rev. 12-17) Previous editions are obsolete.

DESIGNATED FACILITY TO EPA's e-MANIFEST SYSTEM

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

SB 210458155-001 PPW

Tighe&Bond

APPENDIX G

1. This report has been prepared on behalf of and for the exclusive use of the Client and is subject to and issued in accordance with the Agreement and the provisions thereof. Documents provided on this project shall not, in whole or in part, be disseminated or conveyed to any other party, nor used by any other party without the prior written consent of Tighe & Bond. Reuse of documents by Client or others without Tighe & Bond's written permission and mutual agreement shall be at the user's sole risk, without liability on Tighe & Bond's part and Client agrees to indemnify and hold Tighe & Bond harmless from all claims, damages, and expenses, including attorney's fees, arising out of such unauthorized use or reuse.

2. Tighe & Bond acknowledges and agrees that, subject to the Limitations set forth herein and prior written approval by Tighe & Bond, this report may be provided to specific financial institutions, attorneys, title insurers, lessees and/or governmental agencies identified by Client at or about the time of issuance of the report in connection with the conveyance, mortgaging, leasing, or similar transaction involving the real property which is the subject matter of a report and any work product. Use of this report for any purpose by any persons, firm, entity, or governmental agency shall be deemed acceptance of the restrictions and conditions contained therein, these Limitations and the provisions of Tighe & Bond's Agreement with Client. No warranty, express or implied, is made by way of Tighe & Bond's performance of services or providing an environmental site assessment, including but not limited to any warranty with the contents of a report or with any and all work product.

3. Tighe & Bond performed the subsurface investigation in accordance with our Agreement (including any stated scope and schedule limitations) and used the degree of care and skill ordinarily exercised under similar circumstances by members of the profession practicing in the same or similar locality. The objective of a subsurface investigation is to evaluate the presence or absence of contamination. Where access was denied or conditions obscured, Tighe & Bond provides no opinion or report on such areas. The subsurface investigation may not identify all contaminated media as our scope may be limited to certain locations within a site or due to geologic variability, contamination variability, seasonal conditions, obstructions such as buildings, utilities, or other site features and/or other unknown conditions. Tighe & Bond performed the subsurface investigation using reasonable methods to access and identify the presence of contaminated media. Therefore, additional contaminated media may be present at the site and may be discovered during development and site work, so an appropriate cost contingency should be carried by the Client based on their risk tolerance. Tighe & Bond also makes no opinion or report of contamination that may have migrated off site unless off-site investigations are specifically including in the scope of services.

4. Findings, observations, and conclusions presented in this report, including but not limited to the extent of any subsurface explorations or other tests performed by Tighe & Bond, are limited by the scope of services outlined in the Agreement, which may establish schedule and/or budgetary constraints for an environmental assessment or phase thereof. Furthermore, while it is anticipated that each assessment will be performed in accordance with generally accepted professional practices and applicable standards (such as ASTM, etc.) and applicable state and Federal regulations, as may be further described in the report and/or the Agreement, Tighe & Bond does not assume responsibility for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of its services.

5. In preparing this report, Tighe & Bond, Inc. may have relied on certain information provided by governmental agencies or personnel as well as information and/or representations provided by other persons, firms, or entities, and on information in the files of governmental agencies made available to Tighe & Bond at the time of the site assessment. To the extent that such information, representations, or files may be inaccurate, missing, incomplete or not provided to Tighe & Bond, Tighe & Bond is not responsible. Although there may be some degree of overlap in the information provided by these various sources, Tighe & Bond does not assume responsibility for independently verifying the accuracy, authenticity, or completeness of any and all information reviewed by or received from others during the course of the site assessment.

6. The assessment presented is based solely upon information obtained or received prior to issuance of the report. If additional environmental or other relevant information is developed at a later date, Client agrees to bring such information to the attention of Tighe & Bond promptly. Upon evaluation of such information, Tighe & Bond reserves the right to recommend modification of this report and its conclusions. In addition, dense forested areas on the site created some visual and access limitations during the site reconnaissance.

7. Emerging contaminants, including per- and poly-fluorinated alkyl substances (PFAS), are hazardous materials or mixtures (including naturally occurring or manmade chemical, microbial, or radiological substances) that are characterized by having a perceived or real threat to human health, public safety, or the environment for which there are no published health standards or guidelines and there is insufficient or limited available toxicological information or toxicity information that is evolving or being re-evaluated; or there is not significant new source, pathway, or detection limit information. The state of these compounds is constantly being updated and therefore, Tighe & Bond cannot be held liable for not including these compounds in the list of analytes that are analyzed when our services are performed. Unless otherwise specified, Tighe & Bond will only analyze for compounds ordinarily included under similar circumstances by members of the profession practicing in the same or similar locality. Tighe & Bond will not be liable for not including these or any other compounds in the list of target analytes if information regarding their use is not made available by current or former operators/owners at the facility being evaluated. We will also not be liable for not analyzing for the presence of an emerging contaminant, even if that compound is detected at a later date.

