IMMEDIATE RESPONSE ACTION PLAN

No. 2 Fuel Oil Release
188 Medford Street (at Mystic Valley Parkway)
Arlington, Massachusetts

DEP Release Tracking Number: 3-31576

CHES Job No.: EO5401971

Prepared for:
J.P. Noonan Transportation, Inc.
415 West Street
West Bridgewater, Massachusetts 02379

Prepared by:

Clean Harbors Environmental Services, Inc.
42 Longwater Drive
Norwell, Massachusetts 02061

July 26, 2013

Richard E. MacCarthy
Senior Project Engineer

Anthony M. DelTufo, L.S.P.
Manager, Remedial Investigations

IMMEDIATE RESPONSE ACTION PLAN

No. 2 Fuel Oil Release
188 Medford Street (at Mystic Valley Parkway)
Arlington, Massachusetts

DEP Release Tracking Number: 3-31576

CHES Job No.: EO5401971

TABLE OF CONTENTS

FIGURES

TABLES

APPENDICES

Environmental Services®
42 Longwater Drive
Norwell, Massachusetts 02061-9149

IMMEDIATE RESPONSE ACTION PLAN

No. 2 Fuel Oil Release
188 Medford Street (at Mystic Valley Parkway)
Arlington, Massachusetts

DEP Release Tracking Number: 3-31576
CHES Job No.: EO5401971

INTRODUCTION

At approximately 4:15 PM on May 31, 2013, a 10,000 gallon tanker truck owned by J. P. Noonan Transportation, Inc. (Noonan) of West Bridgewater, Massachusetts overturned at the rotary at Medford Street and Mystic Valley Parkway, in front of 188 Medford Street (Winchester Savings Bank, WSB) in Arlington, Massachusetts. The truck was carrying approximately 10,000 gallons of No. 2 fuel oil, and approximately 9,600 gallons were released to the roadway and sidewalk when the tanker shell ruptured after contacting a fire hydrant and curbing at the edge of the roadway. Some splashing and fire fighting foam caused minimal impact to soil on the bank side of the sidewalk, but the majority of the release flowed along the pavement and into storm water catch basins, which discharge to the Mystic River. As a result, an approximate ½ mile stretch of river, between the Medford Street (High Street) and River Street (Harvard Avenue) bridges, was impacted by the release. A Locus Map is attached as Figure 1, a Site Sketch showing the release area at the rotary is attached as Figure 2, and an Aerial Photograph of the site is presented as Figure 3.

Immediate Response Actions (IRAs) were conducted by Clean Harbors Environmental Services, Inc. (CHES) and Moran Environmental Recovery, LLC (MER) along with the Massachusetts Department of Environmental Protection (DEP), the United States Coast Guard (USCG), the United States Environmental Protection Agency (EPA) and other federal, state and local government agencies. IRA activities included the collection of separate-phase product from the water surface and various remediation efforts including cleaning/removal of impacted pavement, cleaning of the impacted drainage system, removal of impacted soils, and the assessment and subsequent removal of impacted debris and moss/soil/sediments along the Arlington shoreline.

While IRA activities have recovered an extraordinarily high percentage of the released fuel, further response actions are planned to monitor site conditions and the effectiveness of response action completed to date, and to allow further remedial actions as warranted. As such, CHES has prepared this IRA Plan, in accordance with 310 CMR 40.0410, to document the completed response actions and outline proposed IRA activities. The document also presents a conceptual framework for future monitoring and sampling (as necessary) to achieve site closure under the

Massachusetts Contingency Plan (MCP), 310 CMR 40.0000. Copies of the Release Notification Form (BWSC103) for the release, and IRA Transmittal Form (BWSC105) to be submitted electronically, are presented as Appendix A.

SITE SETTING

The release site includes portions of the Medford Street, Mystic Valley Parkway and Maynard Street roadways, the sidewalk and landscaped area in front of WSB, and approximately ½ mile of the Mystic River between the Medford Street and River Street bridges. The Mystic River is the town boundary between Arlington and Medford, such that the release area is located in both towns. Medford Street becomes High Street, and River Street becomes Harvard Avenue in Medford. Recreational land abuts both sides of the river in the release area. The closest residential property is located immediately west of the initial release location, adjacent to the WSB building.

The upper portion of the site includes portions of Medford Street, Mystic Valley Parkway and Maynard Street, the sidewalk and landscaped area in front of the 188 Medford Street, and a small area in the recreation area on the Arlington side of the Mystic River. The lower or river/shoreline portion of the site consists of the river bank from the drain outfall from the intersection of Maynard Street and Mystic Valley Parkway located just upstream of the Medford Street bridge to the riprap stone abutment at the River Street bridge. There is a water level control schedule for the Mystic River that is maintained by the Massachusetts Department of Conservation and Recreation (DCR) at the Amelia Earhart Dam, located approximately four miles downstream in Somerville, Massachusetts. Generally the water level in the river fluctuates less than six inches daily, and as much at 18 to 24 inches during periods of heavy precipitation. When water levels are not being controlled by releasing water at the dam, there is very little flow in the river in the area of the release.

IMMEDIATE RESPONSE ACTIONS

Background/Initial Activities

Immediately after the accident occurred, the site was quickly secured by the Massachusetts State Police, and the Arlington and Medford Police and Fire Departments. The fire departments and the Massachusetts Department of Fire Safety (DFS) state hazmat team initiated the IRA by placing absorbent materials on portions of the release area and around nearby drainage structures. The DEP was notified of a release by the Arlington Fire Department at approximately 4:25 PM and immediately responded to the site. MER, who was the DEP's on-call emergency response contractor at the time, was requested by DEP to respond to the site. Noonan, upon notification of the release at approximately 4:30 PM, contracted CHES to assist with the IRA, and the Massachusetts Port Authority (Massport) Fire Department was also dispatched to the site and sprayed fire-fighting foam on the release area at the rotary. The DEP's Field Assessment and Support Team (FAST) was mobilized to the site and set up air monitoring stations at various locations around the release area. Test results indicated no risk to the population. Also, spill trailers containing containment and absorbent boom were mobilized from the DEP's Wilmington facility as well as local fire departments. By 8:30 PM, four sets of boom had been deployed across the Mystic River.

Upon arrival on-site, CHES inspected the site which included the pavement and some adjacent soil surfaces at the rotary intersection of Medford Street, Arlington and Mystic Valley Parkway. Approximately 6,200 square feet of pavement surface including the rotary, Mystic Valley Parkway and a small portion of Maynard Street was covered with fire-fighting foam that had been applied to the release. There were also several catch basins and drain manholes located within the rotary and at the intersection of Maynard Street that were within the release area. The released fuel entered the Mystic River from two outfalls from the storm drainage system. It appeared that the majority of the fuel entered the catch basin (CB-4) at the rotary and a relatively small quantity entered the catch basins (CB-1, CB-2 and CB-3) at Maynard Street. The DEP and fire department personnel had containment boom deployed across the river just upstream of the River Street bridge at approximately 6:30 PM. The released fuel had not reached this point in the river that was located approximately 2,500 feet downstream from the Medford Street rotary due to the slow flow in the river at the time.

Once the tanker truck had been righted, CHES removed approximately 400 gallons of fuel from the trailer using a vacuum truck, at which point it was determined that as much as 9,600 gallons of fuel were released as a result of the incident. Additional containment boom had been installed across the river at three additional locations; upstream of the Medford Street bridge (Boom 1), near Palmer Street (Boom 2), near Park Street (Boom 3) in addition to the boom already deployed at River Street (Boom 4). Boom 2 & 3 were set diagonally to direct the fuel towards Arlington and expedite fuel recovery. The location of these and additional boom subsequently deployed, are shown on Figure 3 (Aerial Photograph), and photographs taken during the response are presented as Appendix B.

CHES personnel made contact with and met with representatives of the Arlington and Medford Conservation Commission (ConCom) on behalf of Noonan and received verbal approval for an Emergency Certification pursuant to the Massachusetts Wetland Protection Act M.G.L. c. 131. The certifications were both issued on June 6th.

Product Recovery from the Mystic River

Product recovery from the river was initiated shortly after the truck was righted with a CHES vacuum truck skimming fuel just downstream of Medford Street, and a MER vacuum truck skimming fuel near Park Street (Boom 3). By midnight, there were three additional vacuum trucks on-site (3 CHES and 2 MER for a total of 5 trucks) with two trucks skimming at Boom 2, two trucks skimming at Boom 3 and one vacuum truck skimming at Boom 4. Product recovery continued overnight at these locations. At approximately 9:30 AM on June 1st, the first trucks had been offloaded into a fractionation tank (frac tank) staged on-site, with a total of 11,000 gallons of oil and water including an estimated 1,800 gallons of fuel oil. Early on June 1st, two additional CHES vacuum trucks and a skimmer barge were on-site.

Concurrent with the skimming operations, absorbent pads and boom were used to contain and collect fuel at the containment boom locations. The spent absorbents materials that became saturated with fuel oil were changed out, placed into double polyethylene (poly) bags, replaced with fresh absorbents and then placed into a roll-off contained staged on-site pending disposal. As previously mentioned, the water level in the river is controlled by a draining schedule

maintained by the DCR at the Amelia Earhart Dam. Because the release occurred on May 31st near 4:00 PM, DCR postponed the scheduled 8:00 PM drain that evening to aid with the fuel oil containment and cleanup. As such, DCR provided a slow drain on June 1st at 9:00 AM and 9:00 PM to enhance the product recovery efforts. Prior to the start of the 9:00 AM drain, additional containment and absorbent boom were installed just downstream of Boom 2 and 3 (Boom 2A & 3A) and at two locations, just downstream of the River Street bridge (Boom 5), and approximately 200 feet further downstream (Boom 6), as a precautionary measure.

During the day on Saturday, June 1st, the skimmer barge was lowered into the river at the River Street bridge and the oil recovery at that location was significantly increased with the barge and increased flow to the containment boom during the controlled drain. Most of the free oil on the water surface had been collected from the water surface before dusk on Saturday. Oil recovery continued through the night into Sunday. On Sunday morning June 2nd, there was no longer any free oil visible on the surface of the Mystic River. Measurement of oil in the two frac tanks indicated that approximately 6,800 gallons of fuel oil had been recovered using the vacuum trucks and skimmer barge. It was also estimated that 1,000 to 1,500 gallons of fuel oil was recovered from the river with the absorbents.

According to the measurements obtained from DCR and the United States Geological Survey (USGS) website for gauging heights at the Amelia Earhart Dam, the water level in the Mystic River was just over 106.00 feet at the time of the release, and had risen to approximately 106.30 overnight on May 31st/June 1st. At the end of the controlled drain on Saturday when the majority of the fuel had been recovered, the water level in the river was 105.70 such that it appears that any shoreline impacts would be mostly contained within s six inch band along the riverbank. Also, it appears that little or no river bed sediments were impacted by the release because all of the free oil was recovered from the water surface before the sediment were exposed during lower water levels.

Two vacuum trucks remained on standby until June 10th as a precaution pending rain forecast for June 8th. The river was monitored for evidence of oil and containment and absorbent boom in the river were maintained. Prior to shipping the oil and water off site for disposal, and after the oil and water had time to settle, the oil was again measured in the frac tanks and it was estimated that approximately 7,200 gallons of fuel oil was contained in the tanks.

Water Sampling

During an assessment in the river by CHES and DEP personnel on June 3rd, CHES collected three water samples at locations downstream (WS-1), in the middle of the site (WS-2) and upstream (WS-3) from the center of the river at a depth of approximately eight to 12 inches below the surface. The sample locations are shown on the Aerial Photograph presented as Figure 3. The samples were submitted to the GeoLabs analytical laboratory (GeoLabs) in Braintree, Massachusetts for extractable petroleum hydrocarbons (EPH) and volatile petroleum hydrocarbons (VPH) with No. 2 fuel oil specific target compound analysis. Split samples were also analyzed in the DEP FAST mobile laboratory.

The EPH and VPH analyses (Table 1) revealed non-detectable (ND, i.e.: below the laboratory detection limit) carbon fraction and target compound concentrations in samples WS-2 and WS-

3. In the remaining sample (WS-1), the C19-C36 aliphatic concentration was 118 micrograms per liter (ug/L), the 2-methylnaphthalene concentration was 5.91 ug/L, the toluene concentration was 2.06 ug/L, the ethylbenzene concentration was 1.23 ug/L and the xylenes concentration was 10.62 ug/L. All of the remaining carbon fraction and target compound concentrations were ND.

CHES collected three additional water samples (WS-1A, WS-2A and WS-3A) from the same locations one week later on June 10th. The samples were analyzed at GeoLabs (Table 1) and revealed no detectable carbon fraction or target compound concentrations in the samples except a xylenes concentration of 9.13 ug/L in WS-1A. These data are all well below the Lowest Ecological Based Criteria used for the derivation of the Method 1 GW-3 Risk Standards. Copies of the laboratory reports are attached in Appendix C.

Pavement Replacement and Cleaning of Impacted Drains

At approximately 10:00 PM on May 31st, a paving subcontractor began to scarify the impacted pavement at the Medford Street/Mystic Valley Parkway rotary, Mystic Valley Parkway and a small portion of Maynard Street that had been impacted by the release. By approximately 10:00 AM the following day, June 1st, the pavement had been scarified and repaved. The repaved area is shown on Figure 2. After completion of the paving, a CHES crew with a vacuum truck inspected all of the drains in the vicinity of the release area for evidence of fuel oil. All oil and/or water present in each structure were removed with the vacuum truck. As indicated on the Site Sketch presented as Figure 2, fuel oil impact was present at three catch basins and one drain manhole at the intersection of Maynard Street and Mystic Valley Parkway (CB1, CB2, CB3 & DMH1), and two catch basins and two drain manholes at the rotary (CB4, CB6, DMH2 & DMH3). Several historic drainage drawings provided by the Arlington Department of Public Works (DPW) indicated that there were two drain outfalls (Drain Outfall 1 & Drain Outfall 2) associated with these impacted drainage structures that discharge to the Mystic River just upstream of the Medford Street bridge. These outfalls were visually confirmed and are shown on Figure 2.

A CHES crew returned on Sunday June 2nd with a vacuum truck and jet rod truck, and removed any residual fuel oil and sediments, and then water washed each structure and the associated piping. Each of the drainage structures appeared intact with either a solid concrete or brick bottom. Prior to water washing the piping that discharged to the river, CHES placed absorbent boom at the two suspected outfall locations. It became apparent during cleaning of the piping that the discharge from the Maynard Street structures went to Drain Outfall 1; however, there was no flow present at Drain Outfall 2 indicating that the discharge pipe from DMH-3 had not yet been identified. As such, calls were placed to the Arlington Town Engineer and DCR Engineering offices to see if additional plans could be obtained and brought to the site for review on Monday June 3rd.

On Monday June 3rd, drawings were provided by DCR that indicated there were two drain outfalls, from the rotary, that discharged to the Mystic River directly underneath the Medford Street bridge, and just downstream of the bridge (shown as drain outfall 3 and 4 on Figure 2). Drain Outfall 4 was identified along the shoreline, but Drain Outfall 3 was not observed even upon close inspection from a boat in the water under the bridge. While working in this area

some moderate to heavy rainfall occurred for a short period of time and some fuel oil was observed on the river surface downstream of the bridge. As such, additional containment and absorbent boom along with absorbent pads were deployed to contain and collect the fuel (see Boom 1A on Figure 3).

The following day, June 4th, while maintaining absorbents inside Boom 1A, a discharge pipe was identified approximately three feet below the water surface on the Arlington side of the bridge. Because the pipe was below the water surface, it was believed fuel oil may have been trapped inside the pipe and would only be discharged during heavy flow such as rainfall events. As such, arrangements were made with the Arlington DPW to discharge hydrant water to the drainage system the following morning to flush the line.

On June 5th with the assistance of the Arlington DPW, CHES conducted the line flushing by introducing hydrant water to CB4. Water was confirmed to flow through DMH2 and DMH3 and exit Drain Outfall 3. Water was introduced slowly at first, and gradually increased to the full hydrant capacity after 15 minutes. The flushing continued for an additional 75 minutes at a flow rate estimated at 350 gallons per minute such that an estimated 28,000 gallons of water had been flushed through the system. The Arlington DPW also mobilized a jet rod truck to the site during the flushing and cleaned the drain line from DMH3 to Drain Outfall 3 several times using an additional 1,000 gallons of water. There was only a small amount of fuel oil observed at the outfall during the first 15 minutes of flushing, estimated to be less than one gallon. At the completion of the flushing there was no oil, petroleum sheen or odors discharging from the outlet pipe.

Shoreline Assessment and Cleanup

Initial Cleanup: On June 4th and 5th, CHES conducted a shoreline assessment and carefully examined the entire shoreline in the site area by foot or by boat to characterize the nature and extent of the impacts to both the Arlington and Medford shorelines. The site area was divided into 100-foot sections that were each flagged starting at station 0000 at the boom upstream of Medford Street (Boom 1) and ending at station 2944 downstream of River Street. Areas of interest such as boom anchor points, collection areas and storm drain outfalls were also noted and flagged. There was no evidence of fuel oil upstream of Medford Street on either the Medford or Arlington shoreline from station 0000 to 0354 (downstream side of the bridge). There was evidence of fuel oil impact on nearly the entire Arlington shoreline from station 0354 to 2682 (River Street) consisting primarily of oiled debris including leaves, brush and trash. There was little or no evidence of fuel impact along the entire Medford shoreline except light odors and sheen in the vicinity of the stone abutments at the Medford Street and River Street bridges where the containment boom was anchored.

Based on the above observations and after obtaining approval from the Arlington ConCom, CHES removed all of the impacted debris along the Arlington shoreline on June 5th, 6th and 7th. All of the debris was removed with hand tools (rakes, shovels and clippers) and placed into double poly bags staged in a roll off container pending disposal. During the cleanup, an inspector followed the cleanup crew and noted areas where oil sheen or odors remained after cleaning. The majority of the shoreline was free of odors and sheen however there were seven areas noted where these conditions existed:

1.) station 0354 (Medford Street bridge) to 500 feet;
2.) station 0675;
3.) station 0885 to 0900;
4.) station 1485 (Boom 2 collection area);
5.) station 1795;
6.) station 1950 (Boom 3 collection area); and
7.) station 2657 to 2682 (start of rip rap to River Street bridge).

Based on these observations, CHES filed a Notice of Intent (NOI) with the Arlington ConCom and conducted a site meeting on June 13th proposing the cleanup of approximately 900 discontinuous linear feet of shoreline that would include limited removal of riverbank sediments, sporadic fringing moss, and water washing these areas to flush any remaining trapped fuel and thereby eliminate possible remaining sources of oil sheen and odors. Verbal approval was given by the ConCom during this meeting and the formal NOI was submitted on June 25th. CHES also received approval from DEP to remove the containment boom across the river and open the river to boat traffic on June 10th. Containment and absorbent boom were installed at the seven areas needing remediation, the boom across the river was removed, cleaned, and returned to owners (as applicable), and the river was opened to boat traffic on June 12th. CHES then contacted DCR and made arrangements to conduct the shoreline work when the water level could be dropped low enough to remove the impacted sediments. The location of the re-deployed containment and absorbent boom are shown on the Remediation Plan presented as Figure 4.

Sediment and Moss Removal: CHES returned to the site and removed impacted sediments and moss on June 25th and 26th. All of the debris was removed with hand tools (rakes, shovels and clippers) and collected with a vacuum truck, or placed into poly bags staged in a roll off container pending disposal. At the completion the cleanup, there were no areas noted where oil sheen remained.

Removal of Impacted Soils

CHES excavated soil impacted by the release at four discrete locations on June 2nd, 5th, 6th and 25th. The first area location was along the sidewalk and roadway in front of 188 Medford Street (Winchester Savings Bank Area) where the truck rolled over; the second location was approximately 50 feet to the east where a small quantity of oil breached the curb and impacted grass adjacent to the rotary (Rotary Area); the third location was adjacent to the frac tank staging area where a small quantity of fuel and water leaked from a frac tank during offloading of a vacuum truck (Mystic Valley Park Area); and the fourth location was just above the stone rip rap rock, upstream of the River Street bridge where some fuel oil was present, apparently from removal of spent absorbents and from foot traffic at the onset of the cleanup (River Street Rip Rap Area). The following sections describe the soil removal, confirmatory analysis and/or field screening of soils during soil removal at each area.

Winchester Savings Bank Area: CHES excavated a total of approximately 38 cubic yards of soil at this location on June 5th and 6th after arrangements were made for the Arlington DPW to be available to replace the broken hydrant at the completion of soil removal. The excavation

was located directly beneath and adjacent to where the truck came to rest, and included portions of the recently repaved roadway, asphalt sidewalk and grass area in front of the WSB building. The excavation included a small grassy area on the bank side of the sidewalk, which may extend onto the bank property. Based on the property boundary shown on a GIS map provided by the town engineer, it appears that most if not all of this small excavation falls within the roadway right-of-way, but it is possible that some of the grassy area excavation may have extended onto bank property. The soils were excavated using both a backhoe and Guzzler vacuum truck.

Soil removal was guided by visual and olfactory evidence of fuel oil supplemented by field screening of the site soils for volatile organic compounds (VOCs) using standard headspace screening methods and a MiniRAE photoionization detector (PID) calibrated to a benzene response factor. The completed excavation was an irregularly shaped area that measured approximately 65 feet long, 12 feet wide and 8-72 inches deep. There were four utilities located within the excavated area that included a sewer line, storm drain line, lateral water line to the damaged hydrant, and an unidentified pipe that was suspected to be an abandoned former pressurized sewer line. Soil removal extended approximately six feet past the inside edge of the sidewalk near bank property, and was discontinued along portions of the roadway due to possible undermining of the pavement. There was one portion of the excavation that extended approximately five feet by five feet into the roadway to allow for the DPW to install new lateral piping from the water main to the hydrant.

During soil removal, 51 discrete soil samples (S-1 through S-51) were collected from the floor and sidewalls/surface soils inside and adjacent to the excavation and field screened for VOCs with the PID. The field screening revealed VOC concentrations at the final excavation limits that ranged from no detectable (i.e. less than 0.1 parts per million, ppm) to 738 ppm in a sample located below the roadway curbing. The surface soil samples were collected from a depth of zero to three inches, the sidewall soil samples were collected from a depths ranging from 6-60 inches, and the floor samples were collected from depths ranging from 8-72 inches. The sampling locations are depicted on Figure 2, the field screening results are summarized in Table 2, and site photographs taken during soil removal are presented in Appendix B.

To further document the petroleum concentrations remaining in site soils, CHES submitted a representative split samples of the two samples with the highest VOC concentrations (S-16 and S-18), and four additional samples (S-25, S-37, S-39 and S-48) to provide geographic coverage of the excavation. The samples were submitted to GeoLabs for EPH and VPH with No. 2 fuel oil specific target compounds analysis.

The EPH analyses (Table 3) revealed C11-C22 aromatic concentrations ranging from ND to 2,120 mg/kg, the C9-C18 aliphatics concentrations ranging from ND to 2,860 mg/kg and C19-C36 aliphatics concentrations ranging from ND to 1,090 mg/kg. The VPH analyses revealed C5-C8 aliphatics concentrations ranging from ND to 33.0 mg/kg, all ND C9-C12 aliphatics concentrations and C9-C10 aromatic concentrations ranging from ND to 593 mg/kg. The EPH target compounds concentrations for naphthalene, 2-methylnaphthale, acenaphthene and phenanthrene ranged from ND to 61.1 mg/kg, and the VPH target compounds concentrations for methyl tert butyl ether, benzene, toluene, ethylbenzene, xylenes and naphthalene ranged from ND to 106.8 mg/kg. The elevated EPH/VPH concentrations were detected in samples

S-16 and S-18. No significant concentrations were detected in the remaining samples. The laboratory report is attached in Appendix C.

Although somewhat elevated EPH/VPH concentrations remain beneath the roadway, it appears that these concentrations are representative of a diminimus soil volume. Floor samples from the excavation show that the vertical extent of impact was at a maximum depth of 48 inches (sample S-46). Field screening results indicate a similar horizontal extent beneath the roadway, such that it does not appear that further soil removal is warranted.

Rotary Area: After completion of soil removal in front of the bank, CHES removed a small volume of soil adjacent to the curbing along the rotary where a small quantity of fuel oil overflowed the curb at the time of the release. Soil removal was guided by visual and olfactory evidence of staining on the ground surface, and field screening for VOCs with a PID. The completed excavation was an irregularly shaped area that measured approximately 9 feet long, 1-2 feet wide and 6 inches deep. During soil removal, four discrete soil samples (S-52 through S-55) were collected from the floor and surface soils adjacent to the excavation and field screened for VOCs with the PID. The field screening revealed VOC concentrations ranging from 2.0 to 5.0 ppm in the samples. Because the excavation was relatively small and the VOC concentrations were low, no samples were submitted for laboratory analysis, as the field screening data was deemed adequate to characterize this portion of the site. The sampling locations are depicted on Figure 2, the field screening results are summarized in Table 2, and a site photograph taken at the completion of soil removal is presented in Appendix B.

Mystic Valley Park Area: At approximately 12:00 PM on June 1st, staining was observed on the walking path immediately adjacent to and behind one of the three frac tanks that were staged at the site to store fuel and water from the vacuum recovery activities. The stain on the stone dust surface measured approximately 20 feet long and three to eight feet wide. Based on the size of the staining, it was estimated that approximately five gallons of oil/water had leaked from a fitting on the rear of the frac tank. The fitting was immediately repaired and the release area was covered with granular absorbents and polyethylene sheeting. On June 2nd, after one of the vacuum trucks at the site completed removal of the liquids in the drainage structures at the rotary, it was used to collect the spent absorbents and surficial stone dust and some adjacent soils. Because the walking path stone dust was very dense and the adjacent soils contained a lot of root matter, soil removal was postponed until a backhoe was available to loosen up the impacted area. The area was again covered with poly sheeting and secured with caution tape.

CHES returned to this location on June 6th after completion of the excavation of impacted soils at the rotary. The impacted soils were loosened up with a backhoe and collected with a Guzzler vacuum truck. Soil removal was guided by visual and olfactory evidence of staining on the ground surface, and field screening of the site soils for VOCs using a PID. The area was over-excavated to insure that no significant petroleum concentrations remained. The completed excavation measured approximately 35 feet long, 20 feet wide, with a typical depth of 3-4 inches.

At the completion of soil removal, 22 discrete soil samples (SS-1 through SS-22) were collected from the floor, sidewalls and surface soils adjacent to the excavation and field screened for VOCs with the PID. The field screening revealed VOC concentrations ranging

from 1.2 to 8.3 ppm in the samples. The surface soil samples obtained outside of the excavation to further delineate the extent of impact were collected from a depth of zero to three inches. The sidewall excavation samples were collected from a depth of zero to 20 inches, and the floor samples were collected from depths ranging from three to 24 inches. Along the walking path, only three inches of stone dust were removed when the stone no longer exhibited olfactory evidence of fuel oil (samples SS-10, SS-11, 13 and SS-14). The soil adjacent to the walking path appeared to contain little or no fuel oil, but exhibited elevated PID response. Based on these observations and the close proximity to the Mystic River, these soils were removed until all PID response was less than 10 ppm. Final PID readings ranged from 1.2 to 8.3 ppm. The sampling locations are depicted on Figure 5 (Sampling Plan), the field screening results are summarized in Table 4 and site photographs taken during soil removal are presented in Appendix B.

To further document site conditions, CHES submitted a representative split of the sample with the highest PID response (SS-12) to the GeoLabs for EPH and No. 2 fuel oil specific target compound analysis. The EPH analyses (Table 5) revealed no detectable carbon fraction or target compound concentrations except a low concentration of 0.894 mg/kg for phenanthrene, indicating no further soil removal was warranted. A copy of the laboratory report is attached in Appendix C.

River Street Rip Rap Area: On June 11th, CHES screened soils located above the upstream rip rap stone adjacent to the River Street bridge abutments because occasional petroleum odors were noted in this area. As indicated in Table 6, CHES field screened a total of 25 samples for VOCs with a PID. Six samples were collected from the small pathway on the Medford side, and 17 samples were collected from the pathway on the Arlington side at depths from the ground surface to 2 inches. On the Medford side, field screening of the samples (S-15 through S-20) revealed no detectable or only low VOC concentrations ranging from <0.1 to 2.5 ppm, and no petroleum odors were noted. On the Arlington side (S-1 through S-14 and S-21), the VOC concentrations ranged from <0.1 to 18.7 ppm, and no petroleum odors were noted except for a slight odor in the samples that were located right at the top of the rip rap (S-11, S-12 and S-13) and between the rip rap stone (S-21). Additional samples were collected at a depth of 2-4 inches at these four locations that were also field screened, with the VOC concentrations ranging from <0.1 to 6.5 ppm, with no odors present in the samples. The field screening results are summarized in Table 6.

Based on the above observations, CHES removed a small volume of soil adjacent to the rip rap on June 25th. The excavated area was approximately five feet by five feet and two to three inches deep. CHES also removed the accessible soils and detritus sporadically present within the space present between the large rip rap stones. All of these activities took place on the Arlington shoreline since no evidence of petroleum was detected on the Medford shoreline. Soil removal was guided by olfactory evidence and field screening of the site soils for VOCs with a PID. At the completion of soil/detritus removal, four discrete soil samples were collected from the soils adjacent to the rip rap (SS-11B, SS-12B, SS-13B and SS-24) and three discrete soil/detritus samples were collected from between the rip rap (SS-21B, SS-22 and SS-23). The field screening results ranged from <0.1 to 0.6 ppm, and no odors were present in the samples. Given the low PID response and small area of excavation, confirmatory laboratory

analysis was not deemed warranted. A site photograph taken at this location after soil removal is presented in Appendix B.

Remedial Waste Disposal

A total of 34,796 gallons of fuel oil and water generated from during recovery activities were transported off site by CHES under Uniform Hazardous Waste Manifest protocol via transporter trucks to Clean Harbors of Maine, Inc. in South Portland, Maine, for disposal on June 6th through 10th, 2013. Copies of the liquid disposal documents are included in Appendix D.

A total of 38 cubic yards of spent absorbent materials and oily debris (leaves and brush) were transported off site by CHES under Uniform Hazardous Waste Manifest protocol in roll-off containers to Clean Harbors of Braintree, Inc., in Braintree, Massachusetts for disposal on June 5th and 7th, 2013. Copies of the disposal documents are included in Appendix D.

A total of 19 cubic yards of oily solids (soils, sediments and debris from drainage system and riverbank cleanup), including approximately two cubic yards of soil from the WSB excavation area, were transported off site by CHES under Uniform Hazardous Waste Manifest protocol. The waste was transported via vacuum trucks to Clean Harbors of Braintree, Inc., in Braintree, Massachusetts for disposal on June 2nd, 6th and 26th, 2013. Copies of the disposal documents are included in Appendix D.

Approximately 36 cubic yards (53.65 tons) of soil from the WSB area excavation were transported off site by CHES under DEP Bill of Lading protocol. The soils were shipped in roll-off containers to Environmental Soil Management, Inc., in Loudon New Hampshire for recycling on June 10th and 11th, 2013. Copies of the disposal documents are included in Appendix D.

Two roll-off containers are presently staged at the site and will be used to dispose of spent absorbent materials currently deployed at the site. Documentation of this waste will be included in a subsequent submittal.

Site Inspections

Subsequent to the last shoreline cleanup completed on June 26th, CHES has inspected the river on six occasions during periods of high and low water levels as well as during or after precipitation events. Each of the seven areas with containment and absorbent boom were inspected. The inspections were conducted on July 1st, 10th 12th, 16th, 19th and 23rd, and photographs taken during inspections are presented in Appendix B.

Site conditions have shown a steady improvement, and for the most part, no visual or olfactory evidence of the release remains. However, occasional, sporadic odor has been noted at the River Street bridge abutment and at former Boom Area 3 (1450-1550 containment area). An occasional light sporadic petroleum sheen has also been present in these areas, although less so during recent inspections.

IRA PLAN

Based upon the site conditions observed and response actions completed to date, the potential for imminent hazards and substantial release migration has been mitigated. However, the river portion of the site, particularly the Arlington riverbank, continues to be monitored to confirm the effectiveness of the response actions conducted to date. Site inspections continue to be conducted during periods of both high and low tide, and during or after significant rainfall events, and will continue until no evidence of petroleum sheen and/or petroleum odor is noted, and with concurrence with DEP. Should site conditions continue to show steady improvement, it is anticipated that DEP approval will be requested to remove most of the remaining boom, as warranted, in the coming weeks.

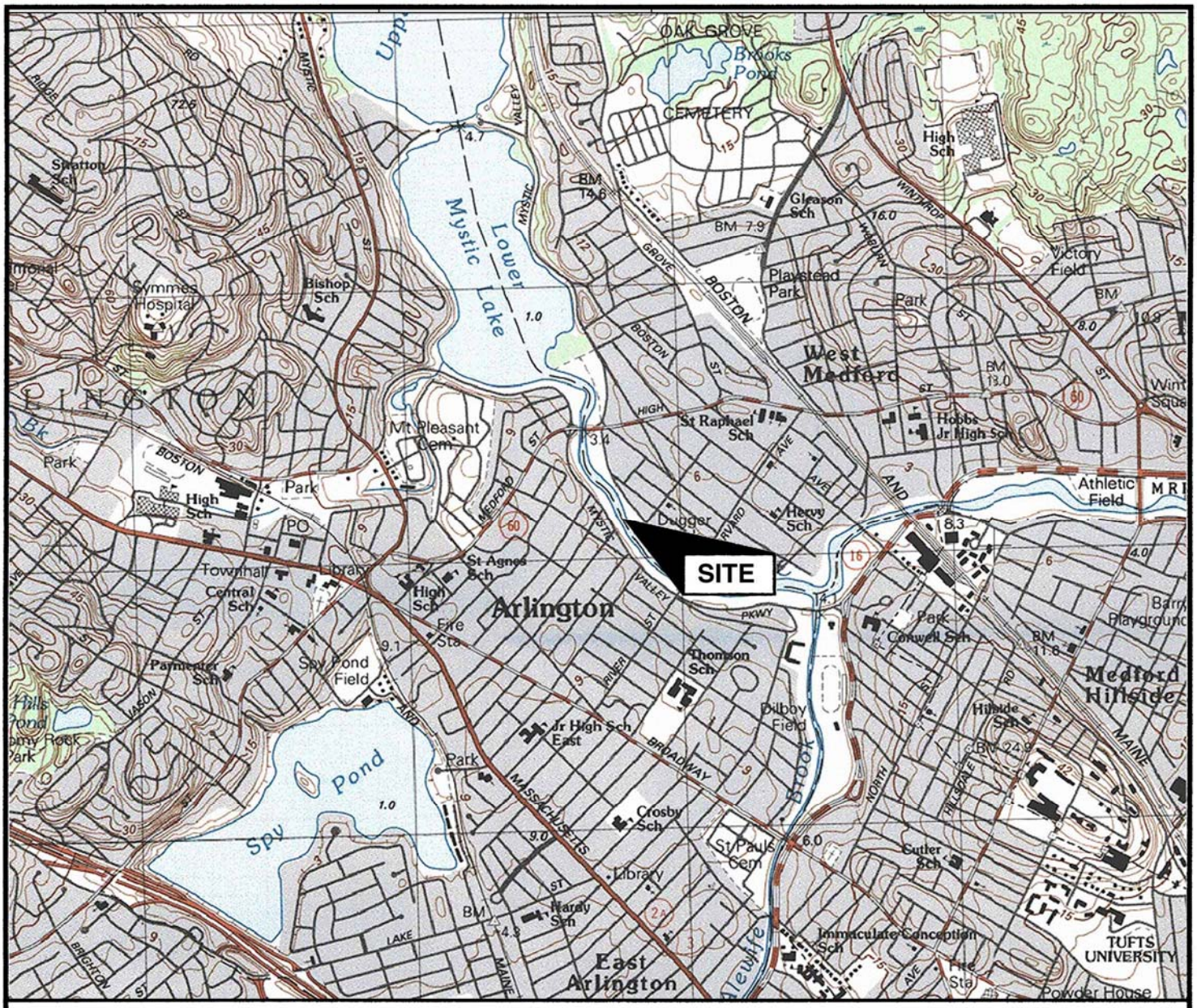
The impacted shoreline has not been sampled for laboratory analysis, as this area is being monitored and being allowed to naturally attenuate. CHES will sample these areas to evaluate any remaining soil and sediment impacts at the site prior to the next IRA submittal. Also, samples will be obtained from similar locations upstream and downstream from the release area to establish local, or background, conditions. It is anticipated that samples will be analyzed for EPH, VPH and total organic carbon. Site data will be compared to established ecological criteria and to background to evaluate whether a condition of significant risk to site biota and habitats exists, and the need for further response actions.

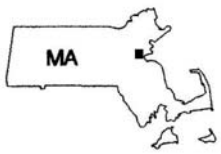
Should site conditions warrant, additional debris, soil and/or sediment may be removed to expedite site recovery. Any remedial waste generated by IRA actions will be properly disposed off site prior to concluding IRA activities. Documentation of such disposal will be provided to the DEP in subsequent IRA submittal(s).

Public involvement activities will be performed in accordance with 310 CMR 40.1400. In addition, CHES will periodically issue status reports to state and local government agencies as well as local citizen groups. Notices of Environmental Sampling and status reports submitted to date are presented as Appendix E.

SCHEDULE

The proposed monitoring and shoreline sampling described herein will be conducted within the next 60 days and documented in an IRA Status or Completion Report in accordance with 310 CMR 40.0000.





QUADRANGLE LOCATION

SCALE 1:24 000

1 0 1 MILE

1000 0 1000 2000 3000 4000 5000 6000 7000 FEET

CONTOUR INTERVAL 3 METERS
ELEVATION REFERENCE IS NATIONAL GEODETIC VERTICAL DATUM OF 1929
COORDINATE REFERENCE IS NORTH AMERICAN DATUM OF 1927

N

COORDINATES							
UTM: 4,698,327 mN 323,861 mE LONGITUDE: W 71° 08′ 27″ LATITUDE: N 42° 25′ 02″	A	PRELIMINARY	REM	AMD	AMD	6/13
	ISSUE	DESCRIPTION	DRWN	CHKD	APPR	DATE

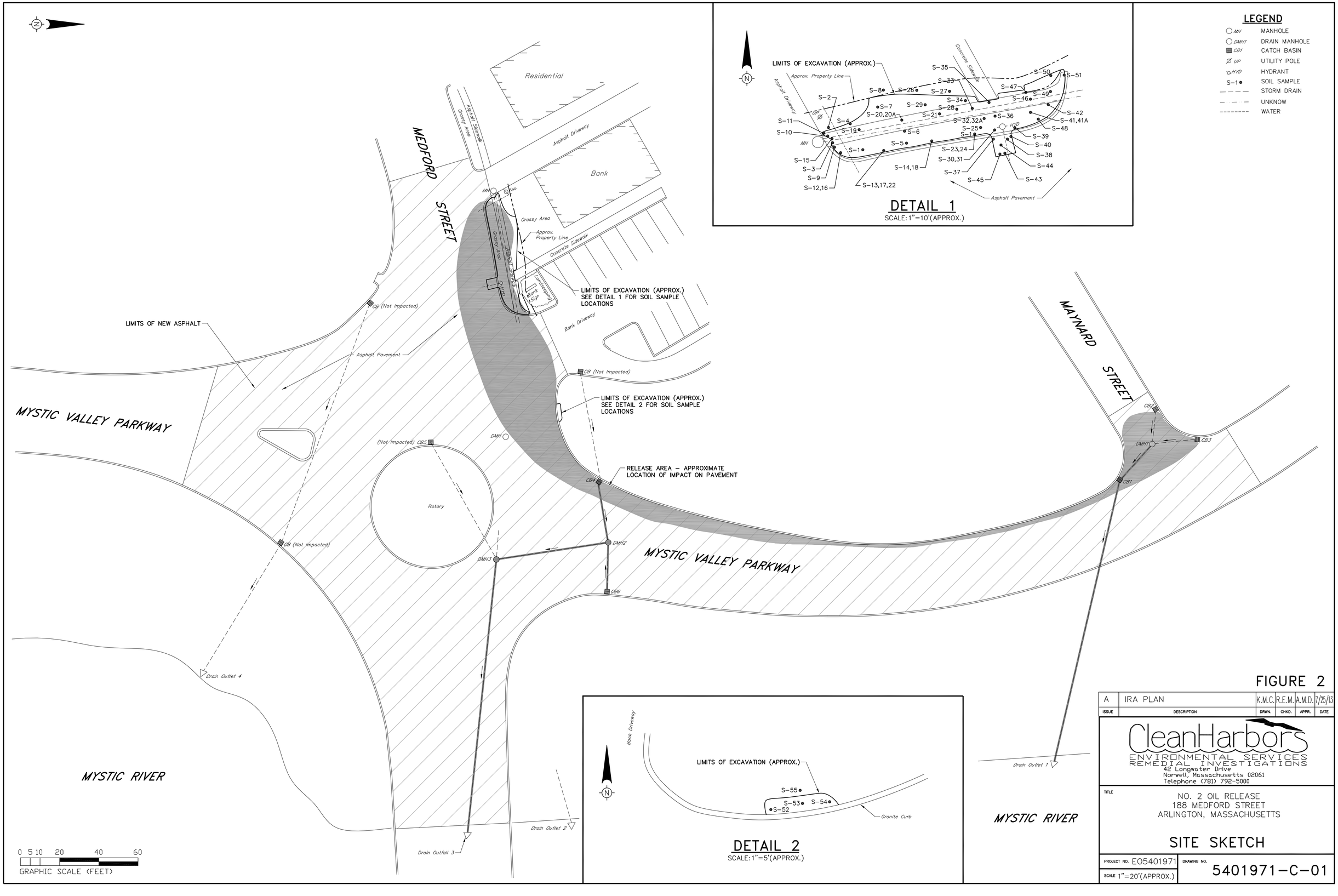
BASE MAP: USGS TOPOGRAPHIC MAP PRINTED FROM TOPO! © 1998 WILDFLOWER PRODUCTIONS

CleanHarbors
Environmental Services®
42 Longwater Drive
Norwell, Massachusetts 02061

No. 2 Fuel Oil Release
188 Medford Street (at Mystic Valley Parkway)
Arlington, Massachusetts

LOCUS MAP

JOB NO.: EO5401971	DWG. NO. FIGURE 1
SCALE: AS SHOWN	



DETAIL 1
SCALE: 1"=10'(APPROX.)

DETAIL 2
SCALE: 1"=5'(APPROX.)

LEGEND

MH	MANHOLE
DMH1	DRAIN MANHOLE
CB1	CATCH BASIN
UP	UTILITY POLE
HYD	HYDRANT
S-1	SOIL SAMPLE
	STORM DRAIN
	UNKNOW
	WATER

FIGURE 2

ISSUE	DESCRIPTION	DRWN.	CHKD.	APPR.	DATE
A	IRA PLAN	K.M.C.	R.E.M.	A.M.D.	7/25/13

CleanHarbors
ENVIRONMENTAL SERVICES
REMEDIAL INVESTIGATIONS
42 Longwater Drive
Norwell, Massachusetts 02061
Telephone (781) 792-5000

TITLE

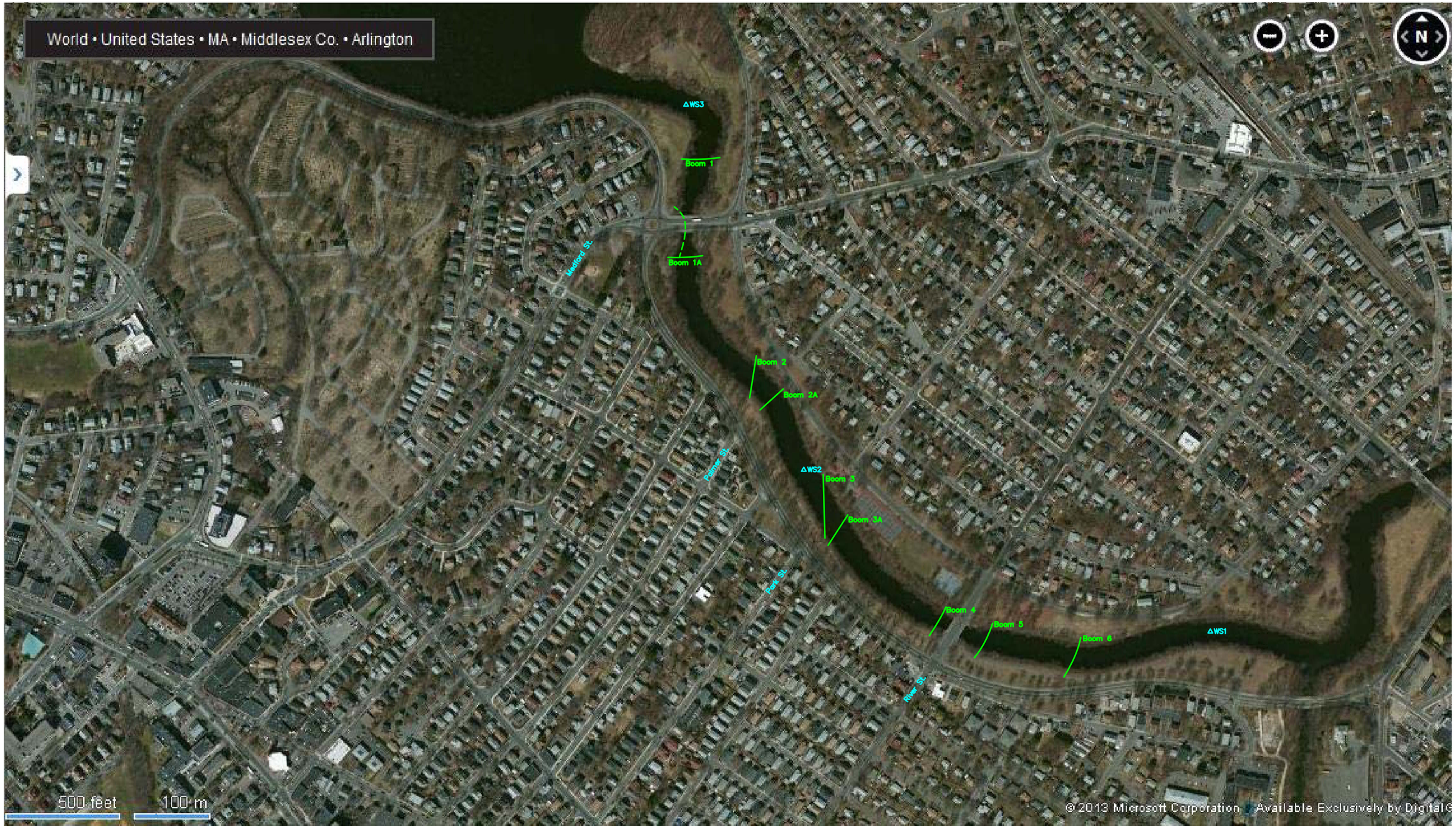
NO. 2 OIL RELEASE
188 MEDFORD STREET
ARLINGTON, MASSACHUSETTS

SITE SKETCH

PROJECT NO. E05401971

SCALE 1"=20'(APPROX.)

DRAWING NO. 5401971-C-01



LEGEND

Boom 1 — CONTAINMENT BOOM

ΔWS1 — WATER SAMPLE

FIGURE 3

ISSUE	DESCRIPTION	DRWN.	CHKD.	APPR.	DATE
A	IRA PLAN	K.M.C.	R.E.M.	S.J.A.	7/25/13

CleanHarbors
ENVIRONMENTAL SERVICES
REMEDIAL INVESTIGATIONS
42 Longwater Drive
Norwell, Massachusetts 02061
Telephone (781) 792-5000

NO. 2 FUEL OIL RELEASE
MEDFORD STREET @ MYSTIC VALLEY PARKWAY
ARLINGTON, MASSACHUSETTS

AERIAL PHOTOGRAPH

PROJECT NO. E05401971 | DWG. NO. 5401971-C-03

SCALE AS NOTED

Legend: = Area where shoreline will be water washed and/or impacted moss may be removed

= Area where limited sediments and/or soils may be removed

Figure 4

ISSUE	DESCRIPTION	DRWN.	CHKD.	APPR.	DATE
A	IRA Plan	K.M.C.	R.E.M.	S.J.A.	6/17/13

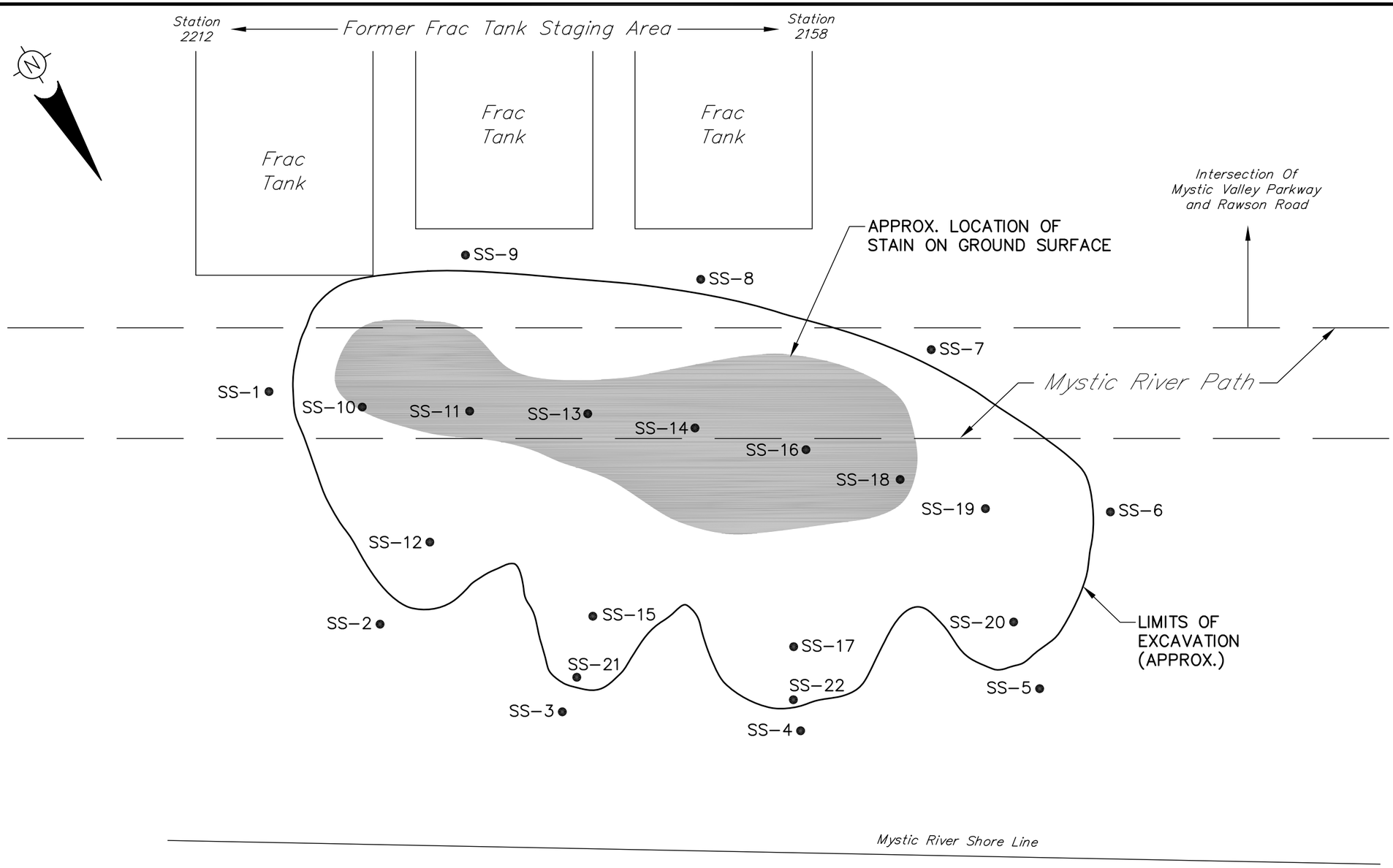
CleanHarbors
ENVIRONMENTAL SERVICES
REMEDIAL INVESTIGATIONS
42 Longwater Drive
Norwell, Massachusetts 02061
Telephone (781) 792-5000

NO. 2 FUEL OIL RELEASE
MEDFORD STREET @ MYSTIC VALLEY PARKWAY
ARLINGTON, MASSACHUSETTS

REMEDIATION PLAN

PROJECT NO. E05401971
SCALE AS NOTED
DWG. NO. 5401971-C-02

FIGURE 5



ISSUE	DESCRIPTION	DRWN.	CHKD.	APPR.	DATE
A	IRA PLAN	K.M.C.	R.E.M.	A.M.D.	7/25/13

NO. 2 OIL RELEASE
MYSTIC VALLEY PARKWAY AT PARK STREET
ARLINGTON, MASSACHUSETTS

SAMPLING PLAN

PROJECT NO. E05401971 | DWG. NO. 5401971-C-04
SCALE 1"=5'(APPROX.)

LEGEND

SS-1 ● SOIL SAMPLE

CleanHarbors
ENVIRONMENTAL SERVICES
REMEDIAL INVESTIGATIONS
42 Longwater Drive
Norwell, Massachusetts 02061
Telephone (781) 792-5000

Table 1
Laboratory Analysis of Surface Water Samples
188 Medford Street (at Mystic Valley Parkway), Arlington, MA

Sample Dates: June 3 & 10, 2013

Sample ID	WS-1	WS-1A	WS-2	WS-2A	WS-3	WS-3A	Lowest Ecological Criteria*
Sample Date:	6/3/2013	6/10/2013	6/3/2013	6/10/2013	6/3/2013	6/10/2013	
	(Downstream)	(Downstream)	(Middle)	(Middle)	(Upstream)	(Upstream)	
EPH (ug/l)							
C11-C22 Aromatics	ND(103)	ND(103)	ND(101)	ND(103)	ND(101)	ND(102)	5
C9-C18 Aliphatics	ND(103)	ND(103)	ND(101)	ND(103)	ND(101)	ND(102)	1,800
C19-C36 Aliphatics	118	ND(103)	ND(101)	ND(103)	ND(101)	ND(102)	2,100
Naphthalene	ND(1.03)	ND(1.03)	ND(1.01)	ND(1.03)	ND(1.01)	ND(1.02)	72
2-Methylnaphthalene	5.91	ND(1.03)	ND(1.01)	ND(1.03)	ND(1.01)	ND(1.02)	70
Acenaphthene	ND(1.03)	ND(1.03)	ND(1.01)	ND(1.03)	ND(1.01)	ND(1.02)	23
Phenanthrene	ND(1.03)	ND(1.03)	ND(1.01)	ND(1.03)	ND(1.01)	ND(1.02)	38
VPH (ug/l)							
C5-C8 Aliphatics	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	250
C9-C12 Aliphatics	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	1,800
C9-C10 Aromatics	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	540
Methyl Tert Butyl Ether	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	100,000
Benzene	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	460
Toluene	2.06	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	1,400
Ethylbenzene	1.23	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	181
Xylenes	10.62	9.13	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	200
Naphthalene	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	72

EPH = extractable petroleum hydrocarbons, VPH = volatile petroleum hydrocarbons, ND = not detected above the reporting limit (in parentheses)
ug/l = micrograms per liter (parts per billion)
* = Lowest Ecologically Based Criteria from derivation of GW-3 Standards

Table 2
Field Screening of Excavation Soil Samples
188 Medford Street and Rotary Areas, Arlington, MA

Sample Dates: June 5 & 6, 2013

Sample ID	Sample Date:	Sample Depth	VOC Results	Notes/Observations:
		(inches)	*(ppm)*	
Winchester Bank Excavation				
S-1	6/5/2013	36	8.7	floor
S-2	6/5/2013	0-3	1.5	surface outside of dead grass area
S-3	6/5/2013	8	2.1	floor under sidewalk
S-4	6/5/2013	12	12.9	wall
S-5	6/5/2013	36	5.4	wall
S-6	6/5/2013	8	0.9	floor under sidewalk
S-7	6/5/2013	12	5.4	wall
S-8	6/5/2013	0-3	<0.1	surface outside of excavation
S-9	6/5/2013	18	452	below end of curb at manhole
S-10	6/5/2013	0-3	0.3	floor under sidewalk and driveway
S-11	6/5/2013	6-8	4.2	below curb and landscaping transition
S-12	6/5/2013	30	227	floor
S-13	6/5/2013	36	664	floor
S-14	6/5/2013	40	1.1	floor
S-15	6/5/2013	0-3	4.7	wall under sidewalk at manhole
S-16*	6/5/2013	24-30	783	wall below curb
S-17	6/5/2013	28-36	534	wall below curb
S-18*	6/5/2013	36-40	738	wall below curb
S-19	6/5/2013	18-30	3.0	wall on Savings Bank side of deepest trench
S-20	*6/5/2013*	*24-36*	*19.7*	*wall on Savings Bank side of deepest trench*
S-20A	6/5/2013	24-36	10.3	wall on Savings Bank side of deepest trench
S-21	6/5/2013	36-40	9.0	wall on Savings Bank side of deepest trench
S-22	6/5/2013	24-36	10.3	wall below curb
S-23	6/5/2013	20-26	186	wall below curb
S-24	6/5/2013	34-40	2.8	wall below curb
S-25*	6/5/2013	40	4.0	floor below curb wall
S-26	6/5/2013	0-3	0.7	surface outside of dead grass area
S-27	6/5/2013	0-3	0.3	surface outside of dead grass area
S-28	6/5/2013	24	8.9	floor under sidewalk
S-29	6/5/2013	12	6.0	floor under dead grass area
S-30	6/5/2013	20-26	480	wall below curb
S-31	6/5/2013	34-40	402	wall below curb
S-32	*6/5/2013*	*40*	*24.1*	*floor below curb wall*
S-32A	6/5/2013	46	19.8	floor below curb wall
S-33	6/5/2013	30	7.2	floor under sidewalk
S-34	6/5/2013	12	4.5	floor under dead grass area
S-35	6/6/2013	24	3.6	wall
S-36	6/6/2013	72	39.2	floor
S-37*	6/6/2013	24	1.6	4" behind former curb location (curb removed)
S-38	6/6/2013	64	1.2	floor
S-39*	6/6/2013	24	16.2	wall below curb
S-40	6/6/2013	24	0.7	floor
S-41	*6/6/2013*	*24*	*87.4*	*floor*
S-41A	6/6/2013	36	3.6	floor
S-42	6/6/2013	24	4.2	floor under sidewalk
S-43	6/6/2013	36-42	0.7	wall
S-44	6/6/2013	60	87.2	floor
S-45	6/6/2013	60	12.3	wall
S-46	6/6/2013	48	3.4	floor under sidewalk
S-47	6/6/2013	12	0.7	floor
S-48*	6/6/2013	20-26	79	wall
S-49	6/6/2013	48	2.7	floor
S-50	6/6/2013	48	9.7	floor
S-51	6/6/2013	20-26	414	wall below curb
Rotary Excavation				
S-52	6/6/2013	6	2.0	floor
S-53	6/6/2013	6	4.1	floor
S-54	6/6/2013	6	5.0	floor
S-55	6/6/2013	0-3	2.9	surface outside of dead grass area

Notes: Italicized font denotes soil was removed during subsequent soil removal.
* = sample submitted for laboratory analysis
VOCs = volatile organic compounds measured with a MiniRAE photoionization detector calibrated to a Benzene response
ppm = parts per million

Table 3
Field Screening and Laboratory Analysis of Excavation Soil Samples
188 Medford Street (at Mystic Valley Parkway), Arlington, MA

Sample Dates: June 5 & 6, 2013

Sample ID	S-16	S-18	S-25	S-37	S-39	S-48	Method 1 Risk Standards*		
Depth (inches)	24-30	36-40	40	24	24	20-26	S-1/GW-3	S-2/GW-3	S-3/GW-3
Date:	6/5/2013	6/5/2013	6/5/2013	6/6/2013	6/6/2013	6/6/2013			
VOCs (ppm)	783	738	4.0	1.6	16.2	79.0			
EPH (mg/kg)									
C11-C22 Aromatics	**2,120**	**1,220**	ND(16.5)	ND(17.6)	ND(16.3)	ND(17.0)	1,000	3,000	5,000
C9-C18 Aliphatics	**2,860**	**2,720**	ND(16.5)	ND(17.6)	24.4	ND(17.0)	1,000	3,000	5,000
C19-C36 Aliphatics	1,090	942	ND(16.5)	ND(17.6)	ND(16.3)	ND(17.0)	3,000	5,000	5,000
Naphthalene	24.3	10.9	ND(0.110)	0.168	ND(0.109)	ND(0.114)	40 / 500	40 / 1,000	40 / 3,000
2-Methylnaphthalene	61.1	30.6	ND(0.110)	0.566	0.486	0.568	80 / 300	80 / 500	80 / 500
Acenaphthene	ND(0.128)	ND(0.114)	ND(0.110)	ND(0.118)	ND(0.109)	ND(0.114)	1,000	3,000	5,000
Phenanthrene	8.04	5.43	ND(0.110)	ND(0.118)	0.113	0.156	500	1,000	3,000
VPH (mg/kg)									
C5-C8 Aliphatics	33.0	26.2	ND(11.0)	ND(11.8)	ND(10.9)	ND(11.4)	100	500	500
C9-C12 Aliphatics	ND(12.8)	ND(11.4)	ND(11.0)	ND(11.8)	ND(10.9)	ND(11.4)	1,000	3,000	5,000
C9-C10 Aromatics	**488**	**593**	ND(11.0)	ND(11.8)	ND(10.9)	ND(11.4)	100	3,000	500
Methyl Tert Butyl Ether	ND(0.128)	ND(0.114)	ND(0.110)	ND(0.118)	ND(0.109)	ND(0.114)	100	100 / 500	100 / 500
Benzene	ND(0.128)	ND(0.114)	ND(0.110)	ND(0.118)	ND(0.109)	ND(0.114)	30	200	700 / 900
Toluene	17.9	16.2	ND(0.110)	ND(0.118)	ND(0.109)	ND(0.114)	500	1,000	2,000 / 3,000
Ethylbenzene	29.1	23.7	0.143	ND(0.118)	ND(0.109)	2.07	500	1,000	1,000 / 3,000
Xylenes	106.8	89.3	1.164	0.694	ND(0.109)	0.670	300 / 500	300 / 1,000	300 / 3,000
Naphthalene	ND(0.128)	ND(0.114)	ND(0.110)	ND(0.118)	0.610	ND(0.114)	40 / 500	40 / 1000	40 / 3000

VOCs = volatile organic compounds measured with a MiniRAE photoionization detector calibrated to a Benzene response
EPH = extractable petroleum hydrocarbons, VPH = volatile petroleum hydrocarbons, NA = not analyzed
ppm = parts per million
mg/kg = milligrams per kilogram
* = Method 1 risk standards for S-1 and S-3 soil in a GW-3 groundwater area
Concentrations in **Bold** were above cleanup standards

Table 4
Field Screening of Excavation Soil Samples
Mystic Valley Parkway and Park Street, Arlington, MA

Sample Dates: June 6, 2013

Sample ID	Sample Date:	Sample Depth *(inches)*	VOC Results *(ppm)*	Notes/Observations:
SS-1	6/6/2013	0-3	1.5	surface from outside excavation
SS-2	6/6/2013	0-3	2.3	surface from outside excavation
SS-3	6/6/2013	0-3	3.3	surface from outside excavation
SS-4	6/6/2013	0-3	2.8	surface from outside excavation
SS-5	6/6/2013	0-3	2.6	surface from outside excavation
SS-6	6/6/2013	0-3	1.7	surface from outside excavation
SS-7	6/6/2013	0-3	1.3	surface from outside excavation
SS-8	6/6/2013	0-3	1.6	surface from outside excavation
SS-9	6/6/2013	0-3	1.3	surface from outside excavation
SS-10	6/6/2013	3-4	1.2	floor
SS-11	6/6/2013	3-4	1.4	floor
SS-12*	6/6/2013	10-12	8.3	floor
SS-13	6/6/2013	3-4	1.7	floor
SS-14	6/6/2013	3-4	1.9	floor
SS-15	6/6/2013	14-18	1.7	floor
SS-16	6/6/2013	3-4	2.9	floor
SS-17	6/6/2013	20-24	3.8	floor
SS-18	6/6/2013	3-4	2.5	floor
SS-19	6/6/2013	3-4	2.3	floor
SS-20	6/6/2013	3-4	5.0	floor
SS-21	6/6/2013	0-14	3.7	wall
SS-22	6/6/2013	0-20	6.7	wall

* = sample submitted for laboratory analysis
VOCs = volatile organic compounds measured with a MiniRAE photoionization detector calibrated to a Benzene response
ppm = parts per million

Table 5
Field Screening and Laboratory Analysis of Excavation Soil Sample
Mystic Valley Park at Park Street, Arlington, MA

Sample Date: June 6, 2013

Sample ID	SS-12	Method 1 Risk Standards*		
Depth (inches)	40	S-1/GW-3	S-2/GW-3	S-3/GW-3
VOCs (ppm)	8.3			
EPH (mg/kg)				
C11-C22 Aromatics	ND(16.3)	1,000	3,000	5,000
C9-C18 Aliphatics	ND(16.3)	1,000	3,000	5,000
C19-C36 Aliphatics	ND(16.3)	3,000	5,000	5,000
Naphthalene	ND(0.109)	500	1,000	3,000
2-Methylnaphthalene	ND(0.109)	300	500	500
Acenaphthene	ND(0.109)	1,000	3,000	5,000
Phenanthrene	0.255	500	1,000	3,000

VOCs = volatile organic compounds measured with a MiniRAE photoionization detector calibrated to a Benzene response
EPH = extractable petroleum hydrocarbons
ppm = parts per million
mg/kg = milligrams per kilogram
* = Method 1 risk standards for S-1, S-2 and S-3 soil in a GW-3 groundwater area

Table 6
Field Screening of Site Soil Samples
Mystic Valley Parkway and River Street, Arlington, MA