8. Tighe & Bond makes no guarantee or warranty that this report (if provided to a regulatory agency) will pass a regulatory audit/review. The Licensed Site Professional (LSP), Licensed Environmental Professional (LEP), Professional Geologist (PG), Professional Engineer (PE) or other relevant professional licensure and the applicable regulatory reviewing agency may have differences of opinion on aspects of (and approaches to) the assessment, remediation, risk evaluation or closure and the regulatory agency may request additional information, sampling data, analysis and/or remediation. Such differences of opinion will not be interpreted to imply that Tighe & Bond's services were not performed competently and in accordance with the standard of care. If additional investigations, response action evaluations, or discussions are needed following a regulatory audit/review, Tighe & Bond can provide these services under a separate Agreement.

9. If an Opinion of Probable Construction Costs (OPCC) is provided, Tighe & Bond has no control over the cost or availability of labor, equipment or materials, or over market conditions or the contractor's method of pricing, and that the opinion of probable costs is made on the basis of Tighe & Bond's professional judgment and experience is based on currently available information. Tighe & Bond makes no guarantee nor warranty, expressed or implied, that the actual costs of the construction work will not vary from the OPCC.

Tighe&Bond

APPENDIX H

N5067-084
January 4, 2022

CJW LLC
Attn: Christopher Totman
56 Tenth Street
Stoughton, Massachusetts 02072

Re: Notification of Environmental Sampling
National Grid – Non-PCB Mineral Oil Dielectric Fluid Release
131 Morse Street
Foxborough, Massachusetts 02035
MassDEP RTN 4-28528

To Mr. Totman:

Tighe & Bond, on behalf of Massachusetts Electric Company d/b/a National Grid (MEC), is hereby notifying you as the listed owner of 131 Morse Street of environmental sampling completed in response to a sudden release of non-polychlorinated biphenyl (Non-PCB) mineral oil dielectric fluid (MODF) from a MEC pad-mounted transformer at your property. This release was reported to the Massachusetts Department of Environmental Protection (MassDEP) on October 4, 2020 and was assigned Release Tracking Number (RTN) 4-28528.

On December 29, 2021, three soil borings were advanced in the vicinity of the former transformer. Each boring was completed as a groundwater monitoring well. On December 29, 2021, Tighe & Bond, on behalf of MEC, collected five soil samples from the three soil borings to evaluate the extent of the MODF release. These soil samples have been submitted for laboratory analysis of extractable petroleum hydrocarbons (EPH) and results are pending. Within 30 days of the laboratory report being issued, you will be provided with a copy of the laboratory report and a Site plan showing the sampling locations.

In addition to the soil samples already collected, Tighe & Bond is planning to collect three groundwater samples, one from each monitoring well, at the Site on January 6, 2022. These groundwater samples will also be submitted for laboratory for analysis of EPH and the results will be provided to you within 30 days of receipt.

Massachusetts Department of Environmental Protection (MassDEP) regulations 310 CMR 40.1403(10) require that written notice be provided within seven days any time environmental samples are collected on behalf of someone other than the property owner. Please note that this letter and the attached MassDEP form are for notification purposes and no action is being asked of you in response to this notice. You will also be provided with notification of any MassDEP reports submitted to document the progress or completion of response activities.

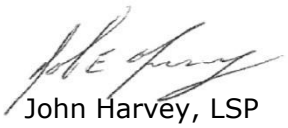
A copy of reports documenting remedial activities and conditions at the Site are available for review online at https://eeaonline.eea.state.ma.us/ – RTN 4-28528, or by contacting Tighe & Bond. Additional public involvement opportunities are available under 310 CMR 40.1403(9).

Should you have any questions, comments or concerns relative to this correspondence, please do not hesitate to contact the undersigned at (401) 455-4306 or (781) 708-9820.

Sincerely,

TIGHE & BOND, INC.

Shelby Miller Marokhovsky
Project Environmental Scientist



John Harvey, LSP
Project Manager

Enclosures:
BWSC Form 123

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

4 - 28528

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 131 Morse Street

City/Town: Foxborough Zip Code: 02035

B. This notice is being provided to the following party:

1. Name: Christopher Totman, on behalf of CJW LLC
2. Street Address: 56 Tenth Street

City/Town: Stoughton Zip Code: 02072

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: 131 Morse Street

City/Town: Foxborough Zip Code: 02035

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-Temporary Solution Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☐ residential ☑ commercial ☑ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Five soil samples from three soil borings were collected for analysis of extractable petroleum hydrocarbon ranges on December 29, 2021. The laboratory results will be provided at a later date.
Three groundwater samples, one from each on-Site monitoring well installed during drilling on December 29, 2021, will be collected on January 6, 2022.