Sample Dates: June 11 & 25, 2013

Sample ID	Sample Date:	Sample Depth	VOC Results	Notes/Observations:
		(inches)	*(ppm)*	
SS-1	6/11/2013	0-2	<0.1	no odor
SS-2	6/11/2013	0-2	<0.1	no odor
SS-3	6/11/2013	0-2	<0.1	no odor
SS-4	6/11/2013	0-2	<0.1	no odor
SS-5	6/11/2013	0-2	<0.1	no odor
SS-6	6/11/2013	0-2	<0.1	no odor
SS-7	6/11/2013	0-2	<0.1	no odor
SS-8	6/11/2013	0-2	<0.1	no odor
SS-9	6/11/2013	0-2	<0.1	no odor
SS-10	6/11/2013	0-2	<0.1	no odor
SS-11	*6/11/2013*	*0-2*	*0.6*	*slight odor*
SS-11A	*6/11/2013*	*2-4*	*<0.1*	*no odor*
SS-12	*6/11/2013*	*0-2*	*10.2*	*slight odor*
SS-12A	*6/11/2013*	*2-4*	*0.5*	*no odor*
SS-13	*6/11/2013*	*0-2*	*6.9*	*slight odor*
SS-14	6/11/2013	0-2	<0.1	no odor
SS-15	6/11/2013	0-2	0.3	no odor
SS-16	6/11/2013	0-2	<0.1	no odor
SS-17	6/11/2013	0-2	<0.1	no odor
SS-18	6/11/2013	0-2	0.1	no odor
SS-19	6/11/2013	0-2	<0.1	no odor
SS-20	6/11/2013	0-2	2.5	no odor
SS-13A	*6/11/2013*	*2-4*	*<0.1*	*no odor*
SS-21	*6/11/2013*	*0-2*	*18.7*	*slight odor*
SS-21A	*6/11/2013*	*2-4*	*6.2*	*no odor*
SS-11B	6/25/2013	3-4	<0.1	no odor
SS-12B	6/25/2013	3-4	<0.1	no odor
SS-13B	6/25/2013	3-4	<0.1	no odor
SS-21B	6/25/2013	3-4	0.6	no odor
SS-22	6/25/2013	3-4	0.4	no odor
SS-23	6/25/2013	3-4	0.1	no odor
SS-24	6/25/2013	3-4	<0.1	no odor

Notes: Italicized font denotes soil was removed during subsequent soil removal.
* = sample submitted for laboratory analysis
VOCs = volatile organic compounds measured with a MiniRAE photoionization detector calibrated to a Benzene response
ppm = parts per million

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC103

RELEASE NOTIFICATION & NOTIFICATION RETRACTION FORM

Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

Release Tracking Number: 3 - 31576

A. RELEASE OR THREAT OF RELEASE LOCATION:

1. Release Name/Location Aid: INTERSECTION WITH MYSTIC VALLEY PKWY
2. Street Address: 188 MEDFORD STREET
3. City/Town: ARLINGTON
4. ZIP Code:
5. UTM Coordinates: a. UTM N: 4698327 b. UTM E: 323861 Identify Location of Release

B. THIS FORM IS BEING USED TO: (check one)

- [x] 1. Submit a **Release Notification**
- [ ] 2. Submit a **Revised Release Notification**
- [ ] 3. Submit a **Retraction of a Previously Reported Notification** of a release or threat of release including supporting documentation required pursuant to 310 CMR 40.0335 (Section C is not required)

(All sections of this transmittal form must be filled out unless otherwise noted above)

C. INFORMATION DESCRIBING THE RELEASE OR THREAT OF RELEASE (TOR):

1. Date and time of Oral Notification, if applicable: 05/31/2013 (mm/dd/yyyy) Time: 04:25 (hh:mm) [ ] AM [x] PM
2. Date and time you obtained knowledge of the Release or TOR: 05/31/2013 (mm/dd/yyyy) Time: 05:00 (hh:mm) [ ] AM [x] PM
3. Date and time release or TOR occurred, if known: 05/31/2013 (mm/dd/yyyy) Time: 04:15 (hh:mm) [ ] AM [x] PM

Check all Notification Thresholds that apply to the Release or Threat of Release:
(for more information see 310 CMR 40.0310 - 40.0315)

4. 2 HOUR REPORTING CONDITIONS

- [x] a. Sudden Release
- [ ] b. Threat of Sudden Release
- [x] c. Oil Sheen on Surface Water
- [ ] d. Poses Imminent Hazard
- [ ] e. Could Pose Imminent Hazard
- [ ] f. Release Detected in Private Well
- [x] g. Release to Storm Drain
- [ ] h. Sanitary Sewer Release (Imminent Hazard Only)

5. 72 HOUR REPORTING CONDITIONS

- [ ] a. Subsurface Non-Aqueous Phase Liquid (NAPL) Equal to or Greater than 1/2 Inch
- [ ] b. Underground Storage Tank (UST) Release
- [ ] c. Threat of UST Release
- [ ] d. Release to Groundwater near Water Supply
- [ ] e. Release to Groundwater near School or Residence
- [ ] f. Substantial Release Migration

6. 120 DAY REPORTING CONDITIONS

- [ ] a. Release of Hazardous Material(s) to Soil or Groundwater Exceeding Reportable Concentration(s)
- [ ] b. Release of Oil to Soil Exceeding Reportable Concentration(s) and Affecting More than 2 Cubic Yards
- [ ] c. Release of Oil to Groundwater Exceeding Reportable Concentration(s)
- [ ] d. Subsurface Non-Aqueous Phase Liquid (NAPL) Equal to or Greater than 1/8 Inch and Less than 1/2 Inch

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC103

RELEASE NOTIFICATION & NOTIFICATION RETRACTION FORM

Release Tracking Number
3 - 31576

Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

C. INFORMATION DESCRIBING THE RELEASE OR THREAT OF RELEASE (TOR): (cont.)

7. List below the Oils (O) or Hazardous Materials (HM) that exceed their Reportable Concentration (RC) or Reportable Quantity (RQ) by the greatest amount.

O or HM Released	CAS Number, if known	O or HM	Amount or Concentration	Units	RCs Exceeded, if Applicable (RCS-1, RCS-2, RCGW-1, RCGW-2)
NO. 2 FUEL OIL		O	9600.00	GAL	N/A

☐ 8. Check here if a list of additional Oil and Hazardous Materials subject to reporting is attached.

D. PERSON REQUIRED TO NOTIFY:

1. Check all that apply: ☑ a. change in contact name ☐ b. change of address ☐ c. change in the person notifying

2. Name of Organization: JP NOONAN TRANSPORTATION INC

3. Contact First Name: BOB 4. Last Name: DUPUIS

5. Street: PO BOX 400 415 WEST ST 6. Title: SAFETY DIRECTOR

7. City/Town: WEST BRIDGEWATER 8. State: MA 9. ZIP Code: 02379-1030

10. Telephone: (508) 588-8026 11. Ext.: 12. FAX:

☑ 13. Check here if attaching names and addresses of owners of properties affected by the Release or Threat of Release, other than an owner who is submitting this Release Notification (required).

E. RELATIONSHIP OF PERSON TO RELEASE OR THREAT OF RELEASE:

☑ 1. RP or PRP ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter

☑ e. Other RP or PRP Specify: NON-SPECIFIED PRP

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ 4. Any Other Person Otherwise Required to Notify Specify Relationship: _____

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC103

RELEASE NOTIFICATION & NOTIFICATION RETRACTION FORM

Release Tracking Number
3 - 31576

Pursuant to 310 CMR 40.0335 and 310 CMR 40.0371 (Subpart C)

F. CERTIFICATION OF PERSON REQUIRED TO NOTIFY:

1. I, _____ , attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: _____ (Signature)

3. Title: AGENT

4. For: JP NOONAN TRANSPORTATION INC (Name of person or entity recorded in Section D)

5. Date: _____ mm/dd/yyyy

☑ 6. Check here if the address of the person providing certification is different from address recorded in Section D.

7. Street: 42 LONGWATER DRIVE

8. City/Town: NORWELL 9. State: MA 10. ZIP Code: 02061-9149

11. Telephone: (781) 792-5819 12. Ext.: _____ 13. FAX: (781) 871-0690

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO $10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)

Owner of Property Affected by the Release

RTN No.:3-31576
BWSC103 Section D (13)

Property Owners:

Winchester Savings Bank
661 Main Street
Winchester, Massachusetts 01890

Town of Arlington
51 Grove Street
Arlington, Massachusetts 02476

City of Medford
85 George P. Hassett Drive
Medford, Massachusetts 02155

Massachusetts Department of Conservation and Recreation
251 Causeway Street, Suite 900
Boston, Massachusetts 02114-2104

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC105

IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL FORM

Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number: 3 - 31576

A. RELEASE OR THREAT OF RELEASE LOCATION:

1. Release Name/Location Aid: INTERSECTION WITH MYSTIC VALLEY PKWY

2. Street Address: 188 MEDFORD STREET

3. City/Town: ARLINGTON 4. ZIP Code:

5. UTM Coordinates: a. UTM N: 4698327 b. UTM E: 323861

☐ 6. Check here if a Tier Classification Submittal has been provided to DEP for this disposal site.
☐ a. Tier IA ☐ b. Tier IB ☐ c. Tier IC ☐ d. Tier II

☐ 7. Check here if this location is Adequately Regulated, pursuant to 310 CMR 40.0110-0114. Specify Program (check one):
☐ a. CERCLA ☐ b. HSWA Corrective Action ☐ c. Solid Waste Management
☐ d. RCRA State Program (21C Facilities)

B. THIS FORM IS BEING USED TO: (check all that apply)

1. List Submittal Date of Initial IRA Written Plan (if previously submitted): _____ (mm/dd/yyyy)

☑ 2. Submit an **Initial IRA Plan**.

☐ 3. Submit a **Modified IRA Plan** of a previously submitted written IRA Plan.

☐ 4. Submit an **Imminent Hazard Evaluation**. (check one)
☐ a. An Imminent Hazard exists in connection with this Release or Threat of Release.
☐ b. An Imminent Hazard does not exist in connection with this Release or Threat of Release.
☐ c. It is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release, and further assessment activities will be undertaken.
☐ d. It is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release. However, response actions will address those conditions that could pose an Imminent Hazard.

☐ 5. Submit a request to **Terminate an Active Remedial System or Response Action(s) Taken to Address an Imminent Hazard**.

☐ 6. Submit an **IRA Status Report**.

☐ 7. Submit a **Remedial Monitoring Report**. (This report can only be submitted through eDEP.)

a. Type of Report: (check one) ☐ i. Initial Report ☐ ii. Interim Report ☐ iii. Final Report

b. Frequency of Submittal: (check all that apply)
☐ i. A Remedial Monitoring Report(s) submitted monthly to address an Imminent Hazard.
☐ ii. A Remedial Monitoring Report(s) submitted monthly to address a Condition of Substantial Release Migration.
☐ iii. A Remedial Monitoring Report(s) submitted concurrent with a IRA Status Report.

c. Number of Remedial Systems and/or Monitoring Programs: _____

A separate BWSC105A, IRA Remedial Monitoring Report, must be filled out for each Remedial System and/or Monitoring Program addressed by this transmittal form.

B. THIS FORM IS BEING USED TO (cont.): (check all that apply)

☐ 8. Submit an **IRA Completion Statement**.

☐ a. Check here if future response actions addressing this Release or Threat of Release notification condition will be conducted as part of the Response Actions planned or ongoing at a Site that has already been Tier Classified under a different Release Tracking Number (RTN) . When linking RTNs, rescoring via the NRS is required if there is a reasonable likelihood that the addition of the new RTN(s) would change the classification of the site.

b. Provide Release Tracking Number of Tier Classified Site (Primary RTN): ☐ - ☐

These additional response actions must occur according to the deadlines applicable to the Primary RTN. Use the Primary RTN when making all future submittals for the site unless specifically relating to this Immediate Response Action.

☐ 9. Submit a **Revised IRA Completion Statement**.

(All sections of this transmittal form must be filled out unless otherwise noted above)

C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT IRA:

1. Identify Media Impacted and Receptors Affected: (check all that apply)

☐ a. Air ☐ b. Basement ☐ c. Critical Exposure Pathway ☐ d. Groundwater ☐ e. Residence

☑ f. Paved Surface ☐ g. Private Well ☐ h. Public Water Supply ☐ i. School ☑ j. Sediments

☑ k. Soil ☑ l. Storm Drain ☑ m. Surface Water ☐ n. Unknown ☐ o. Wetland ☐ p. Zone 2

☐ q. Others Specify:

2. Identify Oils and Hazardous Materials Released: (check all that apply)

☑ a. Oils ☐ b. Chlorinated Solvents ☐ c. Heavy Metals

☐ d. Others Specify:

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply, for volumes list cumulative amounts)

☐ 1. Assessment and/or Monitoring Only
☑ 3. Deployment of Absorbent or Containment Materials
☐ 5. Structure Venting System
☑ 7. Product or NAPL Recovery
☐ 9. Groundwater Treatment Systems
☐ 11. Bioremediation
☐ 2. Temporary Covers or Caps
☐ 4. Temporary Water Supplies
☐ 6. Temporary Evacuation or Relocation of Residents
☐ 8. Fencing and Sign Posting
☐ 10. Soil Vapor Extraction
☐ 12. Air Sparging

D. DESCRIPTION OF RESPONSE ACTIONS (cont.): (check all that apply, for volumes list cumulative amounts)

☑ 13. Excavation of Contaminated Soils

☑ a. Re-use, Recycling or Treatment ☐ i. On Site Estimated volume in cubic yards

☑ ii. Off Site Estimated volume in cubic yards 36

iia. Receiving Facility: ESMI OF NH Town: LOUDON State: NH

iib. Receiving Facility: Town: State:

iii. Describe: THERMAL PROCESSING

☐ b. Store ☐ i. On Site Estimated volume in cubic yards

☐ ii. Off Site Estimated volume in cubic yards

iia. Receiving Facility: Town: State:

iib. Receiving Facility: Town: State:

☑ c. Landfill

☐ i. Cover Estimated volume in cubic yards

Receiving Facility: Town: State:

☑ ii. Disposal Estimated volume in cubic yards 6

Receiving Facility: CLEAN HARBORS Town: BRAINTREE State: MA

☐ 14. Removal of Drums, Tanks or Containers:

a. Describe Quantity and Amount:

b. Receiving Facility: Town: State:

c. Receiving Facility: Town: State:

☑ 15. Removal of Other Contaminated Media:

a. Specify Type and Volume: 13 CUBIC YARDS SOIL, SEDIMENTS AND DEBRIS FROM DRAINAGE SYSTEM AND RIVER CLEANUP; 34,796 GALLONS OF OIL AND WATER FROM RIVER CLEANUP

b. Receiving Facility: CLEAN HARBORS Town: BRAINTREE State: MA

c. Receiving Facility: CLEAN HARBORS Town: SOUTH PORTLAND State: ME

☑ 16. Other Response Actions:

Describe: 38 CUBIC YARDS OF OILY DEBRIS AND SPENT ABSORBENTS SHIPPED TO CHES BRAINTREE FOR DISPOSAL

☐ 17. Use of Innovative Technologies:

Describe:

E. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> *if Section B of this form indicates that an* ***Immediate Response Action Plan*** *is being submitted*, the response action(s) that is(are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is(are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *if Section B of this form indicates that an* ***Imminent Hazard Evaluation*** *is being submitted*, this Imminent Hazard Evaluation was developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and the assessment activity(ies) undertaken to support this Imminent Hazard Evaluation comply(ies) with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000;

> *if Section B of this form indicates that an* ***Immediate Response Action Status Report*** *and/or a* ***Remedial Monitoring Report*** *is(are) being submitted*, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> *if Section B of this form indicates that an* ***Immediate Response Action Completion Statement*** *or a request to* ***Terminate an Active Remedial System or Response Action(s) Taken to Address an Imminent Hazard*** *is being submitted*, the response action(s) that is(are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is(are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: **8959**

2. First Name: **ANTHONY M** 3. Last Name: **DELTUFO**

4. Telephone: **(781) 792-5819** 5. Ext.: 6. FAX: **(781) 792-5938**

7. Signature:

8. Date: (mm/dd/yyyy)

9. LSP Stamp:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC105

Release Tracking Number
3 - 31576

IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL FORM
Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

F. PERSON UNDERTAKING IRA:

1. Check all that apply: ☑ a. change in contact name ☐ b. change of address ☐ c. change in the person undertaking response actions

2. Name of Organization: JP NOONAN TRANSPORTATION INC

3. Contact First Name: BOB 4. Last Name: DUPUIS

5. Street: PO BOX 400 415 WEST ST 6. Title: SAFETY DIRECTOR

7. City/Town: WEST BRIDGEWATER 8. State: MA 9. ZIP Code: 02379-1030

10. Telephone: (508) 588-8026 11. Ext.: 12. FAX:

G. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON UNDERTAKING IRA:

☑ 1. RP or PRP ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter

☑ e. Other RP or PRP Specify: NON-SPECIFIED PRP

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ 4. Any Other Person Undertaking IRA Specify Relationship:

H. REQUIRED ATTACHMENT AND SUBMITTALS:

☐ 1. Check here if any Remediation Waste, generated as a result of this IRA, will be stored, treated, managed, recycled or reused at the site following submission of the IRA Completion Statement. If this box is checked, you must submit one of the following plans, along with the appropriate transmittal form.

☐ a. A Release Abatement Measure (RAM) Plan (BWSC106) ☐ b. Phase IV Remedy Implementation Plan (BWSC108)

☑ 2. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

☑ 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health were notified of the implementation of an Immediate Response Action taken to control, prevent, abate or eliminate an Imminent Hazard.

☐ 4. Check here to certify that the Chief Municipal Officer and the Local Board of Health were notified of the submittal of a Completion Statement for an Immediate Response Action taken to control, prevent, abate or eliminate an Imminent Hazard.

☐ 5. Check here if any non-updatable information provided on this form is incorrect, e.g. Release Address/Location Aid. Send corrections to the DEP Regional Office.

☑ 6. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC105

IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL FORM

Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number: 3 - 31576

I. CERTIFICATION OF PERSON UNDERTAKING IRA:

1. I, _____, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: _____ (Signature) 3. Title: AGENT

4. For: JP NOONAN TRANSPORTATION INC (Name of person or entity recorded in Section F) 5. Date: _____ (mm/dd/yyyy)

☑ 6. Check here if the address of the person providing certification is different from address recorded in Section F.

7. Street: 42 LONGWATER DRIVE

8. City/Town: NORWELL 9. State: MA 10. ZIP Code: 02061-9149

11. Telephone: (781) 792-5819 12. Ext.: _____ 13. FAX: (781) 871-0690

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO $10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)

J.P. NOONAN TRANSPORTATION, INC.

415 WEST STREET · P.O. BOX 400
WEST BRIDGEWATER, MA 02379-0400
TEL (508) 588-8026
FAX (508) 587-2876

September 6, 2011

Mr. Anthony M. DelTufo, LSP
Clean Harbors Environmental Services, Inc.
42 Longwater Drive
Norwell, MA 02061

Re: Agent Authorization for DEP Submittals

Dear Mr. DelTufo:

On behalf of J.P. Noonan Transportation, Inc. (J.P. Noonan), I authorize Clean Harbors Environmental Services, Inc. (CHES) representatives to sign Massachusetts Department of Environmental Protection (DEP) Bureau of Waste Site Cleanup (BWSC) transmittal forms, bills of lading and/or uniform hazardous waste manifests, as Agent for J.P. Noonan, when I am unable to do so. This authorization is in accordance with Section 310 CMR 40.0009(2) of the Massachusetts Contingency Plan. I also authorize CHES to make electronic submittals of DEP documents. I understand that J.P. Noonan remains fully liable under federal and state laws and regulations with regard to Certifications of Person Undertaking Response Actions contained in the DEP transmittal forms as the generator and responsible party, and that CHES would be signing solely for our convenience.

Sincerely,

Authorized Representative

Title: DIRECTOR OF SAFETY

Photograph 1: View of roll over site at Medford Street and Mystic Valley Parkway rotary. Photograph taken on May 31, 2013.

Photograph 2: View of No. 2 fuel oil on the Mystic River below the Medford Street bridge. Photograph taken on May 31, 2013.

Photograph 3: View of product recovery activities in Mystic River downstream of the Medford Street bridge. Photograph taken on May 31, 2013.

Photograph 4: View of containment boom deployed in Mystic River between Medford Street and River Street bridges. Photograph taken on May 31, 2013.

Photograph 5: View of containment boom deployed in Mystic River above River Street bridge. Photograph taken on June 1, 2013.

Photograph 6: View of containment boom deployed in Mystic River below River Street bridge. Photograph taken on June 1, 2013.

Photograph 7: View of product recovery activities in Mystic River at containment boom. Photograph taken on June 1, 2013.

Photograph 8: View of product recovery activities in Mystic River at River Street bridge. Photograph taken on June 1, 2013.

Photograph 9: View of Mystic River from River Street bridge facing upstream. Photograph taken on June 2, 2013.

Photograph 10: View of product recovery activities in Mystic River at containment boom. Photograph taken on June 2, 2013.

Photograph 11: View of Medford Shoreline below Medford Street bridge during Shoreline Assessment. Photograph taken on June 4, 2013.

Photograph 12: View of Arlington Shoreline between Medford Street and River Street bridge during Shoreline Assessment. Photograph taken on June 4, 2013.

Photograph 13: View of roll over site at Medford Street and Mystic Valley Parkway rotary after repaving. Photograph taken on June 5, 2013.

Photograph 14: View of absorbent and containment boom at Medford Street bridge during flushing of drain line. Photograph taken on June 5, 2013.

Photograph 15: View of absorbent and containment boom at Medford Street bridge during water washing and shoreline cleanup. Photograph taken on June 5, 2013.

Photograph 16: View of absorbent and containment boom at Arlington shoreline during water washing and shoreline cleanup. Photograph taken on June 6, 2013.

Photograph 17: View of completed excavation in front of Winchester Savings Bank. Photograph taken on June 6, 2013.

Photograph 18: View of completed excavation adjacent to rotary. Photograph taken on June 6, 2013.

Photograph 19: View of completed excavation at Mystic Valley Park walking path. Photograph taken on June 6, 2013.


Photograph 20: View of station 1450-1550 (Boom 2 Collection Area, 1485') during removal of impacted sediments/moss and water washing. Photograph taken on June 25. 2013.

Photograph 21: View of station 1750-1850 (Area 1795') during removal of impacted sediments/moss and water washing. Photograph taken on June 25. 2013.

Photograph 22: View of station 1900-2000 (Boom 3 Collection Area, 1950') during removal of impacted sediments/moss and water washing. Photograph taken on June 25. 2013.

Photograph 29: View of absorbent and containment boom at station 1900-2000 (Boom 3 Collection Area, 1950'). Photograph taken on July 10, 2013.

Photograph 30: View of absorbent and containment boom at station 2657 to 2682 (rip rap to River Street bridge). Photograph taken on July 10, 2013.

Photograph 23: View of station 850-950 (Area 885 to 900') during removal of impacted sediments/moss and water washing. Photograph taken on June 26. 2013.

Photograph 24: View of station 0625-1725 (Area 675') during removal of impacted sediments/moss and water washing. Photograph taken on June 26. 2013.

Photograph 25: View of station 0354 to 500 (Medford Street bridge) during removal of impacted sediments/moss and water washing. Photograph taken on June 26. 2013.

Photograph 26: View of completed excavation at rip rap above River Street bridge. Photograph taken on June 26, 2013.

Photograph 27: View of absorbent and containment boom at Station 0354-0500 (Medford Street bridge). Photograph taken on July 10, 2013.

Photograph 28: View of absorbent and containment boom at station 1450-1550 (Boom 2 Collection Area, 1485'). Photograph taken on July 10, 2013.

ANALYTICAL REPORT

Monday, June 17, 2013

GeoLabs, Inc.
45 Johnson Lane
Braintree MA
Tele: 781 848 7844
Fax: 781 848 7811

Rich MacCarthy
Clean Harbors
42 Longwater Drive
Norwell, MA 02061

TEL: (781) 792-5822
FAX: (781) 792-5938

Project:
Location: Noonan-Arlington

Order No.: 1306012

Dear Rich MacCarthy:

GeoLabs, Inc. received 3 sample(s) on 6/4/2013 for the analyses presented in the following report.

The laboratory results in this report relate only to samples submitted. All data for associated QC met method or laboratory specifications, except where noted in the Case Narrative.

Report is being re-issued with additional comments on Case Narrative. Analytical methods and results meet requirements of 310CMR 40.1056(J) as per MADEP Compendium of Analytical Methods (CAM).

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

David Mick
Laboratory Director

For current certifications, please visit our website at
Certifications:
CT (PH-0148) - MA (M-MA015) - NH (2508) - RI (LA000252)
Accredited in Accordance with

MassDEP Analytical Protocol Certification Form

Laboratory Name: GeoLabs, Inc. Project #:

Project Location: Noonan-Arlington RTN:

This form provides certification for the following data set: 1306012 (001-003)

Matrices: ☒ Groundwater/Surface Water ☐ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other-wastewater

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☒	8081 Pesicides CAM V B ☐	7196 Hex Cr CAM VI B ☐		MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☒	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐		TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII 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 ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ 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 ☐ No
D	Does the laboratory report comply with all reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analtyical Data"?	☒ Yes ☐ No
E	VPH, EPH, APH and TO-15 only:	
	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications.)	☒ 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 ☐ 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 protocol(s)?	☒ Yes ☐ No

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usablility and representativeness requirements described in 310 CMR 40. 1056 (2) (k) and WSC-07-350.**

H	Were **all** QC performance standards as specified in the CAM protocol(s) achieved?	☐ Yes ☒ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes ☒ No[1]

[1] *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: David Mick **Position: Laboratory Director**

Printed Name: David Mick **Date:** June 17, 2013

Date: *17-Jun-13*

CLIENT: Clean Harbors
Project:
Lab Order: 1306012

CASE NARRATIVE

Physical Condition of Samples

The project was received by the laboratory in satisfactory condition. The sample(s) were received undamaged, in appropriate containers with the correct preservation, with the following exception: Samples were unpreserved, but brought directly from the field.

Project Documentation

The project was accompanied by satisfactory Chain of Custody documentation.

Analysis of Sample(s)

Carbon ranges and diesel targets only analyzed via MADEP EPH method, per client request.

All extractable samples were extracted and analyzed and any Volatile samples were analyzed within method specified holding times and according to GeoLabs documented Standard Operating Procedure. The following analytical anomalies or non-conformances were noted by the laboratory during the processing of these samples:

VPH LCSD RPD % Recovery for Naphthalene is outside of recovery limits.

SIGNATURE:  LAB DIRECTOR

PRINTED NAME: David Mick DATE: 06/17/13

CLIENT: Clean Harbors
Project:
Lab Order: 1306012

CASE NARRATIVE

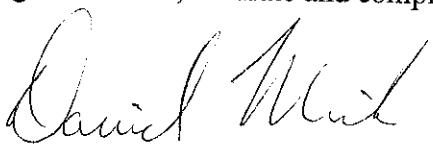
EPH Methods

Method for Ranges: MADEP EPH 04-1.1
Method for Target Analytes: 8270 GC/MS

Carbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
C11-C22 Aromatic Hydrocarbons exclude concentrations of Target PAH Analytes

CERTIFICATION:
Were all QA/QC procedures REQUIRED by the EPH Method followed? YES
Were all performance/acceptance standards achieved? YES
Were any significant modifications made to the EPH method? NO

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

SIGNATURE:  LAB DIRECTOR

PRINTED NAME: David Mick DATE: 06/17/13

CLIENT: Clean Harbors
Project:
Lab Order: 1306012

CASE NARRATIVE

VPH Methods

Method for Ranges: MADEP VPH 04-1.1
Method for Target Analytes: MADEP VPH 04-1.1

Soil sample(s) were received in MeOH and soil was completely covered by MeOH.
Soil sample(s) ratio 1:1 +/- 25%

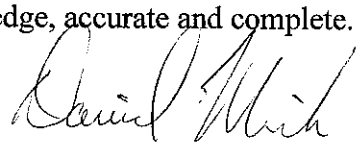
Carbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range. (MTBE, Benzene, Toluene)

C9-C12 Aliphatic Hydrocarbons exclude concentration of Target Analytes eluting in that range (Ethylbenzene, m&p-Xylenes, o-Xylene) AND concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION
Were all QA/QC procedures REQUIRED by the VPH Method followed? YES
Were all QA/QC performance/acceptance standards achieved? NO (See Case Narrative)
Were any significant modifications made to the VPH method, as specified in Sec. 11.3? NO

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

SIGNATURE:  POSITION: LAB DIRECTOR

PRINTED NAME: David Mick

DATE: 06/17/13

ANALYTICAL REPORT **Reported Date:** 17-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-1
Lab Order:	1306012	**Collection Date:**	6/3/2013 4:00:00 PM
Project:		**Date Received:**	6/4/2013
Lab ID:	1306012-001	**Matrix:**	WATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/4/2013 8:59:14 AM**		
Adjusted C11-C22 Aromatics	ND	103		µg/L	1	6/7/2013
C09-C18 Aliphatics	ND	103		µg/L	1	6/7/2013
C19-C36 Aliphatics	*118*	103		µg/L	1	6/7/2013
Unadjusted C11-C22 Aromatics	ND	103		µg/L	1	6/7/2013
Surr: 1-Chlorooctadecane	52.3	40-140		%REC	1	6/7/2013
Surr: o-Terphenyl	77.8	40-140		%REC	1	6/7/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/4/2013 8:59:14 AM**		
Naphthalene	ND	1.03		µg/L	1	6/6/2013 12:09:00 PM
2-Methylnaphthalene	*5.91*	1.03		µg/L	1	6/6/2013 12:09:00 PM
Acenaphthene	ND	1.03		µg/L	1	6/6/2013 12:09:00 PM
Phenanthrene	ND	1.03		µg/L	1	6/6/2013 12:09:00 PM
Total PAH Target Concentration	*5.91*	1.03		µg/L	1	6/6/2013 12:09:00 PM
Surr: 2,2-Difluorobiphenyl	51.2	40-140		%REC	1	6/6/2013 12:09:00 PM
Surr: 2-Fluorobiphenyl	54.3	40-140		%REC	1	6/6/2013 12:09:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
C9-C10 Aromatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 12:33:00 PM
Unadjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 12:33:00 PM
Unadjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 12:33:00 PM
Methyl Tert-Butyl Ether	ND	1.00		µg/L	1	6/6/2013 12:33:00 PM
Benzene	ND	1.00		µg/L	1	6/6/2013 12:33:00 PM
Toluene	*2.06*	1.00		µg/L	1	6/6/2013 12:33:00 PM
Ethylbenzene	*1.23*	1.00		µg/L	1	6/6/2013 12:33:00 PM
m,p-Xylene	*3.16*	1.00		µg/L	1	6/6/2013 12:33:00 PM
o-Xylene	*7.46*	1.00		µg/L	1	6/6/2013 12:33:00 PM
Naphthalene	ND	1.00		µg/L	1	6/6/2013 12:33:00 PM
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 12:33:00 PM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- BRL Below Reporting Limit
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

ANALYTICAL REPORT

Reported Date: 17-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-1
Lab Order:	1306012	**Collection Date:**	6/3/2013 4:00:00 PM
Project:		**Date Received:**	6/4/2013
Lab ID:	1306012-001	**Matrix:**	WATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: ZC
Prep Method:		**Prep Date:**				
Adjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 12:33:00 PM
Surr: 2,5-Dibromotoluene FID	119	70-130		%REC	1	6/6/2013 12:33:00 PM
Surr: 2,5-Dibromotoluene PID	85.0	70-130		%REC	1	6/6/2013 12:33:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT **Reported Date:** 17-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-2
Lab Order:	1306012	**Collection Date:**	6/3/2013 4:28:00 PM
Project:		**Date Received:**	6/4/2013
Lab ID:	1306012-002	**Matrix:**	WATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/4/2013 8:59:14 AM**		
Adjusted C11-C22 Aromatics	ND	101		µg/L	1	6/7/2013
C09-C18 Aliphatics	ND	101		µg/L	1	6/7/2013
C19-C36 Aliphatics	ND	101		µg/L	1	6/7/2013
Unadjusted C11-C22 Aromatics	ND	101		µg/L	1	6/7/2013
Surr: 1-Chlorooctadecane	72.7	40-140		%REC	1	6/7/2013
Surr: o-Terphenyl	76.9	40-140		%REC	1	6/7/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/4/2013 8:59:14 AM**		
Naphthalene	ND	1.01		µg/L	1	6/6/2013 12:47:00 PM
2-Methylnaphthalene	ND	1.01		µg/L	1	6/6/2013 12:47:00 PM
Acenaphthene	ND	1.01		µg/L	1	6/6/2013 12:47:00 PM
Phenanthrene	ND	1.01		µg/L	1	6/6/2013 12:47:00 PM
Total PAH Target Concentration	ND	1.01		µg/L	1	6/6/2013 12:47:00 PM
Surr: 2,2-Difluorobiphenyl	52.1	40-140		%REC	1	6/6/2013 12:47:00 PM
Surr: 2-Fluorobiphenyl	57.1	40-140		%REC	1	6/6/2013 12:47:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
C9-C10 Aromatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 1:21:00 AM
Unadjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 1:21:00 AM
Unadjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 1:21:00 AM
Methyl Tert-Butyl Ether	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
Benzene	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
Toluene	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
Ethylbenzene	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
m,p-Xylene	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
o-Xylene	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
Naphthalene	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 1:21:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT

Reported Date: 17-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-2
Lab Order:	1306012	**Collection Date:**	6/3/2013 4:28:00 PM
Project:		**Date Received:**	6/4/2013
Lab ID:	1306012-002	**Matrix:**	WATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:		**Prep Date:**				
Adjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 1:21:00 AM
Surr: 2,5-Dibromotoluene FID	128	70-130		%REC	1	6/6/2013 1:21:00 AM
Surr: 2,5-Dibromotoluene PID	87.5	70-130		%REC	1	6/6/2013 1:21:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT **Reported Date:** 17-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-3
Lab Order:	1306012	**Collection Date:**	6/3/2013 5:07:00 PM
Project:		**Date Received:**	6/4/2013
Lab ID:	1306012-003	**Matrix:**	WATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Wpr)			**Prep Date:**	6/4/2013 8:59:14 AM		
Adjusted C11-C22 Aromatics	ND	101		µg/L	1	6/7/2013
C09-C18 Aliphatics	ND	101		µg/L	1	6/7/2013
C19-C36 Aliphatics	ND	101		µg/L	1	6/7/2013
Unadjusted C11-C22 Aromatics	ND	101		µg/L	1	6/7/2013
Surr: 1-Chlorooctadecane	60.4	40-140		%REC	1	6/7/2013
Surr: o-Terphenyl	65.6	40-140		%REC	1	6/7/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Wpr)			**Prep Date:**	6/4/2013 8:59:14 AM		
Naphthalene	ND	1.01		µg/L	1	6/6/2013 1:25:00 PM
2-Methylnaphthalene	ND	1.01		µg/L	1	6/6/2013 1:25:00 PM
Acenaphthene	ND	1.01		µg/L	1	6/6/2013 1:25:00 PM
Phenanthrene	ND	1.01		µg/L	1	6/6/2013 1:25:00 PM
Total PAH Target Concentration	ND	1.01		µg/L	1	6/6/2013 1:25:00 PM
Surr: 2,2-Difluorobiphenyl	55.6	40-140		%REC	1	6/6/2013 1:25:00 PM
Surr: 2-Fluorobiphenyl	53.8	40-140		%REC	1	6/6/2013 1:25:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
C9-C10 Aromatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 2:08:00 AM
Unadjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 2:08:00 AM
Unadjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 2:08:00 AM
Methyl Tert-Butyl Ether	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
Benzene	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
Toluene	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
Ethylbenzene	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
m,p-Xylene	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
o-Xylene	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
Naphthalene	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 2:08:00 AM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- BRL Below Reporting Limit
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

ANALYTICAL REPORT **Reported Date:** 17-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-3
Lab Order:	1306012	**Collection Date:**	6/3/2013 5:07:00 PM
Project:		**Date Received:**	6/4/2013
Lab ID:	1306012-003	**Matrix:**	WATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: ZC
Prep Method:		**Prep Date:**				
Adjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 2:08:00 AM
Surr: 2,5-Dibromotoluene FID	109	70-130		%REC	1	6/6/2013 2:08:00 AM
Surr: 2,5-Dibromotoluene PID	82.8	70-130		%REC	1	6/6/2013 2:08:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL QC SUMMARY REPORT

Date: *17-Jun-13*

CLIENT: Clean Harbors
Work Order: 1306012
Project:

TestCode: EPHP_W_DIESEL

Sample ID: **MB-22401**	SampType: **MBLK**	TestCode: **EPHP_W_DIE** Units: **µg/L**	Prep Date: **6/4/2013**	RunNo: **50506**
Client ID: **ZZZZZ**	Batch ID: **22401**	TestNo: **MADEP EPH_ (eph_Wpr)**	Analysis Date: **6/5/2013**	SeqNo: **573403**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	1.00									
2-Methylnaphthalene	ND	1.00									
Acenaphthene	ND	1.00									
Phenanthrene	ND	1.00									
Total PAH Target Concentration	ND	1.00									
Surr: 2,2-Difluorobiphenyl	10.72	0	25	0	42.9	40	140				
Surr: 2-Fluorobiphenyl	12.01	0	25	0	48.0	40	140				

Sample ID: **LCS-22401**	SampType: **LCS**	TestCode: **EPHP_W_DIE** Units: **µg/L**	Prep Date: **6/4/2013**	RunNo: **50506**
Client ID: **ZZZZZ**	Batch ID: **22401**	TestNo: **MADEP EPH_ (eph_Wpr)**	Analysis Date: **6/5/2013**	SeqNo: **573401**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	20.77	1.00	50	0	41.5	40	140				
2-Methylnaphthalene	23.32	1.00	50	0	46.6	40	140				
Acenaphthene	26.57	1.00	50	0	53.1	40	140				
Phenanthrene	38.55	1.00	50	0	77.1	40	140				
Surr: 2,2-Difluorobiphenyl	11.72	0	25	0	46.9	40	140				
Surr: 2-Fluorobiphenyl	12.73	0	25	0	50.9	40	140				

Sample ID: **LCSD-22401**	SampType: **LCSD**	TestCode: **EPHP_W_DIE** Units: **µg/L**	Prep Date: **6/4/2013**	RunNo: **50506**
Client ID: **ZZZZZ**	Batch ID: **22401**	TestNo: **MADEP EPH_ (eph_Wpr)**	Analysis Date: **6/5/2013**	SeqNo: **573402**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	22.59	1.00	50	0	45.2	40	140	20.77	8.39	50	
2-Methylnaphthalene	25.52	1.00	50	0	51.0	40	140	23.32	9.01	50	
Acenaphthene	28.37	1.00	50	0	56.7	40	140	26.57	6.55	50	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306012
Project:

TestCode: EPHP_W_DIESEL

Sample ID: LCSD-22401	SampType: LCSD	TestCode: EPHP_W_DIE	Units: µg/L	Prep Date: 6/4/2013	RunNo: 50506
Client ID: ZZZZZ	Batch ID: 22401	TestNo: MADEP EPH_ (eph_Wpr)		Analysis Date: 6/5/2013	SeqNo: 573402

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenanthrene	40.41	1.00	50	0	80.8	40	140	38.55	4.71	50	
Surr: 2,2-Difluorobiphenyl	12.41	0	25	0	49.6	40	140	0	0	0	
Surr: 2-Fluorobiphenyl	12.64	0	25	0	50.6	40	140	0	0	0	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306012
Project:

TestCode: epht_w

Sample ID: **MB-22401**	SampType: **mblk**	TestCode: **epht_w**	Units: **µg/L**	Prep Date: **6/4/2013**	RunNo: **50494**
Client ID: **ZZZZZ**	Batch ID: **22401**	TestNo: **MADEP EPH**	**(eph_Wpr)**	Analysis Date: **6/4/2013**	SeqNo: **573366**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Adjusted C11-C22 Aromatics	ND	100									
C09-C18 Aliphatics	ND	100									
C19-C36 Aliphatics	ND	100									
Unadjusted C11-C22 Aromatics	ND	100									
Surr: 1-Chlorooctadecane	60.63	0	100	0	60.6	40	140				
Surr: o-Terphenyl	66.70	0	100	0	66.7	40	140				

Sample ID: **LCS-22401**	SampType: **Lcs**	TestCode: **epht_w**	Units: **µg/L**	Prep Date: **6/4/2013**	RunNo: **50494**
Client ID: **ZZZZZ**	Batch ID: **22401**	TestNo: **MADEP EPH**	**(eph_Wpr)**	Analysis Date: **6/4/2013**	SeqNo: **573367**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
C09-C18 Aliphatics	ND	100	100	0	50.9	40	140				
C19-C36 Aliphatics	ND	100	100	0	49.0	40	140				
Unadjusted C11-C22 Aromatics	ND	100	100	0	49.8	40	140				
Surr: 1-Chlorooctadecane	58.92	0	100	0	58.9	40	140				
Surr: o-Terphenyl	65.93	0	100	0	65.9	40	140				

Sample ID: **LCSD-22401**	SampType: **Lcsd**	TestCode: **epht_w**	Units: **µg/L**	Prep Date: **6/4/2013**	RunNo: **50494**
Client ID: **ZZZZZ**	Batch ID: **22401**	TestNo: **MADEP EPH**	**(eph_Wpr)**	Analysis Date: **6/4/2013**	SeqNo: **573368**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
C09-C18 Aliphatics	ND	100	100	0	57.3	40	140	50.92	0	25	
C19-C36 Aliphatics	ND	100	100	0	47.8	40	140	49	0	25	
Unadjusted C11-C22 Aromatics	ND	100	100	0	64.9	40	140	49.82	0	25	
Surr: 1-Chlorooctadecane	59.71	0	100	0	59.7	40	140	0	0	0	
Surr: o-Terphenyl	82.41	0	100	0	82.4	40	140	0	0	0	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306012
Project:

TestCode: VPH_W2

Sample ID: **MBLK** SampType: **MBLK** TestCode: **VPH_W2** Units: **µg/L** Prep Date: RunNo: **50547**
Client ID: **ZZZZZ** Batch ID: **R50547** TestNo: **VPH** Analysis Date: **6/6/2013** SeqNo: **573130**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.00									
2,2,4-Trimethylpentane	ND	1.00									
2-Methylpentane	ND	1.00									
n-Butylcyclohexane	ND	1.00									
n-Decane	ND	1.00									
n-Nonane	ND	1.00									
n-Pentane	ND	1.00									
C9-C10 Aromatic Hydrocarbons	ND	100									
Unadjusted C5-C8 Aliphatic Hydrocarbo	ND	100									
Unadjusted C9-C12 Aliphatic Hydrocarb	ND	100									
Methyl Tert-Butyl Ether	ND	1.00									
Benzene	ND	1.00									
Toluene	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Naphthalene	ND	1.00									
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100									
Adjusted C9-C12 Aliphatic Hydrocarbon	ND	100									
Surr: 2,5-Dibromotoluene FID	89.04	0	100	0	89.0	70	130				
Surr: 2,5-Dibromotoluene PID	88.42	0	100	0	88.4	70	130				

Sample ID: **LCS** SampType: **LCS** TestCode: **VPH_W2** Units: **µg/L** Prep Date: RunNo: **50547**
Client ID: **ZZZZZ** Batch ID: **R50547** TestNo: **VPH** Analysis Date: **6/5/2013** SeqNo: **573128**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	81.52	1.00	100	0	81.5	70	130				

Qualifiers:
BRL Below Reporting Limit
J Analyte detected below quantitation limits
S Spike Recovery outside recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306012
Project:

TestCode: VPH_W2

Sample ID: LCS	SampType: LCS	TestCode: VPH_W2	Units: µg/L	Prep Date:	RunNo: 50547
Client ID: ZZZZZ	Batch ID: R50547	TestNo: VPH		Analysis Date: 6/5/2013	SeqNo: 573128

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,2,4-Trimethylpentane	87.10	1.00	100	0.16	86.9	70	130				
2-Methylpentane	82.67	1.00	100	0	82.7	70	130				
n-Butylcyclohexane	84.08	1.00	100	0	84.1	70	130				
n-Decane	82.01	1.00	100	0.0149	82.0	70	130				
n-Nonane	85.69	1.00	100	0.01028	85.7	30	130				
n-Pentane	89.62	1.00	100	0	89.6	70	130				
C9-C10 Aromatic Hydrocarbons	88.39	50.0	100	0	88.4	70	130				
Unadjusted C5-C8 Aliphatic Hydrocarbo	209.0	100	300	0	69.7	70	130				
Unadjusted C9-C12 Aliphatic Hydrocarb	218.4	100	300	0	72.8	70	130				
Methyl Tert-Butyl Ether	80.62	1.00	100	0	80.6	70	130				
Benzene	80.49	1.00	100	0	80.5	70	130				
Toluene	81.02	1.00	100	0	81.0	70	130				
Ethylbenzene	89.64	1.00	100	0	89.6	70	130				
m,p-Xylene	151.6	1.00	200	0.1	75.7	70	130				
o-Xylene	88.52	1.00	100	0	88.5	70	130				
Naphthalene	91.16	1.00	100	0	91.2	70	130				
Surr: 2,5-Dibromotoluene FID	81.07	0	100	0	81.1	70	130				
Surr: 2,5-Dibromotoluene PID	101.3	0	100	0	101	70	130				

Sample ID: LCSD	SampType: LCSD	TestCode: VPH_W2	Units: µg/L	Prep Date:	RunNo: 50547
Client ID: ZZZZZ	Batch ID: R50547	TestNo: VPH		Analysis Date: 6/6/2013	SeqNo: 573129

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	84.90	1.00	100	0	84.9	70	130	81.52	4.06	25	
2,2,4-Trimethylpentane	91.91	1.00	100	0.16	91.8	70	130	87.1	5.37	25	
2-Methylpentane	87.62	1.00	100	0	87.6	70	130	82.67	5.81	25	
n-Butylcyclohexane	80.35	1.00	100	0	80.4	70	130	84.08	4.54	25	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306012
Project:

TestCode: VPH_W2

Sample ID: LCSD	SampType: LCSD	TestCode: VPH_W2	Units: µg/L	Prep Date:	RunNo: 50547
Client ID: ZZZZZ	Batch ID: R50547	TestNo: VPH		Analysis Date: 6/6/2013	SeqNo: 573129

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
n-Decane	85.78	1.00	100	0.0149	85.8	70	130	82.01	4.49	25	
n-Nonane	83.02	1.00	100	0.01028	83.0	30	130	85.69	3.17	25	
n-Pentane	96.16	1.00	100	0	96.2	70	130	89.62	7.04	25	
C9-C10 Aromatic Hydrocarbons	88.64	50.0	100	0	88.6	70	130	88.39	0.282	25	
Unadjusted C5-C8 Aliphatic Hydrocarbo	222.3	100	300	0	74.1	70	130	209	6.18	25	
Unadjusted C9-C12 Aliphatic Hydrocarb	216.4	100	300	0	72.1	70	130	218.4	0.920	25	
Methyl Tert-Butyl Ether	84.73	1.00	100	0	84.7	70	130	80.62	4.97	25	
Benzene	87.79	1.00	100	0	87.8	70	130	80.49	8.68	25	
Toluene	86.46	1.00	100	0	86.5	70	130	81.02	6.50	25	
Ethylbenzene	88.98	1.00	100	0	89.0	70	130	89.64	0.739	25	
m,p-Xylene	145.7	1.00	200	0.1	72.8	70	130	151.6	3.96	25	
o-Xylene	89.68	1.00	100	0	89.7	70	130	88.52	1.30	25	
Naphthalene	119.2	1.00	100	0	119	70	130	91.16	26.7	25	R
Surr: 2,5-Dibromotoluene FID	84.61	0	100	0	84.6	70	130	0	0	0	
Surr: 2,5-Dibromotoluene PID	86.55	0	100	0	86.6	70	130	0	0	0	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

1306012 PAGE 1 OF 1

CHAIN OF CUSTODY RECORD

GeoLabs, Inc. *Environmental Laboratories*
45 Johnson Lane, Braintree, MA 02184
p 781.848.7844 • f 781.848.7811
www.geolabs.com

Sample Handling: circle choice
Filtration: Done / Not Needed / Lab to do
Preservation: Lab to do Y / N

Special Instructions
CAM Compliant
Improperly Preserved EPH - C6

Turnaround: circle one
1-day (3-day) 2-day 5 / 7-days

Data Delivery: circle choice (s)
Fax (email)
Format:
Excel (PDF)

Requirements: circle choice (s)
GW-1 (MCP Methods) S-1 DEP QC Other _____
CT RCP (Reasonable Confidence Protocols)
State / Fed Program - Criteria _____

Client: Clean Harbors
Address: 42 Longwater Drive Norwell MA
Contact: Rich MacCarthy

Phone: 617-799-6189
Fax: 781-871-0640
email: maccarthy.rm@cleanharbors.com

Project: Nacoran - Arlington
Project PO: _____
Invoice to *: _____

Preservative: 1

COLLECTION DATE 2013	TIME	SAMPLED BY	SAMPLE LOCATION / ID	CONTAINER TYPE	CONTAINER QUANTITY	MATRIX	COMP	GRAB	GeoLabs SAMPLE NUMBER	Analysis Requested: VPH	Analysis Requested: EPH (4 fractions)	Lab Use Only: TEMPERATURE	Lab Use Only: LAB PH
6/3	1600	RM	WS-1	V/AG	2/1	OT		✓	1306012-001	✓	✓	1/5	
↓	1628	JT	WS-2	↓	↓	↓		✓	002	✓	✓		
↓	1707	RM	WS-3	↓	↓	↓		✓	003	✓	✓		

Matrix Codes:
GW = Ground Water DW = Drinking Water S = Soil A = Air
WW = Waste Water SL = Sludge O = Oil OT = Other

Received on Ice ☐

Preservatives
1 = Hcl 3 = H2SO4 5 = NaOH 7 = Other
2 = HNO3 4 = Na2S2O3 6 = MEOH

Containers:
A = Amber B = Bag O = Other
G = Glass P = Plastic
S = Summa V = Voa

Relinquished by: _____ Date / Time 6/4/13
_____ 6/4/13 10:50

Received by: _____ Date / Time 6/4/13 9:50
_____ 6/4/13 10:50

CT (PH-0148) NH (2508) MA (MA-015) RI (LA000252)

ANALYTICAL REPORT

Thursday, June 20, 2013

GeoLabs, Inc.
45 Johnson Lane
Braintree MA 02184
Tele: 781 848 7844
Fax: 781 848 7811

Rich MacCarthy
Clean Harbors
42 Longwater Drive
Norwell, MA 02061

TEL: (781) 792-5822
FAX: (781) 792-5938

Project: EO5401971
Location: Noonan-Arlington

Order No.: 1306097

Dear Rich MacCarthy:

GeoLabs, Inc. received 3 sample(s) on 6/11/2013 for the analyses presented in the following report.

The laboratory results in this report relate only to samples submitted. All data for associated QC met method or laboratory specifications, except where noted in the Case Narrative.

Analytical methods and results meet requirements of 310CMR 40.1056(J) as per MADEP Compendium of Analytical Methods (CAM).

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

David Mick
Laboratory Director

For current certifications, please visit our website at www.geolabs.com
Certifications:
CT (PH-0148) - MA (M-MA015) - NH (2508) - RI (LA000252)
Accredited in Accordance with NELAC

MassDEP Analytical Protocol Certification Form

Laboratory Name: GeoLabs, Inc. Project #: EO 5401971

Project Location: 1306097 (001-003) RTN:

This form provides certification for the following data set: 1305102-001

Matrices: ☐ Groundwater/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 CAM IV A ☒	8081 Pesicides CAM V B ☐	7196 Hex Cr CAM VI B ☐		MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☒	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐		TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII 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 ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ 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 ☐ No
D	Does the laboratory report comply with all reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analtyical Data"?	☒ Yes ☐ No
E	VPH, EPH, APH and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications.)	☒ 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 ☐ 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 protocol(s)?	☒ Yes ☐ No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usablility and representativeness requirements described in 310 CMR 40. 1056 (2) (k) and WSC-07-350.**

H	Were **all** QC performance standards as specified in the CAM protocol(s) achieved?	☐ Yes ☒ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes ☒ No[1]

[1] *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: David Mick **Position: Laboratory Director**

Printed Name: David Mick **Date:** June 20, 2013

Date: *20-Jun-13*

CLIENT:	Clean Harbors
Project:	EO5401971
Lab Order:	1306097

CASE NARRATIVE

Physical Condition of Samples

The project was received by the laboratory in satisfactory condition. The sample(s) were received undamaged, in appropriate containers with the correct preservation.

Project Documentation

The project was accompanied by satisfactory Chain of Custody documentation.

Analysis of Sample(s)

EPH carbon ranges and diesel targets only reported via method MADEP EPH, per client request.

All extractable samples were extracted and analyzed and any Volatile samples were analyzed within method specified holding times and according to GeoLabs documented Standard Operating Procedure. The following analytical anomalies or non-conformances were noted by the laboratory during the processing of these samples:

EPHP LCS & LCSD % Recovery for Naphthalene is outside of recovery limits.
EPHT LCSD % Recovery for Unadjusted C11-C22 Aromatics is outside of recovery limits.

SIGNATURE: David Mick LAB DIRECTOR

PRINTED NAME: David Mick DATE: 06/20/13

CLIENT:	Clean Harbors
Project:	EO5401971
Lab Order:	1306097

CASE NARRATIVE

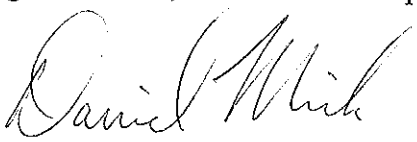
EPH Methods

Method for Ranges: MADEP EPH 04-1.1
Method for Target Analytes: 8270 GC/MS

Carbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
C11-C22 Aromatic Hydrocarbons exclude concentrations of Target PAH Analytes

CERTIFICATION:
Were all QA/QC procedures REQUIRED by the EPH Method followed? YES
Were all performance/acceptance standards achieved? NO (See Case Narrative)
Were any significant modifications made to the EPH method? NO

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

SIGNATURE:  LAB DIRECTOR

PRINTED NAME: David Mick DATE: 06/20/13

CLIENT:	Clean Harbors
Project:	EO5401971
Lab Order:	1306097

CASE NARRATIVE

VPH Methods

Method for Ranges: MADEP VPH 04-1.1
Method for Target Analytes: MADEP VPH 04-1.1

Soil sample(s) were received in MeOH and soil was completely covered by MeOH.
Soil sample(s) ratio 1:1 +/- 25%

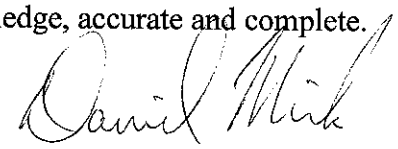
Carbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range. (MTBE, Benzene, Toluene)

C9-C12 Aliphatic Hydrocarbons exclude concentration of Target Analytes eluting in that range (Ethylbenzene, m&p-Xylenes, o-Xylene) AND concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION
Were all QA/QC procedures REQUIRED by the VPH Method followed? YES
Were all QA/QC performance/acceptance standards achieved? YES
Were any significant modifications made to the VPH method, as specified in Sec. 11.3? NO

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

SIGNATURE:  POSITION: LAB DIRECTOR

PRINTED NAME: David Mick

DATE: 06/20/13

ANALYTICAL REPORT **Reported Date:** 20-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-1A
Lab Order:	1306097	**Collection Date:**	6/10/2013 10:00:00 AM
Project:	EO5401971	**Date Received:**	6/11/2013
Lab ID:	1306097-001	**Matrix:**	OTHER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/17/2013 8:43:10 AM**		
Adjusted C11-C22 Aromatics	ND	103		µg/L	1	6/17/2013
C09-C18 Aliphatics	ND	103		µg/L	1	6/17/2013
C19-C36 Aliphatics	ND	103		µg/L	1	6/17/2013
Unadjusted C11-C22 Aromatics	ND	103		µg/L	1	6/17/2013
Surr: 1-Chlorooctadecane	67.0	40-140		%REC	1	6/17/2013
Surr: o-Terphenyl	70.9	40-140		%REC	1	6/17/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/17/2013 8:43:10 AM**		
Naphthalene	ND	1.03		µg/L	1	1/6/2006 2:39:00 AM
2-Methylnaphthalene	ND	1.03		µg/L	1	1/6/2006 2:39:00 AM
Acenaphthene	ND	1.03		µg/L	1	1/6/2006 2:39:00 AM
Phenanthrene	ND	1.03		µg/L	1	1/6/2006 2:39:00 AM
Total PAH Target Concentration	ND	1.03		µg/L	1	1/6/2006 2:39:00 AM
Surr: 2,2-Difluorobiphenyl	55.3	40-140		%REC	1	1/6/2006 2:39:00 AM
Surr: 2-Fluorobiphenyl	65.5	40-140		%REC	1	1/6/2006 2:39:00 AM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
C9-C10 Aromatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:04:00 AM
Unadjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:04:00 AM
Unadjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:04:00 AM
Methyl Tert-Butyl Ether	ND	1.00		µg/L	1	6/12/2013 8:04:00 AM
Benzene	ND	1.00		µg/L	1	6/12/2013 8:04:00 AM
Toluene	ND	1.00		µg/L	1	6/12/2013 8:04:00 AM
Ethylbenzene	ND	1.00		µg/L	1	6/12/2013 8:04:00 AM
m,p-Xylene	*2.63*	1.00		µg/L	1	6/12/2013 8:04:00 AM
o-Xylene	*6.50*	1.00		µg/L	1	6/12/2013 8:04:00 AM
Naphthalene	ND	1.00		µg/L	1	6/12/2013 8:04:00 AM
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:04:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

ANALYTICAL REPORT **Reported Date:** 20-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-1A
Lab Order:	1306097	**Collection Date:**	6/10/2013 10:00:00 AM
Project:	EO5401971	**Date Received:**	6/11/2013
Lab ID:	1306097-001	**Matrix:**	OTHER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: ZC
Prep Method:		**Prep Date:**				
Adjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:04:00 AM
Surr: 2,5-Dibromotoluene FID	95.2	70-130		%REC	1	6/12/2013 8:04:00 AM
Surr: 2,5-Dibromotoluene PID	80.1	70-130		%REC	1	6/12/2013 8:04:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

ANALYTICAL REPORT **Reported Date:** 20-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-2A
Lab Order:	1306097	**Collection Date:**	6/10/2013 10:30:00 AM
Project:	EO5401971	**Date Received:**	6/11/2013
Lab ID:	1306097-002	**Matrix:**	OTHER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/17/2013 8:43:10 AM**		
Adjusted C11-C22 Aromatics	ND	103		µg/L	1	6/17/2013
C09-C18 Aliphatics	ND	103		µg/L	1	6/17/2013
C19-C36 Aliphatics	ND	103		µg/L	1	6/17/2013
Unadjusted C11-C22 Aromatics	ND	103		µg/L	1	6/17/2013
Surr: 1-Chlorooctadecane	62.6	40-140		%REC	1	6/17/2013
Surr: o-Terphenyl	71.9	40-140		%REC	1	6/17/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/17/2013 8:43:10 AM**		
Naphthalene	ND	1.03		µg/L	1	1/6/2006 3:16:00 AM
2-Methylnaphthalene	ND	1.03		µg/L	1	1/6/2006 3:16:00 AM
Acenaphthene	ND	1.03		µg/L	1	1/6/2006 3:16:00 AM
Phenanthrene	ND	1.03		µg/L	1	1/6/2006 3:16:00 AM
Total PAH Target Concentration	ND	1.03		µg/L	1	1/6/2006 3:16:00 AM
Surr: 2,2-Difluorobiphenyl	53.0	40-140		%REC	1	1/6/2006 3:16:00 AM
Surr: 2-Fluorobiphenyl	65.0	40-140		%REC	1	1/6/2006 3:16:00 AM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
C9-C10 Aromatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:45:00 AM
Unadjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:45:00 AM
Unadjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:45:00 AM
Methyl Tert-Butyl Ether	ND	1.00		µg/L	1	6/12/2013 8:45:00 AM
Benzene	ND	1.00		µg/L	1	6/12/2013 8:45:00 AM
Toluene	ND	1.00		µg/L	1	6/12/2013 8:45:00 AM
Ethylbenzene	ND	1.00		µg/L	1	6/12/2013 8:45:00 AM
m,p-Xylene	ND	1.00		µg/L	1	6/12/2013 8:45:00 AM
o-Xylene	ND	1.00		µg/L	1	6/12/2013 8:45:00 AM
Naphthalene	ND	1.00		µg/L	1	6/12/2013 8:45:00 AM
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:45:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT

Reported Date: 20-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-2A
Lab Order:	1306097	**Collection Date:**	6/10/2013 10:30:00 AM
Project:	EO5401971	**Date Received:**	6/11/2013
Lab ID:	1306097-002	**Matrix:**	OTHER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: ZC
Prep Method:		**Prep Date:**				
Adjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:45:00 AM
Surr: 2,5-Dibromotoluene FID	82.1	70-130		%REC	1	6/12/2013 8:45:00 AM
Surr: 2,5-Dibromotoluene PID	81.6	70-130		%REC	1	6/12/2013 8:45:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT **Reported Date:** 20-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-3A
Lab Order:	1306097	**Collection Date:**	6/10/2013 11:00:00 AM
Project:	EO5401971	**Date Received:**	6/11/2013
Lab ID:	1306097-003	**Matrix:**	OTHER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/17/2013 8:43:10 AM**		
Adjusted C11-C22 Aromatics	ND	102		µg/L	1	6/17/2013
C09-C18 Aliphatics	ND	102		µg/L	1	6/17/2013
C19-C36 Aliphatics	ND	102		µg/L	1	6/17/2013
Unadjusted C11-C22 Aromatics	ND	102		µg/L	1	6/17/2013
Surr: 1-Chlorooctadecane	65.3	40-140		%REC	1	6/17/2013
Surr: o-Terphenyl	82.2	40-140		%REC	1	6/17/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/17/2013 8:43:10 AM**		
Naphthalene	ND	1.02		µg/L	1	1/6/2006 3:49:00 AM
2-Methylnaphthalene	ND	1.02		µg/L	1	1/6/2006 3:49:00 AM
Acenaphthene	ND	1.02		µg/L	1	1/6/2006 3:49:00 AM
Phenanthrene	ND	1.02		µg/L	1	1/6/2006 3:49:00 AM
Total PAH Target Concentration	ND	1.02		µg/L	1	1/6/2006 3:49:00 AM
Surr: 2,2-Difluorobiphenyl	52.8	40-140		%REC	1	1/6/2006 3:49:00 AM
Surr: 2-Fluorobiphenyl	59.2	40-140		%REC	1	1/6/2006 3:49:00 AM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
C9-C10 Aromatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 9:27:00 AM
Unadjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 9:27:00 AM
Unadjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 9:27:00 AM
Methyl Tert-Butyl Ether	ND	1.00		µg/L	1	6/12/2013 9:27:00 AM
Benzene	ND	1.00		µg/L	1	6/12/2013 9:27:00 AM
Toluene	ND	1.00		µg/L	1	6/12/2013 9:27:00 AM
Ethylbenzene	ND	1.00		µg/L	1	6/12/2013 9:27:00 AM
m,p-Xylene	ND	1.00		µg/L	1	6/12/2013 9:27:00 AM
o-Xylene	ND	1.00		µg/L	1	6/12/2013 9:27:00 AM
Naphthalene	ND	1.00		µg/L	1	6/12/2013 9:27:00 AM
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 9:27:00 AM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- BRL Below Reporting Limit
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

ANALYTICAL REPORT **Reported Date:** 20-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-3A
Lab Order:	1306097	**Collection Date:**	6/10/2013 11:00:00 AM
Project:	EO5401971	**Date Received:**	6/11/2013
Lab ID:	1306097-003	**Matrix:**	OTHER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: ZC
Prep Method:		**Prep Date:**				
Adjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 9:27:00 AM
Surr: 2,5-Dibromotoluene FID	83.2	70-130		%REC	1	6/12/2013 9:27:00 AM
Surr: 2,5-Dibromotoluene PID	81.4	70-130		%REC	1	6/12/2013 9:27:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

ANALYTICAL QC SUMMARY REPORT

Date: *20-Jun-13*

CLIENT: Clean Harbors
Work Order: 1306097
Project: EO5401971

TestCode: EPHP_W_DIESEL

Sample ID: **mb-22473**	SampType: **MBLK**	TestCode: **EPHP_W_DIE** Units: **µg/L**	Prep Date: **6/17/2013**	RunNo: **50724**
Client ID: **ZZZZZ**	Batch ID: **22473**	TestNo: **MADEP EPH_ (eph_Wpr)**	Analysis Date: **1/6/2006**	SeqNo: **574956**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	1.00									
2-Methylnaphthalene	ND	1.00									
Acenaphthene	ND	1.00									
Phenanthrene	ND	1.00									
Total PAH Target Concentration	ND	1.00									
Surr: 2,2-Difluorobiphenyl	13.69	0	25	0	54.8	40	140				
Surr: 2-Fluorobiphenyl	15.74	0	25	0	63.0	40	140				

Sample ID: **lcs-22473**	SampType: **LCS**	TestCode: **EPHP_W_DIE** Units: **µg/L**	Prep Date: **6/17/2013**	RunNo: **50724**
Client ID: **ZZZZZ**	Batch ID: **22473**	TestNo: **MADEP EPH_ (eph_Wpr)**	Analysis Date: **1/6/2006**	SeqNo: **574957**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	17.50	1.00	50	0	35.0	40	140				S
2-Methylnaphthalene	24.44	1.00	50	0	48.9	40	140				
Acenaphthene	26.63	1.00	50	0	53.3	40	140				
Phenanthrene	35.77	1.00	50	0	71.5	40	140				
Total PAH Target Concentration	104.3	1.00									
Surr: 2,2-Difluorobiphenyl	14.97	0	25	0	59.9	40	140				
Surr: 2-Fluorobiphenyl	17.55	0	25	0	70.2	40	140				

Sample ID: **lcs1-22473**	SampType: **LCSD**	TestCode: **EPHP_W_DIE** Units: **µg/L**	Prep Date: **6/17/2013**	RunNo: **50724**
Client ID: **ZZZZZ**	Batch ID: **22473**	TestNo: **MADEP EPH_ (eph_Wpr)**	Analysis Date: **1/6/2006**	SeqNo: **574958**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	17.04	1.00	50	0	34.1	40	140				S
2-Methylnaphthalene	21.02	1.00	50	0	42.0	40	140				

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306097
Project: EO5401971

TestCode: EPHP_W_DIESEL

Sample ID: lcs1-22473	SampType: LCSD	TestCode: EPHP_W_DIE	Units: µg/L	Prep Date: 6/17/2013	RunNo: 50724
Client ID: ZZZZZ	Batch ID: 22473	TestNo: MADEP EPH_ (eph_Wpr)		Analysis Date: 1/6/2006	SeqNo: 574958

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	22.97	1.00	50	0	45.9	40	140				
Phenanthrene	30.33	1.00	50	0	60.7	40	140				
Total PAH Target Concentration	91.36	1.00									
Surr: 2,2-Difluorobiphenyl	14.79	0	25	0	59.2	40	140				
Surr: 2-Fluorobiphenyl	16.97	0	25	0	67.9	40	140				

Sample ID: LCS1-22473	SampType: LCSD	TestCode: EPHP_W_DIE	Units: µg/L	Prep Date: 6/17/2013	RunNo: 50768
Client ID: ZZZZZ	Batch ID: 22473	TestNo: MADEP EPH_ (eph_Wpr)		Analysis Date: 1/7/2006	SeqNo: 575266

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	29.55	1.00	50	0	59.1	40	140				
2-Methylnaphthalene	32.38	1.00	50	0	64.8	40	140				
Acenaphthene	33.05	1.00	50	0	66.1	40	140				
Phenanthrene	38.99	1.00	50	0	78.0	40	140				
Total PAH Target Concentration	134.0	1.00									
Surr: 2,2-Difluorobiphenyl	15.88	0	25	0	63.5	40	140				
Surr: 2-Fluorobiphenyl	18.16	0	25	0	72.6	40	140				

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306097
Project: EO5401971

TestCode: epht_w

Sample ID: MB-22473	SampType: mblk	TestCode: epht_w	Units: µg/L	Prep Date: 6/17/2013	RunNo: 50706
Client ID: ZZZZZ	Batch ID: 22473	TestNo: MADEP EPH (eph_Wpr)		Analysis Date: 6/17/2013	SeqNo: 574828

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Adjusted C11-C22 Aromatics	ND	100									
C09-C18 Aliphatics	ND	100									
C19-C36 Aliphatics	ND	100									
Unadjusted C11-C22 Aromatics	ND	100									
Surr: 1-Chlorooctadecane	52.51	0	100	0	52.5	40	140				
Surr: o-Terphenyl	62.20	0	100	0	62.2	40	140				

Sample ID: LCS-22473	SampType: Lcs	TestCode: epht_w	Units: µg/L	Prep Date: 6/17/2013	RunNo: 50706
Client ID: ZZZZZ	Batch ID: 22473	TestNo: MADEP EPH (eph_Wpr)		Analysis Date: 6/17/2013	SeqNo: 574829

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
C09-C18 Aliphatics	ND	100	100	0	50.7	40	140				
C19-C36 Aliphatics	ND	100	100	0	53.7	40	140				
Unadjusted C11-C22 Aromatics	ND	100	100	0	42.2	40	140				
Surr: 1-Chlorooctadecane	67.81	0	100	0	67.8	40	140				
Surr: o-Terphenyl	80.10	0	100	0	80.1	40	140				

Sample ID: LCS1-22473	SampType: Lcsd	TestCode: epht_w	Units: µg/L	Prep Date: 6/17/2013	RunNo: 50706
Client ID: ZZZZZ	Batch ID: 22473	TestNo: MADEP EPH (eph_Wpr)		Analysis Date: 6/17/2013	SeqNo: 574830

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
C09-C18 Aliphatics	ND	100	100	0	46.5	40	140	50.65	0	25	
C19-C36 Aliphatics	ND	100	100	0	42.8	40	140	53.68	0	25	
Unadjusted C11-C22 Aromatics	ND	100	100	0	33.3	40	140	42.16	0	25	S
Surr: 1-Chlorooctadecane	51.61	0	100	0	51.6	40	140	0	0	0	
Surr: o-Terphenyl	66.78	0	100	0	66.8	40	140	0	0	0	

Qualifiers:
BRL Below Reporting Limit
J Analyte detected below quantitation limits
S Spike Recovery outside recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306097
Project: EO5401971

TestCode: VPH_W2

Sample ID: **MBLK** SampType: **MBLK** TestCode: **VPH_W2** Units: **µg/L** Prep Date: RunNo: **50661**
Client ID: **ZZZZZ** Batch ID: **R50661** TestNo: **VPH** Analysis Date: **6/12/2013** SeqNo: **574234**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.00									
2,2,4-Trimethylpentane	ND	1.00									
2-Methylpentane	ND	1.00									
n-Butylcyclohexane	ND	1.00									
n-Decane	ND	1.00									
n-Nonane	ND	1.00									
n-Pentane	ND	1.00									
C9-C10 Aromatic Hydrocarbons	ND	100									
Unadjusted C5-C8 Aliphatic Hydrocarbo	ND	100									
Unadjusted C9-C12 Aliphatic Hydrocarb	ND	100									
Methyl Tert-Butyl Ether	ND	1.00									
Benzene	ND	1.00									
Toluene	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Naphthalene	ND	1.00									
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100									
Adjusted C9-C12 Aliphatic Hydrocarbon	ND	100									
Surr: 2,5-Dibromotoluene FID	96.83	0	100	0	96.8	70	130				
Surr: 2,5-Dibromotoluene PID	86.83	0	100	0	86.8	70	130				

Sample ID: **LCS** SampType: **LCS** TestCode: **VPH_W2** Units: **µg/L** Prep Date: RunNo: **50661**
Client ID: **ZZZZZ** Batch ID: **R50661** TestNo: **VPH** Analysis Date: **6/12/2013** SeqNo: **574232**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	80.55	1.00	100	0	80.6	70	130				

Qualifiers:
BRL Below Reporting Limit
J Analyte detected below quantitation limits
S Spike Recovery outside recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306097
Project: EO5401971

TestCode: VPH_W2

Sample ID: LCS	SampType: LCS	TestCode: VPH_W2	Units: µg/L	Prep Date:	RunNo: 50661
Client ID: ZZZZZ	Batch ID: R50661	TestNo: VPH		Analysis Date: 6/12/2013	SeqNo: 574232

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,2,4-Trimethylpentane	97.61	1.00	100	0.08	97.5	70	130				
2-Methylpentane	97.73	1.00	100	0	97.7	70	130				
n-Butylcyclohexane	126.4	1.00	100	0	126	70	130				
n-Decane	123.5	1.00	100	0	123	70	130				
n-Nonane	116.4	1.00	100	0	116	30	130				
n-Pentane	102.5	1.00	100	0	103	70	130				
C9-C10 Aromatic Hydrocarbons	ND	100	100	0	88.3	70	130				
Unadjusted C5-C8 Aliphatic Hydrocarbo	240.7	100	300	0	80.2	70	130				
Unadjusted C9-C12 Aliphatic Hydrocarb	343.2	100	300	0	114	70	130				
Methyl Tert-Butyl Ether	80.42	1.00	100	0	80.4	70	130				
Benzene	83.26	1.00	100	0	83.3	70	130				
Toluene	80.22	1.00	100	0.1	80.1	70	130				
Ethylbenzene	82.70	1.00	100	0.15	82.6	70	130				
m,p-Xylene	164.9	1.00	200	0.1	82.4	70	130				
o-Xylene	91.06	1.00	100	0	91.1	70	130				
Naphthalene	107.4	1.00	100	0	107	70	130				
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100									
Adjusted C9-C12 Aliphatic Hydrocarbon	ND	100									
Surr: 2,5-Dibromotoluene FID	89.21	0	100	0	89.2	70	130				
Surr: 2,5-Dibromotoluene PID	83.74	0	100	0	83.7	70	130				

Sample ID: LCSD	SampType: LCSD	TestCode: VPH_W2	Units: µg/L	Prep Date:	RunNo: 50661
Client ID: ZZZZZ	Batch ID: R50661	TestNo: VPH		Analysis Date: 6/12/2013	SeqNo: 574233

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	80.71	1.00	100	0	80.7	70	130	80.55	0.198	25	
2,2,4-Trimethylpentane	99.06	1.00	100	0.08	99.0	70	130	97.61	1.47	25	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306097
Project: EO5401971

TestCode: VPH_W2

Sample ID: **LCSD**	SampType: **LCSD**	TestCode: **VPH_W2**	Units: **µg/L**	Prep Date:		RunNo: **50661**
Client ID: **ZZZZZ**	Batch ID: **R50661**	TestNo: **VPH**		Analysis Date: **6/12/2013**		SeqNo: **574233**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Methylpentane	97.94	1.00	100	0	97.9	70	130	97.73	0.215	25	
n-Butylcyclohexane	123.4	1.00	100	0	123	70	130	126.4	2.46	25	
n-Decane	127.0	1.00	100	0	127	70	130	123.5	2.81	25	
n-Nonane	118.6	1.00	100	0	119	30	130	116.4	1.86	25	
n-Pentane	103.0	1.00	100	0	103	70	130	102.5	0.448	25	
C9-C10 Aromatic Hydrocarbons	ND	100	100	0	88.3	70	130	88.32	0.0113	25	
Unadjusted C5-C8 Aliphatic Hydrocarbo	242.2	100	300	0	80.7	70	130	240.7	0.642	25	
Unadjusted C9-C12 Aliphatic Hydrocarb	357.3	100	300	0	119	70	130	343.2	4.02	25	
Methyl Tert-Butyl Ether	82.03	1.00	100	0	82.0	70	130	80.42	1.98	25	
Benzene	81.96	1.00	100	0	82.0	70	130	83.26	1.57	25	
Toluene	86.54	1.00	100	0.1	86.4	70	130	80.22	7.58	25	
Ethylbenzene	89.74	1.00	100	0.15	89.6	70	130	82.7	8.17	25	
m,p-Xylene	180.5	1.00	200	0.1	90.2	70	130	164.9	9.08	25	
o-Xylene	82.74	1.00	100	0	82.7	70	130	91.06	9.57	25	
Naphthalene	113.1	1.00	100	0	113	70	130	107.4	5.19	25	
Surr: 2,5-Dibromotoluene FID	83.67	0	100	0	83.7	70	130	0	0	0	
Surr: 2,5-Dibromotoluene PID	88.66	0	100	0	88.7	70	130	0	0	0	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CHAIN OF CUSTODY RECORD

1306097 PAGE 1 OF 1

GeoLabs, Inc. *Environmental Laboratories*
45 Johnson Lane, Braintree, MA 02184
p 781.848.7844 • f 781.848.7811
www.geolabs.com

Sample Handling: circle choice
Filtration: Done / Not Needed / Lab to do
Preservation: Lab to do Y / N

Special Instructions

Turnaround: circle one
1-day 3-day
2-day 5 / 7-days

Data Delivery: circle choice (s)
Fax email
Format:
Excel PDF

Requirements: circle choice (s)
GW-1 MCP Methods
S-1 DEP
QC Other
CT RCP (Reasonable Confidence Protocols)
State / Fed Program - Criteria

Client: CHES
Address: 42 Longwater Dr.
Norwell, MA
Contact: R Mac Castagna

Phone: 781.792.5822
Fax:
email:

Project: Noonan Arlington
Project PO: E0540971
Invoice to *:

Preservative:

COLLECTION DATE	TIME	SAMPLED BY	SAMPLE LOCATION / ID	CONTAINER TYPE	CONTAINER QUANITY	MATRIX	COMP	GRAB	GeoLabs SAMPLE NUMBER	Analysis Requested: VPH	Analysis Requested: EPH + 4 diesel fingerprints	Lab Use Only: TEMPERATURE	Lab Use Only: LAB pH
6/10	1000	RM	WS 1A	V/AG	3	OT			6097-001	✓	✓		
↓	1030	↓	WS 2A	↓	↓	↓			002	✓	✓		
↓	1100	↓	WS 3A	↓	↓	↓			003	✓	✓		

Matrix Codes:
GW = Ground Water DW = Drinking Water S = Soil A = Air
WW = Waste Water SL = Sludge O = Oil OT = Other

Received on Ice

Preservatives
1 = Hcl 3 = H2SO4 5 = NaOH 7 = Other
2 = HNO3 4 = Na2S2O3 6 = MEOH

Containers:
A = Amber B = Bag O = Other
G = Glass P = Plastic
S = Summa V = Voa

Relinquished by:	Date / Time	Received by:	Date / Time
	6/11/13		6/11/13 3:30
	6/11/13 4:10		6/11/13 4:10pm

2010730.J&P.C of CR.09/22/10 * Terms: Payment due within 30 days unless other arrangements are made. Past due balances subject to interest and collection cost.
Note: Homeowners and Law Firms must pay when dropping off samples. We accept cash, check and credit cards.

CT (PH-0148) NH (2508) NJ (MA-009) RI (LA000252) ME (MA 0016)

ANALYTICAL REPORT

Tuesday, June 18, 2013

GeoLabs, Inc.
45 Johnson Lane
Braintree MA 02184
Tele: 781 848 7844
Fax: 781 848 7811

Rich MacCarthy
Clean Harbors
42 Longwater Drive
Norwell, MA 02061

TEL: (781) 792-5822
FAX: (781) 792-5938

Project: Noonan - Arlington
Location:

Order No.: 1306067

Dear Rich MacCarthy:

GeoLabs, Inc. received 6 sample(s) on 6/7/2013 for the analyses presented in the following report.

The laboratory results in this report relate only to samples submitted. All data for associated QC met method or laboratory specifications, except where noted in the Case Narrative.

Analytical methods and results meet requirements of 310CMR 40.1056(J) as per MADEP Compendium of Analytical Methods (CAM).

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

David Mick
Laboratory Director

For current certifications, please visit our website at www.geolabs.com

Certifications:

CT (PH-0148) - MA (M-MA015) - NH (2508) - RI (LA000252)

Accredited in Accordance with NELAC

MassDEP Analytical Protocol Certification Form

Laboratory Name: GeoLabs, Inc. Project #:

Project Location: Noonan- Arlington RTN:

This form provides certification for the following data set: 1306067 (001-006)

Matrices: ☐ Groundwater/Surface Water ☒ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other-wastewater

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☒	8081 Pesicides CAM V B ☐	7196 Hex Cr CAM VI B ☐		MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☒	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐		TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII 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 ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ 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 ☐ No
D	Does the laboratory report comply with all reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analtyical Data"?	☒ Yes ☐ No
E	VPH, EPH, APH and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications.)	☒ 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 ☐ 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 protocol(s)?	☒ Yes ☐ No

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usablility and representativeness requirements described in 310 CMR 40. 1056 (2) (k) and WSC-07-350.**

H	Were **all** QC performance standards as specified in the CAM protocol(s) achieved?	☐ Yes ☒ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes ☒ No[1]

[1] *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: _____ **Position: Laboratory Director**

Printed Name: David Mick **Date:** June 18, 2013

Date: *18-Jun-13*

CLIENT:	Clean Harbors
Project:	Noonan - Arlington
Lab Order:	1306067

CASE NARRATIVE

Physical Condition of Samples

The project was received by the laboratory in satisfactory condition. The sample(s) were received undamaged, in appropriate containers with the correct preservation.

Project Documentation

The project was accompanied by satisfactory Chain of Custody documentation.

Analysis of Sample(s)

EPH carbon ranges and diesel targets only reported via MADEP EPH, per client request.

All extractable samples were extracted and analyzed and any Volatile samples were analyzed within method specified holding times and according to GeoLabs documented Standard Operating Procedure. The following analytical anomalies or non-conformances were noted by the laboratory during the processing of these samples:

EPHP- Samples 001 and 002- Naphthalene is reported with an 'E' value.
EPHT- Sample 002- surrogates are diluted out of sample.

SIGNATURE: David Mick LAB DIRECTOR

PRINTED NAME: David Mick DATE: 06/18/13

CLIENT:	Clean Harbors
Project:	Noonan - Arlington
Lab Order:	1306067

CASE NARRATIVE

EPH Methods

Method for Ranges: MADEP EPH 04-1.1
Method for Target Analytes: 8270 GC/MS

Carbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
C11-C22 Aromatic Hydrocarbons exclude concentrations of Target PAH Analytes

CERTIFICATION:
Were all QA/QC procedures REQUIRED by the EPH Method followed? YES
Were all performance/acceptance standards achieved? YES
Were any significant modifications made to the EPH method? NO

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

SIGNATURE:  LAB DIRECTOR

PRINTED NAME: David Mick DATE: 06/18/13

CLIENT:	Clean Harbors
Project:	Noonan - Arlington
Lab Order:	1306067

CASE NARRATIVE

VPH Methods

Method for Ranges: MADEP VPH 04-1.1
Method for Target Analytes: MADEP VPH 04-1.1

Soil sample(s) were received in MeOH and soil was completely covered by MeOH.
Soil sample(s) ratio 1:1 +/- 25%

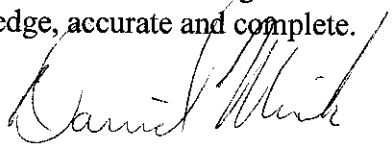
Carbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range. (MTBE, Benzene, Toluene)

C9-C12 Aliphatic Hydrocarbons exclude concentration of Target Analytes eluting in that range (Ethylbenzene, m&p-Xylenes, o-Xylene) AND concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION
Were all QA/QC procedures REQUIRED by the VPH Method followed? YES
Were all QA/QC performance/acceptance standards achieved? YES
Were any significant modifications made to the VPH method, as specified in Sec. 11.3? NO

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

SIGNATURE:  POSITION: LAB DIRECTOR

PRINTED NAME: David Mick

DATE: 06/18/13

ANALYTICAL REPORT

Reported Date: 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-16
Lab Order:	1306067	**Collection Date:**	6/5/2013 11:00:00 AM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-001	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Adjusted C11-C22 Aromatics	*2120*	192		mg/Kg-dry	10	6/12/2013
C09-C18 Aliphatics	*2860*	962		mg/Kg-dry	50	6/12/2013
C19-C36 Aliphatics	*1090*	192		mg/Kg-dry	10	6/12/2013
Unadjusted C11-C22 Aromatics	*2210*	192		mg/Kg-dry	10	6/12/2013
Surr: 1-Chlorooctadecane	59.1	40-140		%REC	1	6/12/2013
Surr: o-Terphenyl	79.6	40-140		%REC	1	6/12/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Naphthalene	*24.3*	0.128		mg/Kg-dry	1	6/12/2013 9:30:00 PM
2-Methylnaphthalene	*61.1*	0.128	E	mg/Kg-dry	1	6/12/2013 9:30:00 PM
Acenaphthene	ND	0.128		mg/Kg-dry	1	6/12/2013 9:30:00 PM
Phenanthrene	*8.04*	0.128		mg/Kg-dry	1	6/12/2013 9:30:00 PM
Total PAH Target Concentration	*93.4*	0.128		mg/Kg-dry	1	6/12/2013 9:30:00 PM
Surr: 2,2-Difluorobiphenyl	55.6	40-140		%REC	1	6/12/2013 9:30:00 PM
Surr: 2-Fluorobiphenyl	48.4	40-140		%REC	1	6/12/2013 9:30:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
Unadjusted C5-C8 Aliphatic HC	*50.9*	12.8		mg/Kg-dry	1	6/13/2013 2:32:00 AM
Unadjusted C9-C12 Aliphatic HC	*328*	128		mg/Kg-dry	10	6/13/2013 1:04:00 AM
Methyl Tert-Butyl Ether	ND	0.128		mg/Kg-dry	1	6/13/2013 2:32:00 AM
Benzene	ND	0.128		mg/Kg-dry	1	6/13/2013 2:32:00 AM
Toluene	*17.9*	0.128		mg/Kg-dry	1	6/13/2013 2:32:00 AM
Ethylbenzene	*29.1*	0.128		mg/Kg-dry	1	6/13/2013 2:32:00 AM
m,p-Xylene	*64.1*	1.28		mg/Kg-dry	10	6/13/2013 1:04:00 AM
o-Xylene	*42.7*	1.28		mg/Kg-dry	10	6/13/2013 1:04:00 AM
Naphthalene	ND	0.128		mg/Kg-dry	1	6/13/2013 2:32:00 AM
C9-C10 Aromatic Hydrocarbons	*488*	128		mg/Kg-dry	10	6/13/2013 1:04:00 AM
Adjusted C5-C8 Aliphatic HC	*33.0*	12.8		mg/Kg-dry	1	6/13/2013 2:32:00 AM
Adjusted C9-C12 Aliphatic HC	ND	12.8		mg/Kg-dry	1	6/13/2013 2:32:00 AM
Surr: 2,5-Dibromotoluene FID	93.1	70-130		%REC	10	6/13/2013 1:04:00 AM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- BRL Below Reporting Limit
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT

Reported Date: 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-16
Lab Order:	1306067	**Collection Date:**	6/5/2013 11:00:00 AM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-001	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:		**Prep Date:**				
Surr: 2,5-Dibromotoluene FID	108	70-130		%REC	1	6/13/2013 2:32:00 AM
Surr: 2,5-Dibromotoluene PID	84.6	70-130		%REC	10	6/13/2013 1:04:00 AM
Surr: 2,5-Dibromotoluene PID	120	70-130		%REC	1	6/13/2013 2:32:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT **Reported Date:** 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-18
Lab Order:	1306067	**Collection Date:**	6/5/2013 12:00:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-002	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Spr)				**Prep Date:** 6/10/2013 2:57:17 PM		
Adjusted C11-C22 Aromatics	*1220*	170		mg/Kg-dry	10	6/12/2013
C09-C18 Aliphatics	*2720*	852		mg/Kg-dry	50	6/12/2013
C19-C36 Aliphatics	*942*	170		mg/Kg-dry	10	6/12/2013
Unadjusted C11-C22 Aromatics	*1270*	170		mg/Kg-dry	10	6/12/2013
Surr: 1-Chlorooctadecane	0	40-140	S	%REC	10	6/12/2013
Surr: o-Terphenyl	0	40-140	S	%REC	10	6/12/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Spr)				**Prep Date:** 6/10/2013 2:57:17 PM		
Naphthalene	*10.9*	0.114		mg/Kg-dry	1	6/12/2013 10:07:00 PM
2-Methylnaphthalene	*30.6*	0.114	E	mg/Kg-dry	1	6/12/2013 10:07:00 PM
Acenaphthene	ND	0.114		mg/Kg-dry	1	6/12/2013 10:07:00 PM
Phenanthrene	*5.43*	0.114		mg/Kg-dry	1	6/12/2013 10:07:00 PM
Total PAH Target Concentration	*46.9*	0.114		mg/Kg-dry	1	6/12/2013 10:07:00 PM
Surr: 2,2-Difluorobiphenyl	54.6	40-140		%REC	1	6/12/2013 10:07:00 PM
Surr: 2-Fluorobiphenyl	49.8	40-140		%REC	1	6/12/2013 10:07:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:				**Prep Date:**		
Unadjusted C5-C8 Aliphatic HC	*42.4*	11.4		mg/Kg-dry	1	6/13/2013 3:15:00 AM
Unadjusted C9-C12 Aliphatic HC	*485*	114		mg/Kg-dry	10	6/13/2013 1:48:00 AM
Methyl Tert-Butyl Ether	ND	0.114		mg/Kg-dry	1	6/13/2013 3:15:00 AM
Benzene	ND	0.114		mg/Kg-dry	1	6/13/2013 3:15:00 AM
Toluene	*16.2*	0.114		mg/Kg-dry	1	6/13/2013 3:15:00 AM
Ethylbenzene	*23.7*	0.114		mg/Kg-dry	1	6/13/2013 3:15:00 AM
m,p-Xylene	*58.8*	1.14		mg/Kg-dry	10	6/13/2013 1:48:00 AM
o-Xylene	*30.5*	0.114		mg/Kg-dry	1	6/13/2013 3:15:00 AM
Naphthalene	ND	0.114		mg/Kg-dry	1	6/13/2013 3:15:00 AM
C9-C10 Aromatic Hydrocarbons	*593*	114		mg/Kg-dry	10	6/13/2013 1:48:00 AM
Adjusted C5-C8 Aliphatic HC	*26.2*	11.4		mg/Kg-dry	1	6/13/2013 3:15:00 AM
Adjusted C9-C12 Aliphatic HC	ND	11.4		mg/Kg-dry	1	6/13/2013 3:15:00 AM
Surr: 2,5-Dibromotoluene FID	86.2	70-130		%REC	10	6/13/2013 1:48:00 AM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- BRL Below Reporting Limit
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

ANALYTICAL REPORT **Reported Date:** 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-18
Lab Order:	1306067	**Collection Date:**	6/5/2013 12:00:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-002	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:		**Prep Date:**				
Surr: 2,5-Dibromotoluene FID	218	70-130	S	%REC	1	6/13/2013 3:15:00 AM
Surr: 2,5-Dibromotoluene PID	87.2	70-130		%REC	10	6/13/2013 1:48:00 AM
Surr: 2,5-Dibromotoluene PID	118	70-130		%REC	1	6/13/2013 3:15:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

ANALYTICAL REPORT **Reported Date:** 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-25
Lab Order:	1306067	**Collection Date:**	6/5/2013 4:30:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-003	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Adjusted C11-C22 Aromatics	ND	16.5		mg/Kg-dry	1	6/12/2013
C09-C18 Aliphatics	ND	16.5		mg/Kg-dry	1	6/12/2013
C19-C36 Aliphatics	ND	16.5		mg/Kg-dry	1	6/12/2013
Unadjusted C11-C22 Aromatics	ND	16.5		mg/Kg-dry	1	6/12/2013
Surr: 1-Chlorooctadecane	61.8	40-140		%REC	1	6/12/2013
Surr: o-Terphenyl	68.6	40-140		%REC	1	6/12/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Naphthalene	ND	0.110		mg/Kg-dry	1	6/12/2013 10:44:00 PM
2-Methylnaphthalene	ND	0.110		mg/Kg-dry	1	6/12/2013 10:44:00 PM
Acenaphthene	ND	0.110		mg/Kg-dry	1	6/12/2013 10:44:00 PM
Phenanthrene	ND	0.110		mg/Kg-dry	1	6/12/2013 10:44:00 PM
Total PAH Target Concentration	ND	0.110		mg/Kg-dry	1	6/12/2013 10:44:00 PM
Surr: 2,2-Difluorobiphenyl	52.1	40-140		%REC	1	6/12/2013 10:44:00 PM
Surr: 2-Fluorobiphenyl	57.4	40-140		%REC	1	6/12/2013 10:44:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
Unadjusted C5-C8 Aliphatic HC	ND	11.0		mg/Kg-dry	1	6/12/2013 10:09:00 AM
Unadjusted C9-C12 Aliphatic HC	ND	11.0		mg/Kg-dry	1	6/12/2013 10:09:00 AM
Methyl Tert-Butyl Ether	ND	0.110		mg/Kg-dry	1	6/12/2013 10:09:00 AM
Benzene	ND	0.110		mg/Kg-dry	1	6/12/2013 10:09:00 AM
Toluene	ND	0.110		mg/Kg-dry	1	6/12/2013 10:09:00 AM
Ethylbenzene	*0.143*	0.110		mg/Kg-dry	1	6/12/2013 10:09:00 AM
m,p-Xylene	*0.375*	0.110		mg/Kg-dry	1	6/12/2013 10:09:00 AM
o-Xylene	*0.789*	0.110		mg/Kg-dry	1	6/12/2013 10:09:00 AM
Naphthalene	ND	0.110		mg/Kg-dry	1	6/12/2013 10:09:00 AM
C9-C10 Aromatic Hydrocarbons	ND	11.0		mg/Kg-dry	1	6/12/2013 10:09:00 AM
Adjusted C5-C8 Aliphatic HC	ND	11.0		mg/Kg-dry	1	6/12/2013 10:09:00 AM
Adjusted C9-C12 Aliphatic HC	ND	11.0		mg/Kg-dry	1	6/12/2013 10:09:00 AM
Surr: 2,5-Dibromotoluene FID	90.2	70-130		%REC	1	6/12/2013 10:09:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT **Reported Date:** 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-25
Lab Order:	1306067	**Collection Date:**	6/5/2013 4:30:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-003	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: ZC
Prep Method:			**Prep Date:**			
Surr: 2,5-Dibromotoluene PID	89.8	70-130		%REC	1	6/12/2013 10:09:00 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT **Reported Date:** 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-37
Lab Order:	1306067	**Collection Date:**	6/5/2013 2:00:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-004	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Adjusted C11-C22 Aromatics	ND	17.6		mg/Kg-dry	1	6/12/2013
C09-C18 Aliphatics	ND	17.6		mg/Kg-dry	1	6/12/2013
C19-C36 Aliphatics	ND	17.6		mg/Kg-dry	1	6/12/2013
Unadjusted C11-C22 Aromatics	ND	17.6		mg/Kg-dry	1	6/12/2013
Surr: 1-Chlorooctadecane	42.1	40-140		%REC	1	6/12/2013
Surr: o-Terphenyl	67.5	40-140		%REC	1	6/12/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Naphthalene	*0.168*	0.118		mg/Kg-dry	1	6/12/2013 11:21:00 PM
2-Methylnaphthalene	*0.566*	0.118		mg/Kg-dry	1	6/12/2013 11:21:00 PM
Acenaphthene	ND	0.118		mg/Kg-dry	1	6/12/2013 11:21:00 PM
Phenanthrene	ND	0.118		mg/Kg-dry	1	6/12/2013 11:21:00 PM
Total PAH Target Concentration	*0.734*	0.118		mg/Kg-dry	1	6/12/2013 11:21:00 PM
Surr: 2,2-Difluorobiphenyl	49.9	40-140		%REC	1	6/12/2013 11:21:00 PM
Surr: 2-Fluorobiphenyl	55.2	40-140		%REC	1	6/12/2013 11:21:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
Unadjusted C5-C8 Aliphatic HC	ND	11.8		mg/Kg-dry	1	6/12/2013 10:52:00 AM
Unadjusted C9-C12 Aliphatic HC	ND	11.8		mg/Kg-dry	1	6/12/2013 10:52:00 AM
Methyl Tert-Butyl Ether	ND	0.118		mg/Kg-dry	1	6/12/2013 10:52:00 AM
Benzene	ND	0.118		mg/Kg-dry	1	6/12/2013 10:52:00 AM
Toluene	ND	0.118		mg/Kg-dry	1	6/12/2013 10:52:00 AM
Ethylbenzene	ND	0.118		mg/Kg-dry	1	6/12/2013 10:52:00 AM
m,p-Xylene	ND	0.118		mg/Kg-dry	1	6/12/2013 10:52:00 AM
o-Xylene	*0.694*	0.118		mg/Kg-dry	1	6/12/2013 10:52:00 AM
Naphthalene	ND	0.118		mg/Kg-dry	1	6/12/2013 10:52:00 AM
C9-C10 Aromatic Hydrocarbons	ND	11.8		mg/Kg-dry	1	6/12/2013 10:52:00 AM
Adjusted C5-C8 Aliphatic HC	ND	11.8		mg/Kg-dry	1	6/12/2013 10:52:00 AM
Adjusted C9-C12 Aliphatic HC	ND	11.8		mg/Kg-dry	1	6/12/2013 10:52:00 AM
Surr: 2,5-Dibromotoluene FID	88.0	70-130		%REC	1	6/12/2013 10:52:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

ANALYTICAL REPORT

Reported Date: 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-37
Lab Order:	1306067	**Collection Date:**	6/5/2013 2:00:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-004	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: ZC
Prep Method:		**Prep Date:**				
Surr: 2,5-Dibromotoluene PID	83.2	70-130		%REC	1	6/12/2013 10:52:00 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT

Reported Date: 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-39
Lab Order:	1306067	**Collection Date:**	6/5/2013 2:30:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-005	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Adjusted C11-C22 Aromatics	ND	16.3		mg/Kg-dry	1	6/12/2013
C09-C18 Aliphatics	*24.4*	16.3		mg/Kg-dry	1	6/12/2013
C19-C36 Aliphatics	ND	16.3		mg/Kg-dry	1	6/12/2013
Unadjusted C11-C22 Aromatics	ND	16.3		mg/Kg-dry	1	6/12/2013
Surr: 1-Chlorooctadecane	40.1	40-140		%REC	1	6/12/2013
Surr: o-Terphenyl	74.7	40-140		%REC	1	6/12/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Naphthalene	ND	0.109		mg/Kg-dry	1	6/12/2013 11:58:00 PM
2-Methylnaphthalene	*0.486*	0.109		mg/Kg-dry	1	6/12/2013 11:58:00 PM
Acenaphthene	ND	0.109		mg/Kg-dry	1	6/12/2013 11:58:00 PM
Phenanthrene	*0.113*	0.109		mg/Kg-dry	1	6/12/2013 11:58:00 PM
Total PAH Target Concentration	*0.599*	0.109		mg/Kg-dry	1	6/12/2013 11:58:00 PM
Surr: 2,2-Difluorobiphenyl	40.0	40-140		%REC	1	6/12/2013 11:58:00 PM
Surr: 2-Fluorobiphenyl	41.3	40-140		%REC	1	6/12/2013 11:58:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
Unadjusted C5-C8 Aliphatic HC	ND	10.9		mg/Kg-dry	1	6/12/2013 11:36:00 AM
Unadjusted C9-C12 Aliphatic HC	ND	10.9		mg/Kg-dry	1	6/12/2013 11:36:00 AM
Methyl Tert-Butyl Ether	ND	0.109		mg/Kg-dry	1	6/12/2013 11:36:00 AM
Benzene	ND	0.109		mg/Kg-dry	1	6/12/2013 11:36:00 AM
Toluene	ND	0.109		mg/Kg-dry	1	6/12/2013 11:36:00 AM
Ethylbenzene	ND	0.109		mg/Kg-dry	1	6/12/2013 11:36:00 AM
m,p-Xylene	ND	0.109		mg/Kg-dry	1	6/12/2013 11:36:00 AM
o-Xylene	ND	0.109		mg/Kg-dry	1	6/12/2013 11:36:00 AM
Naphthalene	*0.610*	0.109		mg/Kg-dry	1	6/12/2013 11:36:00 AM
C9-C10 Aromatic Hydrocarbons	ND	10.9		mg/Kg-dry	1	6/12/2013 11:36:00 AM
Adjusted C5-C8 Aliphatic HC	ND	10.9		mg/Kg-dry	1	6/12/2013 11:36:00 AM
Adjusted C9-C12 Aliphatic HC	ND	10.9		mg/Kg-dry	1	6/12/2013 11:36:00 AM
Surr: 2,5-Dibromotoluene FID	85.9	70-130		%REC	1	6/12/2013 11:36:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