E. Contact information related to the party providing this notice:

Contact Name: John Harvey (Tighe & Bond, on behalf of National Grid)
Street Address: One University Avenue, Suite 100
City/Town: Westwood Zip Code: 02090
Telephone: (781) 708-9820 Email: jharvey@tighebond.com

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

4 - 28528

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 of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) 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/eea/agencies/massdep/cleanup. 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://public.dep.state.ma.us/SearchableSites2/Search.aspx to view site-specific files on-line or http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html if you would like to make an appointment to see these files in person. 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.

N-5067-084
January 26, 2022

CJW LLC
Attn: Christopher Totman
56 Tenth Street
Stoughton, MA 02072

Re: **Public Notification of Environmental Sampling Results**
Mineral Oil Dielectric Fluid Release
131 Morse Street
Foxborough, Massachusetts
MassDEP RTN 4-28528

Dear Mr. Totman:

On behalf of Massachusetts Electric Company d/b/a National Grid (MEC), Tighe & Bond is providing this notice of environmental sampling results to you as the owner of record for the referenced property in accordance with 310 CMR 40.1403(10). MEC has been conducting assessment and remediation activities at the property in response to a release of mineral oil dielectric fluid (MODF) from a transformer that was damaged during an electrical fire on October 4, 2020.

On December 29, 2021, Tighe & Bond, on behalf of MEC, collected five soil samples from three soil borings advanced in the vicinity of the former transformer. The soil samples were submitted to a certified laboratory for analysis of extractable petroleum hydrocarbons (EPH) carbon ranges via MassDEP-approved methodology. The laboratory analytical results indicate that levels of EPH carbon ranges are present in two of the boring locations (in three of the five samples), but at concentrations significant below the Massachusetts Department of Environmental Protection (MassDEP) regulatory standards.

In addition, on January 6, 2022, Tighe & Bond, on behalf of MEC, collected three groundwater samples from each of the three groundwater monitoring wells installed within the soil borings on December 29, 2021. The groundwater samples were submitted to a certified laboratory for analysis of EPH carbon ranges via MassDEP-approved methodology. The laboratory analytical results indicate that EPH carbon ranges are not present within groundwater in excess of the applicable laboratory method reporting limits or the MassDEP regulatory standards.

Please note that this letter, the attached MassDEP form, and laboratory analytical reports are for notification purposes only and no action is being asked of you in response to this notice.

A copy of reports documenting remedial activities and conditions at the site are available for review online at https://eeaonline.eea.state.ma.us/portal#!/search/wastesite - Release Tracking Number (RTN) 4-28528. Additionally, public involvement opportunities are available under 310 CMR 40.1403(9) and 310 CMR 40.1404.

If you have any questions regarding this correspondence, please feel free to contact the undersigned at (401) 455-4306 or (781) 375-2572.

Very truly yours,

TIGHE & BOND, INC.

Shelby Miller Marokhovsky
Project Environmental Scientist

John Harvey, LSP
Project Manager

Enclosures: BWSC 123
Laboratory Reports

J:\N\N5067 National Grid 2020 ER\084 MEC Morse St Foxborough\Public Notifications\Phase I ISI Sampling\Notification of Soil and Groundwater Results.docx

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

4 - 28528

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 131 Morse Street

City/Town: Foxborough Zip Code: 02035

B. This notice is being provided to the following party:

1. Name: Christopher Totman, on behalf of CJW LLC
2. Street Address: 56 Tenth Street

City/Town: Stoughton Zip Code: 02072

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: 131 Morse Street

City/Town: Foxborough Zip Code: 02035

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-Temporary Solution Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☐ residential ☑ commercial ☑ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater, indoor air, soil gas) to the extent known at the time of this notice.

Five soil samples and three groundwater samples were collected in the vicinity of the former transformer area south of the building on your property. Both the soil and groundwater samples were submitted for analysis of EPH carbon ranges.

E. Contact information related to the party providing this notice:

Contact Name: John Harvey (Tighe & Bond on behalf of National Grid)
Street Address: One University Avenue, Suite 100
City/Town: Westwood Zip Code: 02090
Telephone: (781) 708-9820 Email: jharvey@tighebond.com

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC123

This Notice is Related to:
Release Tracking Number

4 - 28528

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 of a release for which a notification to MassDEP has been made under the Massachusetts Contingency Plan (310 CMR 40.0300) 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/eea/agencies/massdep/cleanup. 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://public.dep.state.ma.us/SearchableSites2/Search.aspx to view site-specific files on-line or http://mass.gov/eea/agencies/massdep/about/contacts/conduct-a-file-review.html if you would like to make an appointment to see these files in person. 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.

www.tighebond.com

100% Recyclable