ANALYTICAL REPORT

Reported Date: 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-39
Lab Order:	1306067	**Collection Date:**	6/5/2013 2:30:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-005	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: ZC
Prep Method:			**Prep Date:**			
Surr: 2,5-Dibromotoluene PID	85.6	70-130		%REC	1	6/12/2013 11:36:00 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT

Reported Date: 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-48
Lab Order:	1306067	**Collection Date:**	6/5/2013 3:30:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-006	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Spr)			**Prep Date:**	6/10/2013 2:57:17 PM		
Adjusted C11-C22 Aromatics	ND	17.0		mg/Kg-dry	1	6/12/2013
C09-C18 Aliphatics	ND	17.0		mg/Kg-dry	1	6/12/2013
C19-C36 Aliphatics	ND	17.0		mg/Kg-dry	1	6/12/2013
Unadjusted C11-C22 Aromatics	ND	17.0		mg/Kg-dry	1	6/12/2013
Surr: 1-Chlorooctadecane	58.8	40-140		%REC	1	6/12/2013
Surr: o-Terphenyl	77.9	40-140		%REC	1	6/12/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Spr)			**Prep Date:**	6/10/2013 2:57:17 PM		
Naphthalene	ND	0.114		mg/Kg-dry	1	6/13/2013 12:34:00 AM
2-Methylnaphthalene	*0.568*	0.114		mg/Kg-dry	1	6/13/2013 12:34:00 AM
Acenaphthene	ND	0.114		mg/Kg-dry	1	6/13/2013 12:34:00 AM
Phenanthrene	*0.156*	0.114		mg/Kg-dry	1	6/13/2013 12:34:00 AM
Total PAH Target Concentration	*0.724*	0.114		mg/Kg-dry	1	6/13/2013 12:34:00 AM
Surr: 2,2-Difluorobiphenyl	48.2	40-140		%REC	1	6/13/2013 12:34:00 AM
Surr: 2-Fluorobiphenyl	53.8	40-140		%REC	1	6/13/2013 12:34:00 AM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
Unadjusted C5-C8 Aliphatic HC	ND	11.4		mg/Kg-dry	1	6/13/2013 12:20:00 PM
Unadjusted C9-C12 Aliphatic HC	ND	11.4		mg/Kg-dry	1	6/13/2013 12:20:00 PM
Methyl Tert-Butyl Ether	ND	0.114		mg/Kg-dry	1	6/13/2013 12:20:00 PM
Benzene	ND	0.114		mg/Kg-dry	1	6/13/2013 12:20:00 PM
Toluene	ND	0.114		mg/Kg-dry	1	6/13/2013 12:20:00 PM
Ethylbenzene	*2.07*	0.114		mg/Kg-dry	1	6/13/2013 12:20:00 PM
m,p-Xylene	ND	0.114		mg/Kg-dry	1	6/13/2013 12:20:00 PM
o-Xylene	*0.670*	0.114		mg/Kg-dry	1	6/13/2013 12:20:00 PM
Naphthalene	ND	0.114		mg/Kg-dry	1	6/13/2013 12:20:00 PM
C9-C10 Aromatic Hydrocarbons	ND	11.4		mg/Kg-dry	1	6/13/2013 12:20:00 PM
Adjusted C5-C8 Aliphatic HC	ND	11.4		mg/Kg-dry	1	6/13/2013 12:20:00 PM
Adjusted C9-C12 Aliphatic HC	ND	11.4		mg/Kg-dry	1	6/13/2013 12:20:00 PM
Surr: 2,5-Dibromotoluene FID	87.5	70-130		%REC	1	6/13/2013 12:20:00 PM

Qualifiers:

- B Analyte detected in the associated Method Blank
- BRL Below Reporting Limit
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT

Reported Date: 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-48
Lab Order:	1306067	**Collection Date:**	6/5/2013 3:30:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-006	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:		**Prep Date:**				
Surr: 2,5-Dibromotoluene PID	83.6	70-130		%REC	1	6/13/2013 12:20:00 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL QC SUMMARY REPORT

Date: *18-Jun-13*

CLIENT: Clean Harbors
Work Order: 1306067
Project: Noonan - Arlington

TestCode: epht_s

Sample ID: MB-22432	SampType: mblk	TestCode: epht_s	Units: mg/Kg	Prep Date: 6/10/2013	RunNo: 50626
Client ID: ZZZZZ	Batch ID: 22432	TestNo: MADEP EPH (eph_Spr)		Analysis Date: 6/12/2013	SeqNo: 574371

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Adjusted C11-C22 Aromatics	ND	15.0									
C09-C18 Aliphatics	ND	15.0									
C19-C36 Aliphatics	ND	15.0									
Unadjusted C11-C22 Aromatics	ND	15.0									
Surr: 1-Chlorooctadecane	5.411	0	10	0	54.1	40	140				
Surr: o-Terphenyl	9.352	0	10	0	93.5	40	140				

Sample ID: LCS-22432	SampType: Lcs	TestCode: epht_s	Units: mg/Kg	Prep Date: 6/10/2013	RunNo: 50626
Client ID: ZZZZZ	Batch ID: 22432	TestNo: MADEP EPH (eph_Spr)		Analysis Date: 6/12/2013	SeqNo: 574372

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
C09-C18 Aliphatics	ND	15.0	10	0	58.3	40	140				
C19-C36 Aliphatics	ND	15.0	10	0	68.4	40	140				
Unadjusted C11-C22 Aromatics	ND	15.0	10	0	81.0	40	140				
Surr: 1-Chlorooctadecane	6.124	0	10	0	61.2	40	140				
Surr: o-Terphenyl	12.26	0	10	0	123	40	140				

Sample ID: LCS#2-22432	SampType: Lcsd	TestCode: epht_s	Units: mg/Kg	Prep Date: 6/10/2013	RunNo: 50626
Client ID: ZZZZZ	Batch ID: 22432	TestNo: MADEP EPH (eph_Spr)		Analysis Date: 6/12/2013	SeqNo: 574373

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
C09-C18 Aliphatics	ND	15.0	10	0	65.2	40	140	5.826	0	25	
C19-C36 Aliphatics	ND	15.0	10	0	70.6	40	140	6.836	0	25	
Unadjusted C11-C22 Aromatics	ND	15.0	10	0	43.1	40	140	8.095	0	25	
Surr: 1-Chlorooctadecane	5.107	0	10	0	51.1	40	140	0	0		
Surr: o-Terphenyl	7.149	0	10	0	71.5	40	140	0	0	0	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306067
Project: Noonan - Arlington

TestCode: VPH_S2

Sample ID: **MBLK**	SampType: **MBLK**	TestCode: **VPH_S2**	Units: **mg/Kg**	Prep Date:	RunNo: **50664**
Client ID: **ZZZZZ**	Batch ID: **R50664**	TestNo: **VPH**		Analysis Date: **6/12/2013**	SeqNo: **574266**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	0.100									
2,2,4-Trimethylpentane	ND	0.100									
2-Methylpentane	ND	0.100									
n-Butylcyclohexane	ND	0.100									
n-Decane	ND	0.100									
n-Nonane	ND	0.100									
n-Pentane	ND	0.100									
Unadjusted C5-C8 Aliphatic HC	ND	10.0									
Unadjusted C9-C12 Aliphatic HC	ND	10.0									
Methyl Tert-Butyl Ether	ND	0.100									
Benzene	ND	0.100									
Toluene	ND	0.100									
Ethylbenzene	ND	0.100									
m,p-Xylene	ND	0.100									
o-Xylene	ND	0.100									
Naphthalene	ND	0.100									
C9-C10 Aromatic Hydrocarbons	ND	10.0									
Surr: 2,5-Dibromotoluene FID	96.83	0	100	0	96.8	70	130				
Surr: 2,5-Dibromotoluene PID	86.83	0	100	0	86.8	70	130				

Sample ID: **LCS**	SampType: **LCS**	TestCode: **VPH_S2**	Units: **mg/Kg**	Prep Date:	RunNo: **50664**
Client ID: **ZZZZZ**	Batch ID: **R50664**	TestNo: **VPH**		Analysis Date: **6/12/2013**	SeqNo: **574264**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	80.55	0.100	100	0	80.6	70	130				
2,2,4-Trimethylpentane	97.61	0.100	100	0.008	97.6	70	130				
2-Methylpentane	97.73	0.100	100	0	97.7	70	130				

Qualifiers:
BRL Below Reporting Limit
J Analyte detected below quantitation limits
S Spike Recovery outside recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306067
Project: Noonan - Arlington

TestCode: VPH_S2

Sample ID: **LCS** SampType: **LCS** TestCode: **VPH_S2** Units: **mg/Kg** Prep Date: RunNo: **50664**
Client ID: **ZZZZZ** Batch ID: **R50664** TestNo: **VPH** Analysis Date: **6/12/2013** SeqNo: **574264**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
n-Butylcyclohexane	126.4	0.100	100	0	126	70	130				
n-Decane	123.5	0.100	100	0	123	70	130				
n-Nonane	116.4	0.100	100	0	116	30	130				
n-Pentane	102.5	0.100	100	0	103	70	130				
Unadjusted C5-C8 Aliphatic HC	240.7	10.0	300	0	80.2	70	130				
Unadjusted C9-C12 Aliphatic HC	343.2	10.0	300	0	114	70	130				
Methyl Tert-Butyl Ether	80.42	0.100	100	0	80.4	70	130				
Benzene	83.26	0.100	100	0	83.3	70	130				
Toluene	80.22	0.100	100	0.01	80.2	70	130				
Ethylbenzene	82.70	0.100	100	0.015	82.7	70	130				
m,p-Xylene	164.9	0.100	200	0	82.4	70	130				
o-Xylene	91.06	0.100	100	0	91.1	70	130				
Naphthalene	107.4	0.100	100	0	107	70	130				
C9-C10 Aromatic Hydrocarbons	88.32	10.0	100	0	88.3	70	130				
Surr: 2,5-Dibromotoluene FID	89.21	0	100	0	89.2	70	130				
Surr: 2,5-Dibromotoluene PID	83.74	0	100	0	83.7	70	130				

Sample ID: **LCSD** SampType: **LCSD** TestCode: **VPH_S2** Units: **mg/Kg** Prep Date: RunNo: **50664**
Client ID: **ZZZZZ** Batch ID: **R50664** TestNo: **VPH** Analysis Date: **6/12/2013** SeqNo: **574265**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	80.71	0.100	100	0	80.7	70	130	0	0	25	
2,2,4-Trimethylpentane	99.06	0.100	100	0.008	99.1	70	130	0	0	25	
2-Methylpentane	97.94	0.100	100	0	97.9	70	130	0	0	25	
n-Butylcyclohexane	123.4	0.100	100	0	123	70	130	0	0	25	
n-Decane	127.0	0.100	100	0	127	70	130	0	0	25	
n-Nonane	118.6	0.100	100	0	119	30	130	0	0	25	

Qualifiers:
BRL Below Reporting Limit
J Analyte detected below quantitation limits
S Spike Recovery outside recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306067
Project: Noonan - Arlington

TestCode: VPH_S2

Sample ID: LCSD	SampType: LCSD	TestCode: VPH_S2	Units: mg/Kg	Prep Date:	RunNo: 50664
Client ID: ZZZZZ	Batch ID: R50664	TestNo: VPH		Analysis Date: 6/12/2013	SeqNo: 574265

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
n-Pentane	103.0	0.100	100	0	103	70	130	0	0	25	
Unadjusted C5-C8 Aliphatic HC	242.2	10.0	300	0	80.7	70	130	0	0	25	
Unadjusted C9-C12 Aliphatic HC	357.3	10.0	300	0	119	70	130	0	0	25	
Methyl Tert-Butyl Ether	82.03	0.100	100	0	82.0	70	130	0	0	25	
Benzene	81.96	0.100	100	0	82.0	70	130	0	0	25	
Toluene	86.54	0.100	100	0.01	86.5	70	130	0	0	25	
Ethylbenzene	89.74	0.100	100	0.015	89.7	70	130	0	0	25	
m,p-Xylene	180.5	0.100	200	0	90.3	70	130	0	0	25	
o-Xylene	82.74	0.100	100	0	82.7	70	130	0	0	25	
Naphthalene	113.1	0.100	100	0	113	70	130	0	0	25	
C9-C10 Aromatic Hydrocarbons	88.33	10.0	100	0	88.3	70	130	0	0	25	
Surr: 2,5-Dibromotoluene FID	83.67	0	100	0	83.7	70	130	0	0	0	
Surr: 2,5-Dibromotoluene PID	88.66	0	100	0	88.7	70	130	0	0	0	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CHAIN OF CUSTODY RECORD

GeoLabs, Inc. *Environmental Laboratories*
45 Johnson Lane, Braintree, MA 02184
p 781.848.7844 • f 781.848.7811
www.geolabs.com

1300601 PAGE 1 OF 1

Sample Handling: circle choice
Filtration: Done / Not Needed / Lab to do
Preservation: Lab to do Y / (N)

Special Instructions
CAM Compliant

Turnaround: circle one
1-day 3-day
2-day (5 / 7-days)

Data Delivery: circle choice (s)
Fax (email)
Format:
Excel (PDF)

Requirements: circle choice (s)
GW-1 (MCP Methods)
S-1 DEP
QC Other _____
CT RCP (Reasonable Confidence Protocols)
State / Fed Program - Criteria _____

Client: Clean Harbors
Address: 42 Longwater Dr. Norwell, MA 02061
Contact: Rich MacCarthy

Phone: 781-792-5822
Fax: 781-871-0690
email: maccarthyr@cleanharbors.com

Project: Noonan-Arlington
Project PO: _____
Invoice to *: _____

Preserative: 6

COLLECTION DATE 2013	TIME	SAMPLED BY	SAMPLE LOCATION / ID	CONTAINER TYPE	CONTAINER QUANTITY	MATRIX	COMP	GRAB	GeoLabs SAMPLE NUMBER	Analysis Requested: VPH	Analysis Requested: EPH (4 Diesel Targets)	Lab Use Only: TEMPERATURE	Lab Use Only: LAB pH
6/5	1100	JT	S-16	V/G	1/1	S		✓	1300601-001	✓	✓	6	
6/5	1200		S-18	V/G		S		✓	002	✓	✓		
6/5	1630		S-25	V/G		S		✓	003	✓	✓		
6/6	1400		S-37	V/G		S		✓	004	✓	✓		
6/6	1430		S-39	V/G		S		✓	005	✓	✓		
6/6	1530	↓	S-48	V/G	↓	S		✓	006	✓	✓		

Matrix Codes:
GW = Ground Water DW = Drinking Water S = Soil A = Air
WW = Waste Water SL = Sludge O = Oil OT = Other

Received on Ice ☐

Preservatives
1 = Hcl 3 = H2SO4 5 = NaOH 7 = Other
2 = HNO3 4 = Na2S2O3 6 = MEOH

Containers:
A = Amber B = Bag O = Other
G = Glass P = Plastic
S = Summa V = Voa

Relinquished by: _____ Date / Time: 6/7/13 @ 1715

Received by: _____ Date / Time: 6-7-13 5:15

 THANK YOU - WE APPRECIATE YOUR BUSINESS *All discounting will be removed after 90 days* * All Payment terms are NET 30 Days. A late payment charge of 1.5% per mont or 18% per year, together with expenses above and beyond collection costs, inclyding attoreny"s fees and court costs, will be applied to balances that go beyond NET 30 days.

CT (PH-0148) NH (2508) MA (MA-015) RI (LA000252)

ANALYTICAL REPORT

Tuesday, June 18, 2013

GeoLabs, Inc.
45 Johnson Lane
Braintree MA 02184
Tele: 781 848 7844
Fax: 781 848 7811

Rich MacCarthy
Clean Harbors
42 Longwater Drive
Norwell, MA 02061

TEL: (781) 792-5822
FAX: (781) 792-5938

Project: Noonan Park
Location:

Order No.: 1306066

Dear Rich MacCarthy:

GeoLabs, Inc. received 1 sample(s) on 6/7/2013 for the analyses presented in the following report.

The laboratory results in this report relate only to samples submitted. All data for associated QC met method or laboratory specifications, except where noted in the Case Narrative.

Analytical methods and results meet requirements of 310CMR 40.1056(J) as per MADEP Compendium of Analytical Methods (CAM).

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

David Mick
Laboratory Director

For current certifications, please visit our website at www.geolabs.com
Certifications:
CT (PH-0148) - MA (M-MA015) - NH (2508) - RI (LA000252)
Accredited in Accordance with NELAC

MassDEP Analytical Protocol Certification Form

Laboratory Name: GeoLabs, Inc. Project #:

Project Location: Noonan- Park RTN:

This form provides certification for the following data set: 1306066-001

Matrices: ☐ Groundwater/Surface Water ☒ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other-wastewater

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☐	8081 Pesicides CAM V B ☐	7196 Hex Cr CAM VI B ☐		MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☒	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐		TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII 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 ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ 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 ☐ No
D	Does the laboratory report comply with all reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analtyical Data"?	☒ Yes ☐ No
E	VPH, EPH, APH and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications.)	☒ 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 ☐ 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 protocol(s)?	☒ Yes ☐ No

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usablility and representativeness requirements described in 310 CMR 40. 1056 (2) (k) and WSC-07-350.**

H	Were **all** QC performance standards as specified in the CAM protocol(s) achieved?	☒ Yes ☐ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes ☒ No[1]

[1] *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: _____ **Position: Laboratory Director**

Printed Name: David Mick **Date:** June 18, 2013

Date: *18-Jun-13*

CLIENT: Clean Harbors
Project: Noonan Park
Lab Order: 1306066

CASE NARRATIVE

Physical Condition of Samples

The project was received by the laboratory in satisfactory condition. The sample(s) were received undamaged, in appropriate containers with the correct preservation.

Project Documentation

The project was accompanied by satisfactory Chain of Custody documentation.

Analysis of Sample(s)

EPH carbon ranges and diesel targets only reported via MADEP EPH, per client request.

All extractable samples were extracted and analyzed and any Volatile samples were analyzed within method specified holding times and according to GeoLabs documented Standard Operating Procedure. No analytical anomalies or non-conformances were noted by the laboratory during the processing of these samples.

SIGNATURE: David Mick LAB DIRECTOR

PRINTED NAME: David Mick DATE: 06/18/13

CLIENT:	Clean Harbors
Project:	Noonan Park
Lab Order:	1306066

CASE NARRATIVE

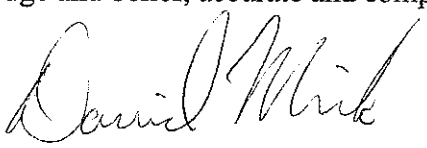
EPH Methods

Method for Ranges: MADEP EPH 04-1.1
Method for Target Analytes: 8270 GC/MS

Carbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
C11-C22 Aromatic Hydrocarbons exclude concentrations of Target PAH Analytes

CERTIFICATION:
Were all QA/QC procedures REQUIRED by the EPH Method followed? YES
Were all performance/acceptance standards achieved? YES
Were any significant modifications made to the EPH method? NO

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

SIGNATURE:  LAB DIRECTOR

PRINTED NAME: David Mick DATE: 06/18/13

ANALYTICAL REPORT

Reported Date: 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	SS-12
Lab Order:	1306066	**Collection Date:**	6/6/2013 6:00:00 PM
Project:	Noonan Park	**Date Received:**	6/7/2013
Lab ID:	1306066-001	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Adjusted C11-C22 Aromatics	ND	16.3		mg/Kg-dry	1	6/12/2013
C09-C18 Aliphatics	ND	16.3		mg/Kg-dry	1	6/12/2013
C19-C36 Aliphatics	ND	16.3		mg/Kg-dry	1	6/12/2013
Unadjusted C11-C22 Aromatics	ND	16.3		mg/Kg-dry	1	6/12/2013
Surr: 1-Chlorooctadecane	63.9	40-140		%REC	1	6/12/2013
Surr: o-Terphenyl	88.2	40-140		%REC	1	6/12/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Naphthalene	ND	0.109		mg/Kg-dry	1	6/13/2013 1:11:00 AM
2-Methylnaphthalene	ND	0.109		mg/Kg-dry	1	6/13/2013 1:11:00 AM
Acenaphthene	ND	0.109		mg/Kg-dry	1	6/13/2013 1:11:00 AM
Phenanthrene	*0.255*	0.109		mg/Kg-dry	1	6/13/2013 1:11:00 AM
Total PAH Target Concentration	*0.255*	0.109		mg/Kg-dry	1	6/13/2013 1:11:00 AM
Surr: 2,2-Difluorobiphenyl	50.9	40-140		%REC	1	6/13/2013 1:11:00 AM
Surr: 2-Fluorobiphenyl	55.5	40-140		%REC	1	6/13/2013 1:11:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL QC SUMMARY REPORT

Date: *18-Jun-13*

CLIENT: Clean Harbors
Work Order: 1306066
Project: Noonan Park

TestCode: epht_s

Sample ID: MB-22432	SampType: mblk	TestCode: epht_s	Units: mg/Kg	Prep Date: 6/10/2013	RunNo: 50626
Client ID: ZZZZZ	Batch ID: 22432	TestNo: MADEP EPH (eph_Spr)		Analysis Date: 6/12/2013	SeqNo: 574371

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Adjusted C11-C22 Aromatics	ND	15.0									
C09-C18 Aliphatics	ND	15.0									
C19-C36 Aliphatics	ND	15.0									
Unadjusted C11-C22 Aromatics	ND	15.0									
Surr: 1-Chlorooctadecane	5.411	0	10	0	54.1	40	140				
Surr: o-Terphenyl	9.352	0	10	0	93.5	40	140				

Sample ID: LCS-22432	SampType: Lcs	TestCode: epht_s	Units: mg/Kg	Prep Date: 6/10/2013	RunNo: 50626
Client ID: ZZZZZ	Batch ID: 22432	TestNo: MADEP EPH (eph_Spr)		Analysis Date: 6/12/2013	SeqNo: 574372

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
C09-C18 Aliphatics	ND	15.0	10	0	58.3	40	140				
C19-C36 Aliphatics	ND	15.0	10	0	68.4	40	140				
Unadjusted C11-C22 Aromatics	ND	15.0	10	0	81.0	40	140				
Surr: 1-Chlorooctadecane	6.124	0	10	0	61.2	40	140				
Surr: o-Terphenyl	12.26	0	10	0	123	40	140				

Sample ID: LCS#2-22432	SampType: Lcsd	TestCode: epht_s	Units: mg/Kg	Prep Date: 6/10/2013	RunNo: 50626
Client ID: ZZZZZ	Batch ID: 22432	TestNo: MADEP EPH (eph_Spr)		Analysis Date: 6/12/2013	SeqNo: 574373

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
C09-C18 Aliphatics	ND	15.0	10	0	65.2	40	140	5.826	0	25	
C19-C36 Aliphatics	ND	15.0	10	0	70.6	40	140	6.836	0	25	
Unadjusted C11-C22 Aromatics	ND	15.0	10	0	43.1	40	140	8.095	0	25	
Surr: 1-Chlorooctadecane	5.107	0	10	0	51.1	40	140	0	0		
Surr: o-Terphenyl	7.149	0	10	0	71.5	40	140	0	0	0	

Qualifiers:
BRL Below Reporting Limit
J Analyte detected below quantitation limits
S Spike Recovery outside recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

1306066 PAGE 1 OF 1

CHAIN OF CUSTODY RECORD

GeoLabs, Inc. *Environmental Laboratories*
45 Johnson Lane, Braintree, MA 02184
p 781.848.7844 • f 781.848.7811
www.geolabs.com

Sample Handling: circle choice
Filtration: Done / Not Needed / Lab to do
Preservation: Lab to do Y / N

Special Instructions
CAM Compliant

Turnaround: circle one
1-day 3-day
2-day 5/7-days

Data Delivery: circle choice (s)
Fax email
Format:
Excel PDF

Requirements: circle choice (s)
GW-1 MCP Methods
S-1 DEP
QC Other _____
CT RCP (Reasonable Confidence Protocols)
State / Fed Program - Criteria _____

Client: Clean Harbors
Address: 42 Longwater Drive
Norwell, MA 02061
Contact: Rich MacCarthy

Phone: 781-792-5822
Fax: 781-871-0690
email: maccarthy@cleanharbors.com

Project: Noonan - Park
Project PO: _____
Invoice to *: _____

Preservative:

COLLECTION DATE 2013	TIME	SAMPLED BY	SAMPLE LOCATION / ID	CONTAINER TYPE	CONTAINER QUANTITY	MATRIX	COMP	GRAB	GeoLabs SAMPLE NUMBER	Analysis Requested: EPH (4 Diesel Targets)							Lab Use Only: TEMPERATURE	Lab Use Only: LAB PH
6/6	1800	JT	SS-12	G	1	S		✓	60606-001	✓							6	

Matrix Codes:
GW = Ground Water DW = Drinking Water S = Soil A = Air
WW = Waste Water SL = Sludge O = Oil OT = Other

Received on Ice ☐

Preservatives
1 = Hcl 3 = H2SO4 5 = NaOH 7 = Other
2 = HNO3 4 = Na2S2O3 6 = MEOH

Containers:
A = Amber B = Bag O = Other
G = Glass P = Plastic
S = Summa V = Voa

Relinquished by: _____ Date / Time 6/7/13 @ 1715

Received by: _____ Date / Time 6-7-13 515

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) SB 539 8072-002 TR# 2118 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
MP508 587 1046	1	1800 483 3718	004869341 FLE

GENERATOR

5. Generator's Name and Mailing Address
J.P. NOONAN TRANSPORTATION
415 WEST ST.
WEST BRIDGE WATER MA. 02379
Generator's Phone: (508) 588-8026 ATTN: BOB DUPUIS

Generator's Site Address (if different than mailing address)
MYSTIC VALLEY PKWY. & MCDFORD ST.
ARLINGTON MA. 02474

6. Transporter 1 Company Name
CLEAN HARBORS ENVIRONMENTAL SERVICES INC.
U.S. EPA ID Number
MAD 039322250

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

8. Designated Facility Name and Site Address
CLEAN HARBORS ENVIRONMENTAL SERVICES INC.
37 RUMMERY RD.
SOUTH PORTLAND ME 04106
Facility's Phone: 207 772 2201
U.S. EPA ID Number
MED 980 672 182

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, (WATER, OIL)	01	TT	5020	G	MA99		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
IA CH 640184

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 J.P. NOONAN — Bill Campopiano
Signature: Bill Campopiano
Month: 06 Day: 06 Year: 13

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: Bill Burns — Signature: Bill Burns — Month: 06 Day: 06 Year: 13
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.
H039			

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: Carl Baxter — Signature: — Month: 06 Day: 06 Year: 13

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

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

TRL#2117

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) SB 5398072-002 Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MP5085871046
2. Page 1 of: 1
3. Emergency Response Phone: 1-800 483-3718
4. Manifest Tracking Number: 004869342 FLE

GENERATOR

5. Generator's Name and Mailing Address
J.P. NOONAN TRANSPORTATION
415 WEST ST.
WEST BRIDGEWATER MA. 02379

Generator's Site Address (if different than mailing address)
MYSTIC VALLEY PKWY & MEDFORD ST.
ARLINGTON MA 02474

Generator's Phone: (508) 588-8026 ATTN: BOB DUPUIS

6. Transporter 1 Company Name: CLEAN HARBORS ENVIRONMENTAL SERVICES INC.
U.S. EPA ID Number: MAD 039322250

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

8. Designated Facility Name and Site Address
CLEAN HARBORS ENVIRONMENTAL SERVICES INC.
57 RUMMERY RD.
SO. PORTLAND ME, 04106
Facility's Phone: 207 772 2201
U.S. EPA ID Number: MED 980672182.

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 (WATER,OIL)	01	TT	5000	G	MA99
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1A 2H640184

DESILTEST 21000 PPM

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 J.P. NOONAN BILL CAMPOPIANO
Signature:
Month: 06 Day: 06 Year: 13

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: PAUL POSALIES
Signature:
Month: 06 Day: 06 Year: 13
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. H039 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: CARL BOSTON
Signature:
Month: 06 Day: 06 Year: 13

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

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) SB5398072-002 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
MP5085871046	1	800.483.3718	004888392 FLE

GENERATOR

5. Generator's Name and Mailing Address
J.P. Noonan Transportation
415 West St.
West Bridgewater, MA. 02379
Generator's Phone: 508-588-8026 Attn: Bob DuPuis

Generator's Site Address (if different than mailing address)
Mystic Valley Pkwy & Medford St.
Arlington, MA. 02474

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 Environmental Services, Inc
37 Rumery St.
South Portland, ME. 04106
Facility's Phone: 207-772-2201 — U.S. EPA ID Number: MED980672182

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 (OIL & WATER)	001	TT	~~5000~~ 7200	G	MA98		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1. CH640184
Dexil test <1000 PPM

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: X Bill Campopiano (ON BEHALF OF J.P. NOONAN) — Signature: X [signature] — Month: 06 Day: 06 Year: 13

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: X Bill Burns — Signature: X [signature] — Month: 06 Day: 06 Year: 13

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.
H039			

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: Brian Leask — Signature: [signature] — Month: 06 Day: 10 Year: 13

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

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

TRL2119

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) SB5398072002 SC PPW 3/3/2011 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
	MP5085871040	1	(800)483-3718	006572211 FLE

GENERATOR

5. Generator's Name and Mailing Address
JP Noonan Transportation
415 West Street
West Bridgewater, MA 02379
Generator's Phone: (508) 587-1041

Generator's Site Address (if different than mailing address)
Mystic Valley Pkwy @ Medford Street
Arlington,MA 02474

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 Env Services Inc
37 Rumery Road
South Portland, ME 04106
Facility's Phone: (207)772-2201

U.S. EPA ID Number
MED980672182

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, (WATER, OIL)	001	TT	5309	G	MA98
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1.CH640184

Drill <1000 PPM

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 J.P. NOONAN — X Bill Campopiano
Signature: X Bill Campopiano
Month: 06 Day: 07 Year: 13

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: BOB WEST
Signature: Bob West
Month: 06 Day: 07 Year: 13

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.
H039			

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: TROY WARDEN
Signature:
Month: 6 Day: 7 Year: 13

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

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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

TRL2137

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) SB5398072-002 SC PPW 3/3/2011 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
	MP5085871046	1	(800)483-3718	006572213 FLE

GENERATOR

5. Generator's Name and Mailing Address
JP Noonan Transportation
415 West Street
West Bridgewater, MA 02379
Generator's Phone: (508) 587-1014

Generator's Site Address (if different than mailing address)
Mystic Valley Pkwy @ Medford Street
Arlington,MA 02474

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 Env Services Inc
37 Rumery Road
South Portland, ME 04106
Facility's Phone: (207) 772-2201
U.S. EPA ID Number: MED980672182

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, (WATER, OIL)	001	TT	~~5000~~ 8040 (est)	G	MA98		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1.CH640184
Halogens <1000

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: X On Behalf of J.P. Noonan Bill Campbell
Signature: X
Month: 06 Day: 07 Year: 13

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: Bob West
Signature: Bob West
Month: 06 Day: 07 Year: 13
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.
H039			

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: TROY NADEAU
Signature
Month: 6 Day: 7 Year: 13

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

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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

318

SB5398072002 SC PPW 3/3/2011

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
	MP5085871046	1	(800)483-3718	006572212 FLE

5. Generator's Name and Mailing Address
JP Noonan Transportation
415 West Street
West Bridgewater, MA 02379
Generator's Phone: (508) 587-1046

Generator's Site Address (if different than mailing address)
Mystic Valley Pkwy @ Medford Street
Arlington, MA 02474

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 Env Services Inc
37 Rumery Road
South Portland, ME 04106
Facility's Phone: (207) 772-2201
U.S. EPA ID Number: MED980672182

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, (WATER, OIL)	001	TT	4227	G	MA98		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1. CH640184
Dexil 41000 ppm

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 — Month 06 Day 10 Year 13

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: Jim Bracken — Signature — Month 06 Day 10 Year 13

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.
H039			

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 06 Day 10 Year 13

GENERATOR — TRANSPORTER — DESIGNATED FACILITY

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

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) SB5398072001 SC PPW 3/3/2011 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
MP5085871046	1	(800)483-3718	006572191 FLE

GENERATOR

5. Generator's Name and Mailing Address
JP Noonan Transportation
415 West Street
West Bridgewater, MA 02379
Generator's Phone: (508) 587-1046 (ATTN: BOB DUPUIS)

Generator's Site Address (if different than mailing address)
Mystic Valley Pkwy @ Medford Street
Arlington, MA 02474

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, (OIL, DEBRIS)**	1	CM	18	Y	MA01
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1.chasb8200B
TR4258
Cust # CHIU252143

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: Michael Cadigan on Behalf of J.P Noonan — Signature — Month 6 Day 5 Year 13

INT'L

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

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Michael Cadigan — Signature — Month 6 Day 5 Year 13
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:
U.S. EPA ID Number

18b. Alternate Facility (or Generator)
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 — Month 6 Day 5 Year 13

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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

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

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) SB5398072-001 Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MP5085871046
2. Page 1 of: 1
3. Emergency Response Phone: 800 483 3718
4. Manifest Tracking Number: 000626607 FLE

5. Generator's Name and Mailing Address
J.P. NOONAN TRANSPORTATION
415 WEST ST
WEST BRIDGEWATER MA. 02379

Generator's Site Address (if different than mailing address)
MYSTIC VALLEY PKWY. @ MEDFORD ST.
ARLINGTON MA. 02474

Generator's Phone: 508 587-1046 ATTN: BOB DUPUIS

6. Transporter 1 Company Name: CLEAN HARBORS ENVIRONMENTAL SERVICES INC.
U.S. EPA ID Number: MAD 039322250

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

8. Designated Facility Name and Site Address
CLEAN HARBORS OF BRAINTREE INC.
1 HILL AVE.
BRAINTREE MA. 02184
Facility's Phone: 781-380-7100
U.S. EPA ID Number: MAD 053452637

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, (OIL DEBRIS)	001	CM	20	Y	MA01		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1 CHASB 8200B
TR 4258 CHIU 258067

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 J.P. NOONAN BILL CAMPOPIANO
Signature
Month Day Year: 06 07 13

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: Michael Cardigan
Signature
Month Day Year: 06 07 13
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:
U.S. EPA ID Number

18b. Alternate Facility (or Generator)
Facility's Phone:
Month Day Year
18c. Signature of Alternate Facility (or Generator)

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
Signature
Month Day Year: 06 07 13

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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

#4155

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) SBS398072 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
	MES088266255	1	(800) 483-3318	004869344 FLE

GENERATOR

5. Generator's Name and Mailing Address: S.P Noonan Transportation, 436 West Street, West Bridgewater, MA 02379
Generator's Site Address (if different than mailing address): 188 Medford Street, Arlington, MA 02128
Generator's Phone: (508) 857-4667

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 — U.S. EPA ID Number: MAD053452632
Facility's Phone: (781) 380-1100

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	TT	5	Y	MA01
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. ~~EM358~~ CHB-26B (HH)

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 Sean Leary — Signature: Sean Leary — Month 6 Day 2 Year 13

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:

TRANSPORTER

Transporter signature (for exports only):

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Sean Leary — Signature: Sean Leary — Month 6 Day 2 Year 13
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: U.S. EPA ID Number

18b. Alternate Facility (or Generator) — Month Day Year
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)

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: Hugus Hoang — Signature: Hugus — Month 6 Day 3 Year 13

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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

#4260

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) SBS398022-001 Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MPS085871046
2. Page 1 of: 1
3. Emergency Response Phone: (800) 423-3718
4. Manifest Tracking Number: 004869343 FLE

5. Generator's Name and Mailing Address: J.P NOONAN TRANSPORTATION, 415 West Street, West Bridgewater, MA 02379
Generator's Site Address (if different than mailing address): Mystic Valley Pkwy & Medford St, Arlington, MA 02474
Generator's Phone: (508) 587-1046

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
U.S. EPA ID Number: MAD053452637
Facility's Phone: (781) 380-7100

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 (Oil Debris)	001	TT	6	Y	MA04
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. Chasb8200B

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 Leary on behalf of J.P. NOONAN
Signature:
Month 6 Day 6 Year 13

INTERNATIONAL SHIPMENTS
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 Leary
Signature:
Month 6 Day 6 Year 13
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: U.S. EPA ID Number
18b. Alternate Facility (or Generator)
Facility's Phone: Month Day Year
18c. Signature of Alternate Facility (or Generator)
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: Keith Mulcahy
Signature:
Month 6 Day 6 Year 13

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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

4/21

SB5398072-001 SC PPW 3/3/2011 Form Approved. OMB No. 2050-0039

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

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MP5085871046
2. Page 1 of: 1
3. Emergency Response Phone: (800)483-3718
4. Manifest Tracking Number: 006572488 FLE

5. Generator's Name and Mailing Address
JP Noonan Transportation
415 West Street
West Bridgewater, MA 02379
Generator's Phone: 508-587-1046

Generator's Site Address (if different than mailing address)
Mystic Valley Pkwy @ Medford Street
Arlington,MA 02474

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 SLUDGE)	XX1	T	8	Y	MA01		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1.chb-26B

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: Adam Anderson on behalf of Generator
Signature: Adam Anderson
Month: 6 Day: 26 Year: 13

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: Adam Anderson
Signature: Adam Anderson
Month: 6 Day: 26 Year: 13
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:
U.S. EPA ID Number:
18b. Alternate Facility (or Generator)
Facility's Phone:
Month: Day: Year:
18c. Signature of Alternate Facility (or Generator)

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: Donna Robado
Signature: Donna Robado
Month: 6 Day: 26 Year: 13

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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

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

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number: 3 - 31576

A. LOCATION OF SITE OR DISPOSAL SITE WHERE REMEDIATION WASTE WAS GENERATED:

1. Release Name/Location Aid: INTERSECTION WITH MYSTIC VALLEY PKWY
2. Street Address: 188 MEDFORD STREET
3. City/Town: ARLINGTON 4. Zip Code:
5. ☐ Check here if a Tier Classification Submittal has been provided to DEP for this disposal site:
   ☐ a. Tier 1A ☐ b. Tier 1B ☐ b. Tier 1C ☐ d. Tier II
6. If applicable provide the Permit Number:

B. THIS FORM IS BEING USED TO: (check one: B1-B4):

☑ 1. Submit a **Bill of Lading (BOL)** to transport Remediation Waste to Temporary Storage or a Receiving Facility. Response Actions associated with this BOL (check all that apply):

- ☑ a. Immediate Response Action (IRA)
- ☐ b. Release Abatement Measure (RAM)
- ☐ c. Downgradient Property Status (DPS)
- ☐ d. Utility Release Abatement Measure (URAM)
- ☐ e. Comprehensive Response Actions
- ☐ f.. Limited Removal Action (LRA): (must be retained pursuant to 310 CMR 40.0034(6); can't be submitted via eDEP)
- ☐ g. Other

☐ 2. Submit an Attestation of Completion of **Shipment to Temporary Storage** (Sections C, F and J are not required):

☐ 3. Submit an Attestation of Completion of **Shipment to a Receiving Facility** (Sections C, F and J are not required):

☐ 4. Certify that Remediation Waste Was **Not Shipped, and the Bill of Lading is Void.** (Sections C, D, E, and F are not required)

5. Date Bill of Lading submitted to the Department: _____ (mm/dd/yyyy) b. eDEP Transaction ID:

6. Period of Generation Associated with this Bill of Lading 6/1/2013 (mm/dd/yyyy) to 6/10/2013 (mm/dd/yyyy)

(All sections of this transmittal form must be filled out unless otherwise noted)

The Bill of Lading is not considered complete until the Attestation of Completion of Shipment is received by the Department.

C. DESCRIPTION OF WASTE AND WASTE SOURCE:

1. Contaminated Media /Debris (check all that apply):

☑ a. Soil ☐ b. Groundwater ☐ c. Surface Water ☐ d. Sediment ☐ e. Vegetation or Organic Debris

☐ f. Demolition/Construction Waste ☐ g. Inorganic Absorbent Materials ☐ h. Other:

2. Uncontainerized Waste (check all that apply):

☐ a. Inorganic Absorbent Materials ☐ b. Other:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

BWSC112

Release Tracking Number
3 - 31576

C. DESCRIPTION OF WASTE AND WASTE SOURCE (cont.):

3. Containerized Waste (check all that apply):
☐ a. Tank Bottoms/Sludges ☐ b. Containers ☐ c. Drums ☐ d. Engineered Impoundments
☐ e. Other:

4. Estimated Quantity: 50 ☑ Tons ☐ Cu. Yds. ☐ Gallons

5. Contaminant Source (check one):
☑ a. Transportation Accident ☐ b. Underground Storage Tank ☐ c. Brownfields Redevelopment
☐ d. Other:

6. Type of Contaminant (check all that apply):
☐ a. Gasoline ☐ b. Diesel Fuel ☑ c. #2 Fuel Oil ☐ d. #4 Fuel Oil ☐ e. #6 Fuel Oil ☐ f. Jet Fuel
☐ g. Waste Oil ☐ h. Kerosene ☐ i. Chlorinated Solvents ☐ j. Urban Fill ☐ k. Other:

7. Constituents of Concern (check all that apply):
☐ a. As ☐ b. Cd ☐ c. Cr ☐ d. Pb ☐ e. Hg ☑ f. EPH/TPH ☐ g. VPH
☐ h. PCBs ☐ i. VOCs ☐ j. SVOCs ☐ k. Other:

8. If applicable, check the box for the Reportable Concentration Category of the site:
☐ a. RCS-1 ☐ b. RCS-2 ☐ c. RCGW-1 ☐ d. RCGW-2

9. Remediation Waste Characterization Documentation (check at least one):
☑ a. Site History Information ☐ b. Sampling Analytical Methods and Procedures ☐ c. Laboratory Data
☐ d. Field Screening Data ☐ e. Characterization Documentation previously submitted to the Department
i. Date submitted: (mm/dd/yyyy) ii. Type of Documentation:

D. TRANSPORTER OR COMMON CARRIER INFORMATION:

1. Transporter/Common Carrier Name: CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.
2. Contact First Name: FRANK 3. Last Name: PHILLION
4. Street: 609 PLEASANT STREET 5. Title: SUPERVISOR
6. City/Town: WEYMOUTH 7. State: MA 8. Zip Code: 02189-0000
9. Telephone: (781) 803-4132 10. Ext: 11. Fax:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

BWSC112

Release Tracking Number
3 - 31576

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

1. Operator/Facility Name: ENVIRONMENTAL SOIL MANAGEMENT, INC.
2. Contact First Name: STEPHEN 3. Last Name: RAPER
4. Street: 67 INTERNATIONAL DRIVE 5. Title: COMPLIANCE MANAGER
6. City/Town: LOUDON 7. State: NH 8. Zip Code: 03307-0000
9. Telephone: (603) 783-0228 10. Ext: 11. Fax: (603) 783-0104
12. Type of Facility: (Check one)
    a. Temporary Storage i. Period of Temporary Storage: (mm/dd/yyyy) to (mm/dd/yyyy)
    ii. Reason for Temporary Storage:
    ☐ b. Asphalt Batch/Hot Mix ☐ c. Landfill/Disposal ☐ d. Landfill/Structural Fill ☐ e. Landfill/Daily Cover
    ☐ f. Asphalt Batch/Cold Mix ☑ g. Thermal Processing ☐ h. Incinerator ☐ i. Other:
13. Division of Hazardous Waste/Class A Permit Number:
14. Division of Solid Waste Permit Number: DES-SW-SP-96-002
15. EPA Identification Number: NH5986485852

F. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this submittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief, the assessment action(s) undertaken to characterize the Remediation Waste which is (are) the subject of this submittal for acceptance at the facility identified in this submittal comply with applicable provisions of 310 CMR 40.0000, and such facility is permitted to accept Remediation Waste having the characteristics described in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: 8959
2. First Name: ANTHONY M 3. Last Name: DELTUFO
4. Telephone: (781) 792-5819 5. Ext.
6. FAX: (781) 792-5938
7. Signature: ANTHONY M DELTUFO
8. Date: 6/6/2013 (mm/dd/yyyy)
9. LSP Stamp:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number: 3 - 31576

G. PERSON SUBMITTING BILL OF LADING:

1. Check all that apply: ☐ a. change in contact name ☐ b. Change of address ☑ c. change in person undertaking response actions
2. Name of Organization: J.P. NOONAN TRANSPORTATION, INC.
3. Contact First Name: ROBERT 4. Last Name: DUPUIS
5. Street: 415 WEST STREET 6. Title: SAFETY DIRECTOR
7. City/Town: WEST BRIDGEWATER 8. State: MA 9. Zip Code: 02379-0000
10. Telephone: (508) 588-8026 11. Ext: 12. Fax:

H. RELATIONSHIP TO SITE OF PERSON SUBMITTING BILL OF LADING: ☐ Check here to change relationship

☑ 1. RP or PRP: ☐ a. Owner ☐ b. Operator ☐ c. Generator ☑ d. Transporter
☐ e. Other RP or PRP Specify:

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c.21E, s.2):

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c.21E, s.5(j))

☐ 4. Any Other person Undertaking Response Actions: Specify Relationship:

I. REQUIRED ATTACHMENTS AND SUBMITTALS :

☑ 1. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approvals issued by DEP or EPA. If the box is checked, you must attach a statement identifying the applicable provisions thereof.

☐ 2. Check here if any non-updatable information provided on this form is incorrect, e. g. property address. Send corrections to BWSC.eDEP@state.ma.us

☑ 3. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.

J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING :

1. I, ANTHONY DELTUFO, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: ANTHONY DELTUFO 3. Title: AGENT

4. For: J.P. NOONAN TRANSPORTATION, INC. (Name of person or entity recorded in Section H) 5. Date: 6/6/2013 (mm/dd/yyyy)

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number
3 - 31576

J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING (cont.) :

☑ 6. Check here if the address of the person providing certification is different from address recorded in Section H.

7. Street: 42 LONGWATER DRIVE

8. City/Town: NORWELL 9. State: MA 10. Zip Code: 02061-9149

11. Telephone: (781) 792-5819 12. Ext: 13. Fax: (781) 871-0690

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO $10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (MassDEP USE ONLY):

Received by DEP on

6/6/2013 4:14:37 PM

J.P. NOONAN TRANSPORTATION, INC.

415 WEST STREET · P.O. BOX 400
WEST BRIDGEWATER, MA 02379-0400
TEL (508) 588-8026
FAX (508) 587-2876

September 6, 2011

Mr. Anthony M. DelTufo, LSP
Clean Harbors Environmental Services, Inc.
42 Longwater Drive
Norwell, MA 02061

Re: Agent Authorization for DEP Submittals

Dear Mr. DelTufo:

On behalf of J.P. Noonan Transportation, Inc. (J.P. Noonan), I authorize Clean Harbors Environmental Services, Inc. (CHES) representatives to sign Massachusetts Department of Environmental Protection (DEP) Bureau of Waste Site Cleanup (BWSC) transmittal forms, bills of lading and/or uniform hazardous waste manifests, as Agent for J.P. Noonan, when I am unable to do so. This authorization is in accordance with Section 310 CMR 40.0009(2) of the Massachusetts Contingency Plan. I also authorize CHES to make electronic submittals of DEP documents. I understand that J.P. Noonan remains fully liable under federal and state laws and regulations with regard to Certifications of Person Undertaking Response Actions contained in the DEP transmittal forms as the generator and responsible party, and that CHES would be signing solely for our convenience.

Sincerely,

Authorized Representative

Title: DIRECTOR OF SAFETY

Environmental Services
Remedial Investigations
42 Longwater Drive
Norwell, MA 02061
(781) 792-5000
http://www.cleanharbors.com/

BILL OF LADING SUPPORT DOCUMENTATION

NO. 2 FUEL OIL RELEASE
MYSTIC VALLEY PARKWAY AT MEDFORD STREET
ARLINGTON, MASSACHUSETTS
DEP Release Tracking Number: 3-31576

Background

On May 31, 2013, Clean Harbors Environmental Services, Inc. (CHES) was contracted by J.P. Noonan. Transportation, Inc. (JP Noonan) to perform an Immediate Response Action (IRA) after a release of virgin No. 2 fuel oil from a tanker truck at the intersection of Mystic Valley Parkway and Medford Street in Arlington, Massachusetts (site). The truck overturned at the rotary at the intersection of the two streets, spilling its load of fuel oil. The IRA involved the recovery of oil from the Mystic River, the use of absorbent material to contain the release and the removal of soils and other media that were impacted by the release. Verbal approval has been received from MADEP to remove up to 50 cubic yards of soil during the IRA. The site is located within a residential area and, as such, no contaminants are suspected at the site other than the released virgin No. 2 fuel oil. As such, the soils are suitable for shipment to the Environmental Soil Management, Inc. (ESMI) thermal processing facility located in Loudon, New Hampshire for treatment and recycling.

Remediation Waste Characterization

Soils have been characterized as being impacted by virgin No. 2 fuel oil due to a spill which occurred due to a traffic accident involving a tanker truck carrying a load of No. 2 fuel oil.

Statement of Provisions

The spill occurred as the result of an traffic accident involving a tanker truck, and verbal approval was obtained from MADEP to complete the IRA activities described herein.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

Release Tracking Number
3 - 31576

BILL OF LADING (pursuant to 310 CMR 40.0030)

A. LOCATION OF SITE OR DISPOSAL SITE WHERE REMEDIATION WASTE WAS GENERATED:

1. Release Name/Location Aid: INTERSECTION WITH MYSTIC VALLEY PKWY
2. Street Address: 188 MEDFORD STREET
3. City/Town: ARLINGTON 4. Zip Code:
5. ☐ Check here if a Tier Classification Submittal has been provided to DEP for this disposal site:
   ☐ a. Tier 1A ☐ b. Tier 1B ☐ b. Tier 1C ☐ d. Tier II
6. If applicable provide the Permit Number:

B. THIS FORM IS BEING USED TO: (check one: B1-B4):

☐ 1. Submit a **Bill of Lading (BOL)** to transport Remediation Waste to Temporary Storage or a Receiving Facility.
Response Actions associated with this BOL (check all that apply):

- ☐ a. Immediate Response Action (IRA)
- ☐ b. Release Abatement Measure (RAM)
- ☐ c. Downgradient Property Status (DPS)
- ☐ d. Utility Release Abatement Measure (URAM)
- ☐ e. Comprehensive Response Actions
- ☐ f.. Limited Removal Action (LRA): (must be retained pursuant to 310 CMR 40.0034(6); can't be submitted via eDEP)
- ☐ g. Other

☐ 2. Submit an Attestation of Completion of **Shipment to Temporary Storage** (Sections C, F and J are not required):

☑ 3. Submit an Attestation of Completion of **Shipment to a Receiving Facility** (Sections C, F and J are not required):

☐ 4. Certify that Remediation Waste Was **Not Shipped, and the Bill of Lading is Void.** (Sections C, D, E, and F are not required)

5. Date Bill of Lading submitted to the Department: 6/6/2013 4:14:37 F (mm/dd/yyyy) b. eDEP Transaction ID: 569044

6. Period of Generation Associated with this Bill of Lading 6/1/2013 (mm/dd/yyyy) to 6/10/2013 (mm/dd/yyyy)

(All sections of this transmittal form must be filled out unless otherwise noted)
The Bill of Lading is not considered complete until the Attestation of Completion of Shipment is received by the Department.

C. DESCRIPTION OF WASTE AND WASTE SOURCE:

1. Contaminated Media /Debris (check all that apply):
   ☐ a. Soil ☐ b. Groundwater ☐ c. Surface Water ☐ d. Sediment ☐ e. Vegetation or Organic Debris
   ☐ f. Demolition/Construction Waste ☐ g. Inorganic Absorbent Materials ☐ h. Other:
2. Uncontainerized Waste (check all that apply):
   ☐ a. Inorganic Absorbent Materials ☐ b. Other:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

BWSC112

Release Tracking Number
3 - 31576

C. DESCRIPTION OF WASTE AND WASTE SOURCE (cont.):

3. Containerized Waste (check all that apply):
   ☐ a. Tank Bottoms/Sludges ☐ b. Containers ☐ c. Drums ☐ d. Engineered Impoundments
   ☐ e. Other:
4. Estimated Quantity: ☐ Tons ☐ Cu. Yds. ☐ Gallons
5. Contaminant Source (check one):
   ☐ a. Transportation Accident ☐ b. Underground Storage Tank ☐ c. Brownfields Redevelopment
   ☐ d. Other:
6. Type of Contaminant (check all that apply):
   ☐ a. Gasoline ☐ b. Diesel Fuel ☐ c. #2 Fuel Oil ☐ d. #4 Fuel Oil ☐ e. #6 Fuel Oil ☐ f. Jet Fuel
   ☐ g. Waste Oil ☐ h. Kerosene ☐ i. Chlorinated Solvents ☐ j. Urban Fill ☐ k. Other:
7. Constituents of Concern (check all that apply):
   ☐ a. As ☐ b. Cd ☐ c. Cr ☐ d. Pb ☐ e. Hg ☐ f. EPH/TPH ☐ g. VPH
   ☐ h. PCBs ☐ i. VOCs ☐ j. SVOCs ☐ k. Other:
8. If applicable, check the box for the Reportable Concentration Category of the site:
   ☐ a. RCS-1 ☐ b. RCS-2 ☐ c. RCGW-1 ☐ d. RCGW-2
9. Remediation Waste Characterization Documentation (check at least one):
   ☐ a. Site History Information ☐ b. Sampling Analytical Methods and Procedures ☐ c. Laboratory Data
   ☐ d. Field Screening Data ☐ e. Characterization Documentation previously submitted to the Department
   i. Date submitted: (mm/dd/yyyy) ii. Type of Documentation:

D. TRANSPORTER OR COMMON CARRIER INFORMATION:

1. Transporter/Common Carrier Name: CLEAN HARBORS ENV. SERVICES, INC
2. Contact First Name: FRANK 3. Last Name: PHILLION
4. Street: 609 PLEASANT STREET 5. Title: SUPERVISOR
6. City/Town: WEYMOUTH 7. State: MA 8. Zip Code: 02189-0000
9. Telephone: (781) 803-4132 10. Ext: 11. Fax:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number
3 - 31576

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

1. Operator/Facility Name: ENVIRONMENTAL SOIL MANAGEMENT, INC.
2. Contact First Name: STEPHEN 3. Last Name: RAPER
4. Street: 67 INTERNATIONAL DRIVE 5. Title: COMPLIANCE MANAGER
6. City/Town: LOUDON 7. State: NH 8. Zip Code: 03307-0000
9. Telephone: (603) 783-0228 10. Ext: 11. Fax:
12. Type of Facility: (Check one)
    a. Temporary Storage i. Period of Temporary Storage: (mm/dd/yyyy) to (mm/dd/yyyy)
    ii. Reason for Temporary Storage:
    ☐ b. Asphalt Batch/Hot Mix ☐ c. Landfill/Disposal ☐ d. Landfill/Structural Fill ☐ e. Landfill/Daily Cover
    ☐ f. Asphalt Batch/Cold Mix ☑ g. Thermal Processing ☐ h. Incinerator ☐ i. Other:
13. Division of Hazardous Waste/Class A Permit Number:
14. Division of Solid Waste Permit Number: DES-SW-SP-96-002
15. EPA Identification Number: NH5986485852

F. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this submittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief, the assessment action(s) undertaken to characterize the Remediation Waste which is (are) the subject of this submittal for acceptance at the facility identified in this submittal comply with applicable provisions of 310 CMR 40.0000, and such facility is permitted to accept Remediation Waste having the characteristics described in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #:
2. First Name: 3. Last Name:
4. Telephone: 5. Ext.
6. FAX:
7. Signature:
8. Date: (mm/dd/yyyy)
9. LSP Stamp:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number
3 - 31576

G. PERSON SUBMITTING BILL OF LADING:

1. Check all that apply: ☐ a. change in contact name ☐ b. Change of address ☐ c. change in person undertaking response actions

2. Name of Organization: JP NOONAN TRANSPORTATION INC

3. Contact First Name: BOB 4. Last Name: DUPUIS

5. Street: PO BOX 400 415 WEST ST 6. Title: DAFETY MANAGER

7. City/Town: WEST BRIDGEWATER 8. State: MA 9. Zip Code: 02379-1030

10. Telephone: (508) 588-8026 11. Ext: 12. Fax:

H. RELATIONSHIP TO SITE OF PERSON SUBMITTING BILL OF LADING: ☐ Check here to change relationship

☑ 1. RP or PRP: ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter

☑ e. Other RP or PRP Specify: NON-SPECIFIED PRP

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c.21E, s.2):

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c.21E, s.5(j))

☐ 4. Any Other person Undertaking Response Actions: Specify Relationship:

I. REQUIRED ATTACHMENTS AND SUBMITTALS :

☐ 1. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approvals issued by DEP or EPA. If the box is checked, you must attach a statement identifying the applicable provisions thereof.

☐ 2. Check here if any non-updatable information provided on this form is incorrect, e. g. property address. Send corrections to BWSC.eDEP@state.ma.us

☐ 3. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.

J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING :

1. I, _____, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: _____ 3. Title: _____

4. For: _____ 5. Date: _____
(Name of person or entity recorded in Section H) (mm/dd/yyyy)

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number
3 - 31576

J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING (cont.) :

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section H.

7. Street:

8. City/Town: 9. State: 10. Zip Code:

11. Telephone: 12. Ext: 13. Fax:

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO $10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (MassDEP USE ONLY):

Received by DEP on

7/3/2013 10:39:20 AM

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112A

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number
3 - 31576

SUMMARY OF SHIPMENT SHEET 1 **OF** 1

A. SUMMARY OF SHIPMENT (To be filled out by the receiving facility upon receipt of Remediation Waste):

1. Date of Shipment: (mm/dd/yyyy)	2. Date of Receipt: (mm/dd/yyyy)	3. Number of Loads Shipped:	4. Daily Volume Shipped: ☐ yds³ ☑ tons ☐ gals
6/10/2013	6/10/2013	2.00	36.99
6/11/2013	6/11/2013	1.00	16.66
5. Totals Recorded on this Summary of Shipment Sheet:		3.00	53.65

B. ☐ Check here if additional BWSC112A BOL Summary Sheets are needed.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112B

Release Tracking Number
3 - 31576

BILL OF LADING (pursuant to 310 CMR 40.0030)
SUMMARY SHEET SIGNATURE PAGE

A. ACKNOWLEDGEMENT OF RECEIPT OF REMEDIATION WASTE AT RECEIVING FACILITY OR TEMPORARY STORAGE:

1. I, STEPHEN RAPER, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: STEPHEN RAPER
3. Title: COMPLIANCE MANAGER
4. For: ESMI
5. Date: 7/1/2013 (mm/dd/yyyy)
6. Date of Final Shipment associated with this Bill of Lading: 6/11/2013 (mm/dd/yyyy)

B. ACKNOWLEDGEMENT OF SHIPMENT AND RECEIPT OF REMEDIATION WASTE BY PERSON CONDUCTING RESPONSE ACTIONS ASSOCIATED WITH THIS BILL OF LADING:

1. I, ANTHONY DELTUFO, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: ANTHONY DELTUFO
3. Title: AGENT
4. For: JP NOONAN TRANSPORTATION INC (Name of person or entity recorded in Section G)
5. Date: 7/3/2013 (mm/dd/yyyy)

☑ 6. Check here if the address of the person providing certification is different from address recorded in BWSC112 Section H.

7. Street: 42 LONGWATER DRIVE
8. City/Town: NORWELL
9. State: MA
10. Zip Code: 02061-9149
11. Telephone: (781) 792-5819
12. Ext:
13. Fax: (781) 871-0690

☐ 14. Check here if attaching optional supporting documentation such as copies of Load Information Summary Sheets

Clean Harbors Environmental Services, Inc.
42 Longwater Drive
Norwell, MA 02061-9149
Phone: 781-792-5000
Fax: 781-792-5938
www.cleanharbors.com

July 25, 2013

Mr. Adam W. Chapdelaine
Arlington Town Manager
730 Massachusetts Avenue
Arlington, Massachusetts 02476

Mr. Edward M. Lambert Jr., Commissioner
Mass Department of Conservation and Recreation
251 Causeway Street, Suite 900
Boston, Massachusetts 02114-2104

Re: Informational Notice of Environmental Sampling and Laboratory Report Transmittal
No. 2 Fuel Oil Release
188 Medford Street at Mystic Valley Parkway
Arlington, Massachusetts
DEP Release Tracking No.: 3-31576

Dear Sirs:

On behalf of J.P. Noonan Transportation, Inc., Clean Harbors Environmental Services, Inc. (CHES) is submitting this Notice of Environmental Sampling (BWSC123) and transmittal of laboratory data. On May 31, 2013, a release of approximately 9,600 gallons of No. 2 fuel oil occurred at the above-referenced location due to a truck rollover. Clean Harbors Environmental Services, Inc. (CHES) conducted Immediate Response Actions in accordance with the Massachusetts Contingency Plan (MCP). These actions included cleaning the pavement and storm water drainage system, recovery of fuel from the Mystic River, surface water sampling and removal of impacted soils adjacent to the roadway and at locations adjacent to the river between the Medford Street and River Street bridges.

The attached preliminary Site Sketch, Aerial Photograph and Sampling Plan show the sample locations, and copies of the laboratory analytical results are attached. Further discussion regarding the analytical results will be available in the Immediate Response Action (IRA) Plan, to be submitted electronically to the Massachusetts Department of Environmental Protection (DEP) on or before July 30, 2013. The IRA Plan can be downloaded from the DEP website at http://public.dep.state.ma.us/wsc_viewer/main.aspx by entering the DEP Release Tracking Number referenced above. No action other than the receipt of this letter is necessary by your office.

If you have any questions regarding this notice, please feel free to contact the undersigned at 781-792-5822.

Sincerely,

Richard E. MacCarthy
Senior Remedial Engineer

Cc: Cori Beckwith (via email)
Town of Arlington ConCom,
730 Mass Ave., Arlington, MA 02476

Alicia Hunt (via email)
City of Medford ConCom
85 George P. Hassett Dr., Medford, MA 02155

Bob Dupuis (via email)
415 West Street
West Bridgewater, MA 02379

Project file EO5401971

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

3 | 31576

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 188 Medford Street

City/Town: Arlington Zip Code: 02474-3114

B. This notice is being provided to the following party:

1. Name: Town of Arlington

2. Street Address: 730 Massachusetts Avenue

City/Town: Arlington Zip Code: 02476

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: 188 Medford Street

City/Town: Arlington Zip Code: 02474-3114

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☐ residential ☐ commerical ☐ industrial ☐ school/playground ☑ Other roadway (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Soil Samples collected in front of Bank building in landscaped areas along sidewalk, under sidewalk and in grassy area along curb east of Bank driveway.

E. Contact information related to the party providing this notice:

Contact Name: Bob Dupuis

Street Address: 415 West Street

City/Town: West Bridgewater, MA Zip Code: 02379

Telephone: (508) 588-8026 Email: _____

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

3 | 31576

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 188 Medford Street

City/Town: Arlington Zip Code: 02474-3114

B. This notice is being provided to the following party:

1. Name: Edward Lambert

2. Street Address: 251 Causeway Street, Suite 900

City/Town: Boston Zip Code: 02114-2104

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: 188 Medford Street

City/Town: Arlington Zip Code: 02474-3114

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☐ residential ☐ commerical ☐ industrial ☐ school/playground ☑ Other road and parkway (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Soil Samples collected in front of Bank building in landscaped areas along sidewalk, under sidewalk, and along river between Medford and River Street bridges.

E. Contact information related to the party providing this notice:

Contact Name: Bob Dupuis

Street Address: 415 West Street

City/Town: West Bridgewater, MA Zip Code: 02379

Telephone: (508) 588-8026 Email: _____

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

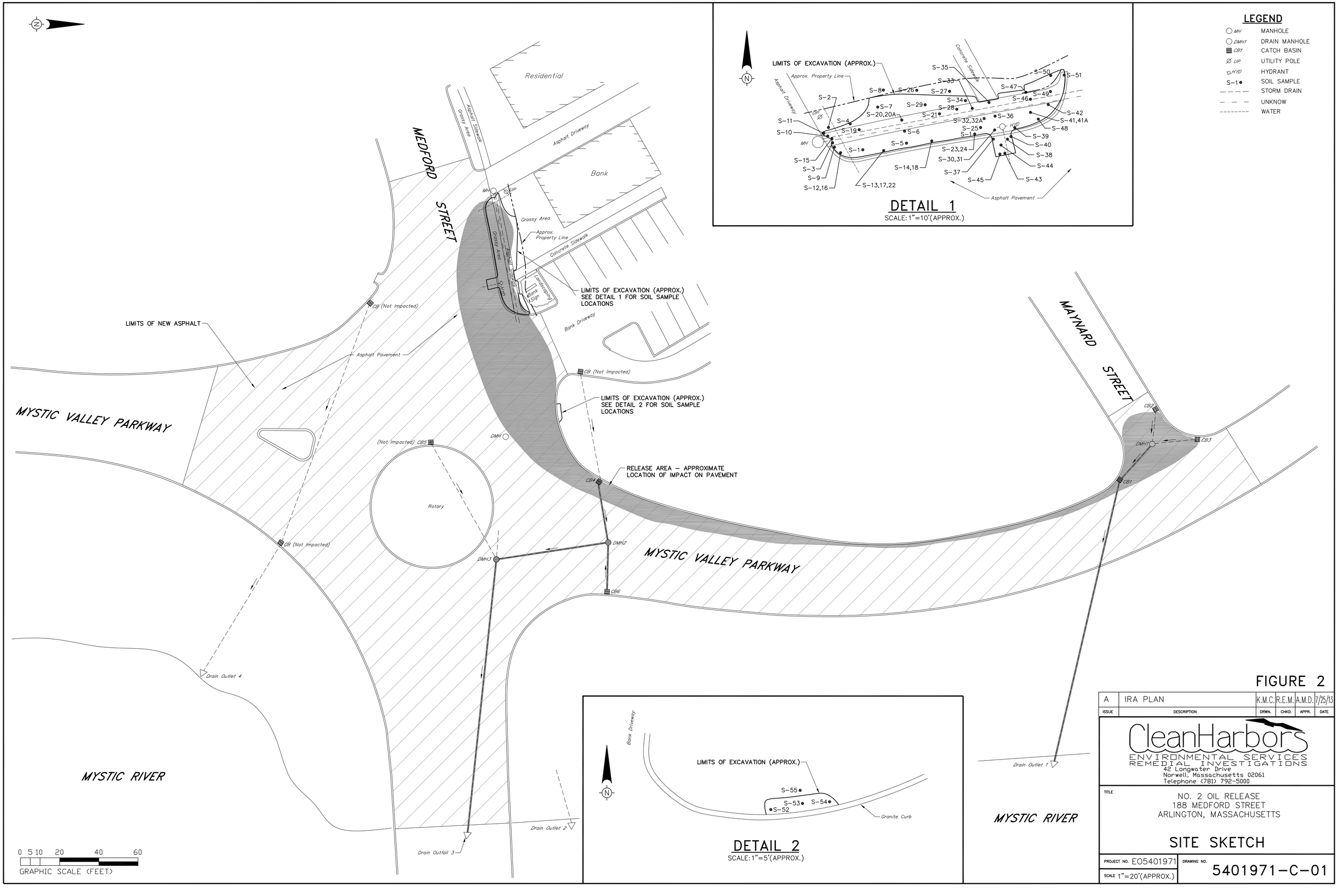


FIGURE 2

ISSUE	DESCRIPTION	DRWN.	CHKD.	APPR.	DATE
A	IRA PLAN	K.M.C.	R.E.M.	A.M.D.	7/25/13

CleanHarbors
ENVIRONMENTAL SERVICES
REMEDIAL INVESTIGATIONS
42 Longwater Drive
Norwell, Massachusetts 02061
Telephone (781) 792-5000

TITLE

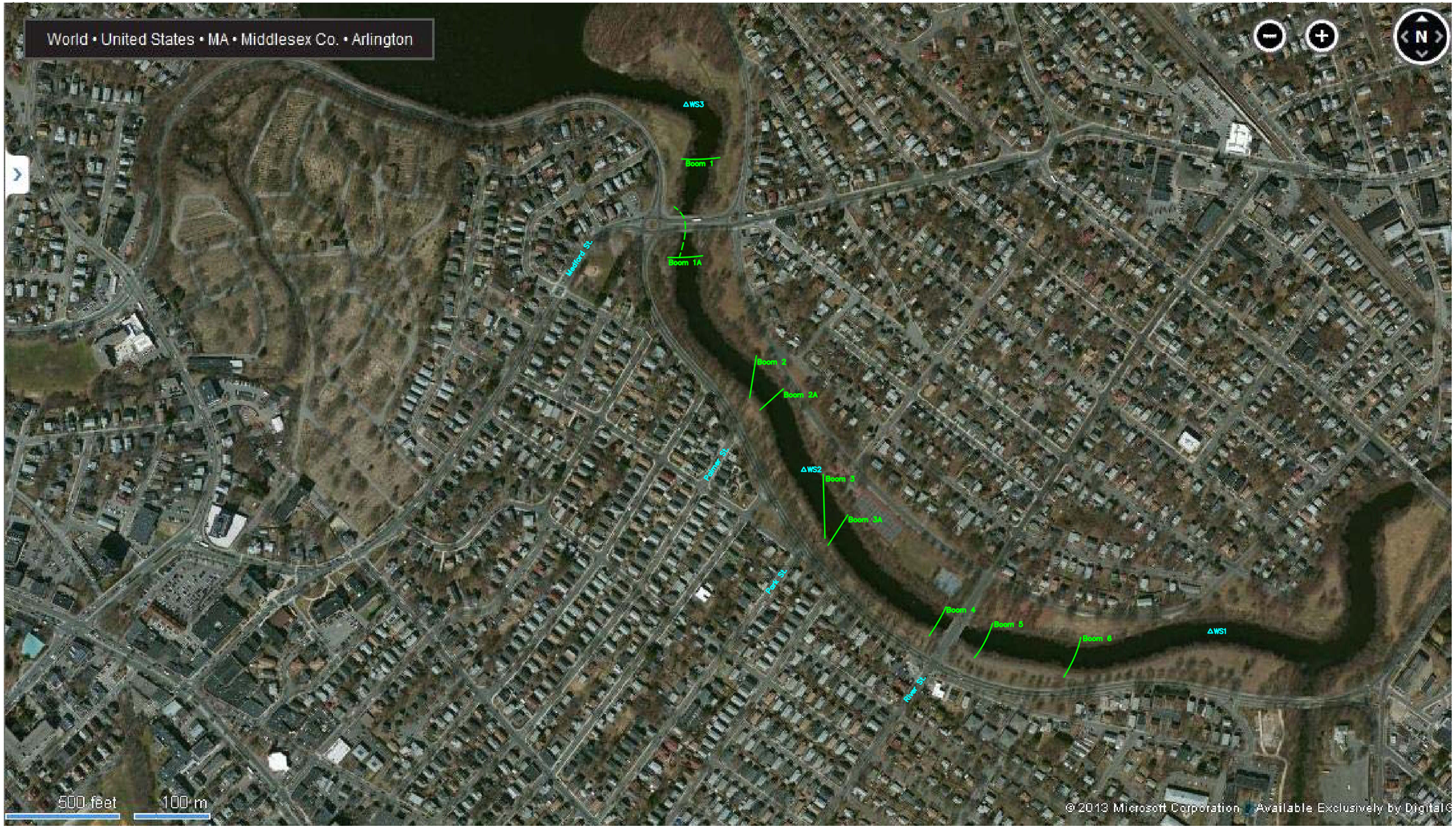
NO. 2 OIL RELEASE
188 MEDFORD STREET
ARLINGTON, MASSACHUSETTS

SITE SKETCH

PROJECT NO. E05401971

SCALE 1"=20'(APPROX.)

DRAWING NO. 5401971-C-01



LEGEND

Boom 1 — CONTAINMENT BOOM

ΔWS1 — WATER SAMPLE

FIGURE 3

ISSUE	DESCRIPTION	DRWN.	CHKD.	APPR.	DATE
A	IRA PLAN	K.M.C.	R.E.M.	S.J.A.	7/25/13

CleanHarbors
ENVIRONMENTAL SERVICES
REMEDIAL INVESTIGATIONS
42 Longwater Drive
Norwell, Massachusetts 02061
Telephone (781) 792-5000

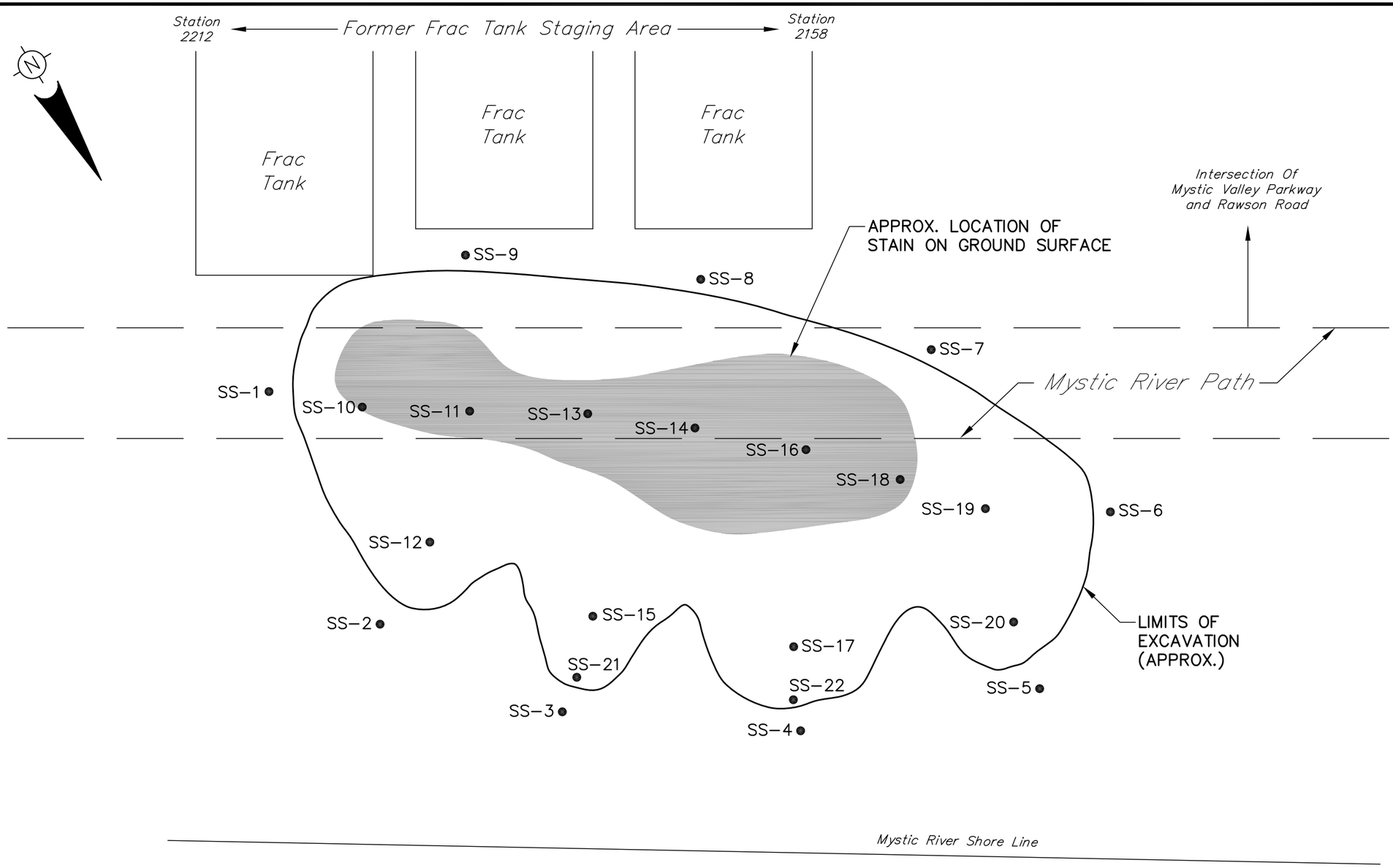
NO. 2 FUEL OIL RELEASE
MEDFORD STREET @ MYSTIC VALLEY PARKWAY
ARLINGTON, MASSACHUSETTS

AERIAL PHOTOGRAPH

PROJECT NO. E05401971 | DWG. NO. 5401971-C-03

SCALE AS NOTED

FIGURE 5



ISSUE	DESCRIPTION	DRWN.	CHKD.	APPR.	DATE
A	IRA PLAN	K.M.C.	R.E.M.	A.M.D.	7/25/13

NO. 2 OIL RELEASE
MYSTIC VALLEY PARKWAY AT PARK STREET
ARLINGTON, MASSACHUSETTS

SAMPLING PLAN

PROJECT NO. E05401971 | DWG. NO. 5401971-C-04
SCALE 1"=5'(APPROX.)

LEGEND

SS-1 ● SOIL SAMPLE

CleanHarbors
ENVIRONMENTAL SERVICES
REMEDIAL INVESTIGATIONS
42 Longwater Drive
Norwell, Massachusetts 02061
Telephone (781) 792-5000

ANALYTICAL REPORT

Monday, June 17, 2013

GeoLabs, Inc.
45 Johnson Lane
Braintree MA
Tele: 781 848 7844
Fax: 781 848 7811

Rich MacCarthy
Clean Harbors
42 Longwater Drive
Norwell, MA 02061

TEL: (781) 792-5822
FAX: (781) 792-5938

Project:
Location: Noonan-Arlington

Order No.: 1306012

Dear Rich MacCarthy:

GeoLabs, Inc. received 3 sample(s) on 6/4/2013 for the analyses presented in the following report.

The laboratory results in this report relate only to samples submitted. All data for associated QC met method or laboratory specifications, except where noted in the Case Narrative.

Report is being re-issued with additional comments on Case Narrative. Analytical methods and results meet requirements of 310CMR 40.1056(J) as per MADEP Compendium of Analytical Methods (CAM).

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

David Mick
Laboratory Director

For current certifications, please visit our website at
Certifications:
CT (PH-0148) - MA (M-MA015) - NH (2508) - RI (LA000252)
Accredited in Accordance with

MassDEP Analytical Protocol Certification Form

Laboratory Name: GeoLabs, Inc. Project #:

Project Location: Noonan-Arlington RTN:

This form provides certification for the following data set: 1306012 (001-003)

Matrices: ☒ Groundwater/Surface Water ☐ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other-wastewater

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☒	8081 Pesicides CAM V B ☐	7196 Hex Cr CAM VI B ☐		MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☒	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐		TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII 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 ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ 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 ☐ No
D	Does the laboratory report comply with all reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analtyical Data"?	☒ Yes ☐ No
E	VPH, EPH, APH and TO-15 only:	
	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications.)	☒ 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 ☐ 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 protocol(s)?	☒ Yes ☐ No

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usablility and representativeness requirements described in 310 CMR 40. 1056 (2) (k) and WSC-07-350.**

H	Were **all** QC performance standards as specified in the CAM protocol(s) achieved?	☐ Yes ☒ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes ☒ No[1]

[1] *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: David Mick **Position: Laboratory Director**

Printed Name: David Mick **Date:** June 17, 2013

Date: *17-Jun-13*

CLIENT: Clean Harbors
Project:
Lab Order: 1306012

CASE NARRATIVE

Physical Condition of Samples

The project was received by the laboratory in satisfactory condition. The sample(s) were received undamaged, in appropriate containers with the correct preservation, with the following exception: Samples were unpreserved, but brought directly from the field.

Project Documentation

The project was accompanied by satisfactory Chain of Custody documentation.

Analysis of Sample(s)

Carbon ranges and diesel targets only analyzed via MADEP EPH method, per client request.

All extractable samples were extracted and analyzed and any Volatile samples were analyzed within method specified holding times and according to GeoLabs documented Standard Operating Procedure. The following analytical anomalies or non-conformances were noted by the laboratory during the processing of these samples:

VPH LCSD RPD % Recovery for Naphthalene is outside of recovery limits.

SIGNATURE:  LAB DIRECTOR

PRINTED NAME: David Mick DATE: 06/17/13

CLIENT: Clean Harbors
Project:
Lab Order: 1306012

CASE NARRATIVE

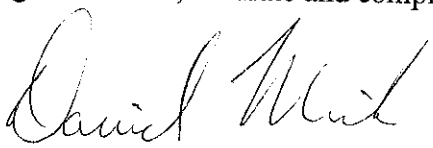
EPH Methods

Method for Ranges: MADEP EPH 04-1.1
Method for Target Analytes: 8270 GC/MS

Carbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
C11-C22 Aromatic Hydrocarbons exclude concentrations of Target PAH Analytes

CERTIFICATION:
Were all QA/QC procedures REQUIRED by the EPH Method followed? YES
Were all performance/acceptance standards achieved? YES
Were any significant modifications made to the EPH method? NO

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

SIGNATURE:  LAB DIRECTOR

PRINTED NAME: David Mick DATE: 06/17/13

CLIENT: Clean Harbors
Project:
Lab Order: 1306012

CASE NARRATIVE

VPH Methods

Method for Ranges: MADEP VPH 04-1.1
Method for Target Analytes: MADEP VPH 04-1.1

Soil sample(s) were received in MeOH and soil was completely covered by MeOH.
Soil sample(s) ratio 1:1 +/- 25%

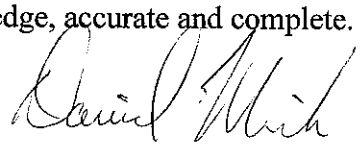
Carbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range. (MTBE, Benzene, Toluene)

C9-C12 Aliphatic Hydrocarbons exclude concentration of Target Analytes eluting in that range (Ethylbenzene, m&p-Xylenes, o-Xylene) AND concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION
Were all QA/QC procedures REQUIRED by the VPH Method followed? YES
Were all QA/QC performance/acceptance standards achieved? NO (See Case Narrative)
Were any significant modifications made to the VPH method, as specified in Sec. 11.3? NO

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

SIGNATURE:  POSITION: LAB DIRECTOR

PRINTED NAME: David Mick

DATE: 06/17/13

ANALYTICAL REPORT **Reported Date:** 17-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-1
Lab Order:	1306012	**Collection Date:**	6/3/2013 4:00:00 PM
Project:		**Date Received:**	6/4/2013
Lab ID:	1306012-001	**Matrix:**	WATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/4/2013 8:59:14 AM**		
Adjusted C11-C22 Aromatics	ND	103		µg/L	1	6/7/2013
C09-C18 Aliphatics	ND	103		µg/L	1	6/7/2013
C19-C36 Aliphatics	*118*	103		µg/L	1	6/7/2013
Unadjusted C11-C22 Aromatics	ND	103		µg/L	1	6/7/2013
Surr: 1-Chlorooctadecane	52.3	40-140		%REC	1	6/7/2013
Surr: o-Terphenyl	77.8	40-140		%REC	1	6/7/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/4/2013 8:59:14 AM**		
Naphthalene	ND	1.03		µg/L	1	6/6/2013 12:09:00 PM
2-Methylnaphthalene	*5.91*	1.03		µg/L	1	6/6/2013 12:09:00 PM
Acenaphthene	ND	1.03		µg/L	1	6/6/2013 12:09:00 PM
Phenanthrene	ND	1.03		µg/L	1	6/6/2013 12:09:00 PM
Total PAH Target Concentration	*5.91*	1.03		µg/L	1	6/6/2013 12:09:00 PM
Surr: 2,2-Difluorobiphenyl	51.2	40-140		%REC	1	6/6/2013 12:09:00 PM
Surr: 2-Fluorobiphenyl	54.3	40-140		%REC	1	6/6/2013 12:09:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
C9-C10 Aromatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 12:33:00 PM
Unadjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 12:33:00 PM
Unadjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 12:33:00 PM
Methyl Tert-Butyl Ether	ND	1.00		µg/L	1	6/6/2013 12:33:00 PM
Benzene	ND	1.00		µg/L	1	6/6/2013 12:33:00 PM
Toluene	*2.06*	1.00		µg/L	1	6/6/2013 12:33:00 PM
Ethylbenzene	*1.23*	1.00		µg/L	1	6/6/2013 12:33:00 PM
m,p-Xylene	*3.16*	1.00		µg/L	1	6/6/2013 12:33:00 PM
o-Xylene	*7.46*	1.00		µg/L	1	6/6/2013 12:33:00 PM
Naphthalene	ND	1.00		µg/L	1	6/6/2013 12:33:00 PM
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 12:33:00 PM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- BRL Below Reporting Limit
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

ANALYTICAL REPORT

Reported Date: 17-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-1
Lab Order:	1306012	**Collection Date:**	6/3/2013 4:00:00 PM
Project:		**Date Received:**	6/4/2013
Lab ID:	1306012-001	**Matrix:**	WATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: ZC
Prep Method:		**Prep Date:**				
Adjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 12:33:00 PM
Surr: 2,5-Dibromotoluene FID	119	70-130		%REC	1	6/6/2013 12:33:00 PM
Surr: 2,5-Dibromotoluene PID	85.0	70-130		%REC	1	6/6/2013 12:33:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT **Reported Date:** 17-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-2
Lab Order:	1306012	**Collection Date:**	6/3/2013 4:28:00 PM
Project:		**Date Received:**	6/4/2013
Lab ID:	1306012-002	**Matrix:**	WATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/4/2013 8:59:14 AM**		
Adjusted C11-C22 Aromatics	ND	101		µg/L	1	6/7/2013
C09-C18 Aliphatics	ND	101		µg/L	1	6/7/2013
C19-C36 Aliphatics	ND	101		µg/L	1	6/7/2013
Unadjusted C11-C22 Aromatics	ND	101		µg/L	1	6/7/2013
Surr: 1-Chlorooctadecane	72.7	40-140		%REC	1	6/7/2013
Surr: o-Terphenyl	76.9	40-140		%REC	1	6/7/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/4/2013 8:59:14 AM**		
Naphthalene	ND	1.01		µg/L	1	6/6/2013 12:47:00 PM
2-Methylnaphthalene	ND	1.01		µg/L	1	6/6/2013 12:47:00 PM
Acenaphthene	ND	1.01		µg/L	1	6/6/2013 12:47:00 PM
Phenanthrene	ND	1.01		µg/L	1	6/6/2013 12:47:00 PM
Total PAH Target Concentration	ND	1.01		µg/L	1	6/6/2013 12:47:00 PM
Surr: 2,2-Difluorobiphenyl	52.1	40-140		%REC	1	6/6/2013 12:47:00 PM
Surr: 2-Fluorobiphenyl	57.1	40-140		%REC	1	6/6/2013 12:47:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
C9-C10 Aromatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 1:21:00 AM
Unadjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 1:21:00 AM
Unadjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 1:21:00 AM
Methyl Tert-Butyl Ether	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
Benzene	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
Toluene	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
Ethylbenzene	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
m,p-Xylene	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
o-Xylene	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
Naphthalene	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 1:21:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT

Reported Date: 17-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-2
Lab Order:	1306012	**Collection Date:**	6/3/2013 4:28:00 PM
Project:		**Date Received:**	6/4/2013
Lab ID:	1306012-002	**Matrix:**	WATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:		**Prep Date:**				
Adjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 1:21:00 AM
Surr: 2,5-Dibromotoluene FID	128	70-130		%REC	1	6/6/2013 1:21:00 AM
Surr: 2,5-Dibromotoluene PID	87.5	70-130		%REC	1	6/6/2013 1:21:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT **Reported Date:** 17-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-3
Lab Order:	1306012	**Collection Date:**	6/3/2013 5:07:00 PM
Project:		**Date Received:**	6/4/2013
Lab ID:	1306012-003	**Matrix:**	WATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Wpr)			**Prep Date:**	6/4/2013 8:59:14 AM		
Adjusted C11-C22 Aromatics	ND	101		µg/L	1	6/7/2013
C09-C18 Aliphatics	ND	101		µg/L	1	6/7/2013
C19-C36 Aliphatics	ND	101		µg/L	1	6/7/2013
Unadjusted C11-C22 Aromatics	ND	101		µg/L	1	6/7/2013
Surr: 1-Chlorooctadecane	60.4	40-140		%REC	1	6/7/2013
Surr: o-Terphenyl	65.6	40-140		%REC	1	6/7/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Wpr)			**Prep Date:**	6/4/2013 8:59:14 AM		
Naphthalene	ND	1.01		µg/L	1	6/6/2013 1:25:00 PM
2-Methylnaphthalene	ND	1.01		µg/L	1	6/6/2013 1:25:00 PM
Acenaphthene	ND	1.01		µg/L	1	6/6/2013 1:25:00 PM
Phenanthrene	ND	1.01		µg/L	1	6/6/2013 1:25:00 PM
Total PAH Target Concentration	ND	1.01		µg/L	1	6/6/2013 1:25:00 PM
Surr: 2,2-Difluorobiphenyl	55.6	40-140		%REC	1	6/6/2013 1:25:00 PM
Surr: 2-Fluorobiphenyl	53.8	40-140		%REC	1	6/6/2013 1:25:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
C9-C10 Aromatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 2:08:00 AM
Unadjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 2:08:00 AM
Unadjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 2:08:00 AM
Methyl Tert-Butyl Ether	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
Benzene	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
Toluene	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
Ethylbenzene	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
m,p-Xylene	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
o-Xylene	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
Naphthalene	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 2:08:00 AM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- BRL Below Reporting Limit
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

ANALYTICAL REPORT **Reported Date:** 17-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-3
Lab Order:	1306012	**Collection Date:**	6/3/2013 5:07:00 PM
Project:		**Date Received:**	6/4/2013
Lab ID:	1306012-003	**Matrix:**	WATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: ZC
Prep Method:		**Prep Date:**				
Adjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 2:08:00 AM
Surr: 2,5-Dibromotoluene FID	109	70-130		%REC	1	6/6/2013 2:08:00 AM
Surr: 2,5-Dibromotoluene PID	82.8	70-130		%REC	1	6/6/2013 2:08:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL QC SUMMARY REPORT

Date: *17-Jun-13*

CLIENT: Clean Harbors
Work Order: 1306012
Project:

TestCode: EPHP_W_DIESEL

Sample ID: **MB-22401**	SampType: **MBLK**	TestCode: **EPHP_W_DIE** Units: **µg/L**	Prep Date: **6/4/2013**	RunNo: **50506**
Client ID: **ZZZZZ**	Batch ID: **22401**	TestNo: **MADEP EPH_ (eph_Wpr)**	Analysis Date: **6/5/2013**	SeqNo: **573403**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	1.00									
2-Methylnaphthalene	ND	1.00									
Acenaphthene	ND	1.00									
Phenanthrene	ND	1.00									
Total PAH Target Concentration	ND	1.00									
Surr: 2,2-Difluorobiphenyl	10.72	0	25	0	42.9	40	140				
Surr: 2-Fluorobiphenyl	12.01	0	25	0	48.0	40	140				

Sample ID: **LCS-22401**	SampType: **LCS**	TestCode: **EPHP_W_DIE** Units: **µg/L**	Prep Date: **6/4/2013**	RunNo: **50506**
Client ID: **ZZZZZ**	Batch ID: **22401**	TestNo: **MADEP EPH_ (eph_Wpr)**	Analysis Date: **6/5/2013**	SeqNo: **573401**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	20.77	1.00	50	0	41.5	40	140				
2-Methylnaphthalene	23.32	1.00	50	0	46.6	40	140				
Acenaphthene	26.57	1.00	50	0	53.1	40	140				
Phenanthrene	38.55	1.00	50	0	77.1	40	140				
Surr: 2,2-Difluorobiphenyl	11.72	0	25	0	46.9	40	140				
Surr: 2-Fluorobiphenyl	12.73	0	25	0	50.9	40	140				

Sample ID: **LCSD-22401**	SampType: **LCSD**	TestCode: **EPHP_W_DIE** Units: **µg/L**	Prep Date: **6/4/2013**	RunNo: **50506**
Client ID: **ZZZZZ**	Batch ID: **22401**	TestNo: **MADEP EPH_ (eph_Wpr)**	Analysis Date: **6/5/2013**	SeqNo: **573402**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	22.59	1.00	50	0	45.2	40	140	20.77	8.39	50	
2-Methylnaphthalene	25.52	1.00	50	0	51.0	40	140	23.32	9.01	50	
Acenaphthene	28.37	1.00	50	0	56.7	40	140	26.57	6.55	50	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306012
Project:

TestCode: EPHP_W_DIESEL

Sample ID: LCSD-22401	SampType: LCSD	TestCode: EPHP_W_DIE	Units: µg/L	Prep Date: 6/4/2013	RunNo: 50506
Client ID: ZZZZZ	Batch ID: 22401	TestNo: MADEP EPH_ (eph_Wpr)		Analysis Date: 6/5/2013	SeqNo: 573402

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenanthrene	40.41	1.00	50	0	80.8	40	140	38.55	4.71	50	
Surr: 2,2-Difluorobiphenyl	12.41	0	25	0	49.6	40	140	0	0	0	
Surr: 2-Fluorobiphenyl	12.64	0	25	0	50.6	40	140	0	0	0	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306012
Project:

TestCode: epht_w

Sample ID: **MB-22401**	SampType: **mblk**	TestCode: **epht_w**	Units: **µg/L**	Prep Date: **6/4/2013**	RunNo: **50494**
Client ID: **ZZZZZ**	Batch ID: **22401**	TestNo: **MADEP EPH**	**(eph_Wpr)**	Analysis Date: **6/4/2013**	SeqNo: **573366**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Adjusted C11-C22 Aromatics	ND	100									
C09-C18 Aliphatics	ND	100									
C19-C36 Aliphatics	ND	100									
Unadjusted C11-C22 Aromatics	ND	100									
Surr: 1-Chlorooctadecane	60.63	0	100	0	60.6	40	140				
Surr: o-Terphenyl	66.70	0	100	0	66.7	40	140				

Sample ID: **LCS-22401**	SampType: **Lcs**	TestCode: **epht_w**	Units: **µg/L**	Prep Date: **6/4/2013**	RunNo: **50494**
Client ID: **ZZZZZ**	Batch ID: **22401**	TestNo: **MADEP EPH**	**(eph_Wpr)**	Analysis Date: **6/4/2013**	SeqNo: **573367**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
C09-C18 Aliphatics	ND	100	100	0	50.9	40	140				
C19-C36 Aliphatics	ND	100	100	0	49.0	40	140				
Unadjusted C11-C22 Aromatics	ND	100	100	0	49.8	40	140				
Surr: 1-Chlorooctadecane	58.92	0	100	0	58.9	40	140				
Surr: o-Terphenyl	65.93	0	100	0	65.9	40	140				

Sample ID: **LCSD-22401**	SampType: **Lcsd**	TestCode: **epht_w**	Units: **µg/L**	Prep Date: **6/4/2013**	RunNo: **50494**
Client ID: **ZZZZZ**	Batch ID: **22401**	TestNo: **MADEP EPH**	**(eph_Wpr)**	Analysis Date: **6/4/2013**	SeqNo: **573368**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
C09-C18 Aliphatics	ND	100	100	0	57.3	40	140	50.92	0	25	
C19-C36 Aliphatics	ND	100	100	0	47.8	40	140	49	0	25	
Unadjusted C11-C22 Aromatics	ND	100	100	0	64.9	40	140	49.82	0	25	
Surr: 1-Chlorooctadecane	59.71	0	100	0	59.7	40	140	0	0	0	
Surr: o-Terphenyl	82.41	0	100	0	82.4	40	140	0	0	0	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306012
Project:

TestCode: VPH_W2

Sample ID: **MBLK** SampType: **MBLK** TestCode: **VPH_W2** Units: **µg/L** Prep Date: RunNo: **50547**
Client ID: **ZZZZZ** Batch ID: **R50547** TestNo: **VPH** Analysis Date: **6/6/2013** SeqNo: **573130**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.00									
2,2,4-Trimethylpentane	ND	1.00									
2-Methylpentane	ND	1.00									
n-Butylcyclohexane	ND	1.00									
n-Decane	ND	1.00									
n-Nonane	ND	1.00									
n-Pentane	ND	1.00									
C9-C10 Aromatic Hydrocarbons	ND	100									
Unadjusted C5-C8 Aliphatic Hydrocarbo	ND	100									
Unadjusted C9-C12 Aliphatic Hydrocarb	ND	100									
Methyl Tert-Butyl Ether	ND	1.00									
Benzene	ND	1.00									
Toluene	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Naphthalene	ND	1.00									
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100									
Adjusted C9-C12 Aliphatic Hydrocarbon	ND	100									
Surr: 2,5-Dibromotoluene FID	89.04	0	100	0	89.0	70	130				
Surr: 2,5-Dibromotoluene PID	88.42	0	100	0	88.4	70	130				

Sample ID: **LCS** SampType: **LCS** TestCode: **VPH_W2** Units: **µg/L** Prep Date: RunNo: **50547**
Client ID: **ZZZZZ** Batch ID: **R50547** TestNo: **VPH** Analysis Date: **6/5/2013** SeqNo: **573128**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	81.52	1.00	100	0	81.5	70	130				

Qualifiers:
BRL Below Reporting Limit
J Analyte detected below quantitation limits
S Spike Recovery outside recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306012
Project:

TestCode: VPH_W2

Sample ID: LCS	SampType: LCS	TestCode: VPH_W2	Units: µg/L	Prep Date:	RunNo: 50547
Client ID: ZZZZZ	Batch ID: R50547	TestNo: VPH		Analysis Date: 6/5/2013	SeqNo: 573128

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,2,4-Trimethylpentane	87.10	1.00	100	0.16	86.9	70	130				
2-Methylpentane	82.67	1.00	100	0	82.7	70	130				
n-Butylcyclohexane	84.08	1.00	100	0	84.1	70	130				
n-Decane	82.01	1.00	100	0.0149	82.0	70	130				
n-Nonane	85.69	1.00	100	0.01028	85.7	30	130				
n-Pentane	89.62	1.00	100	0	89.6	70	130				
C9-C10 Aromatic Hydrocarbons	88.39	50.0	100	0	88.4	70	130				
Unadjusted C5-C8 Aliphatic Hydrocarbo	209.0	100	300	0	69.7	70	130				
Unadjusted C9-C12 Aliphatic Hydrocarb	218.4	100	300	0	72.8	70	130				
Methyl Tert-Butyl Ether	80.62	1.00	100	0	80.6	70	130				
Benzene	80.49	1.00	100	0	80.5	70	130				
Toluene	81.02	1.00	100	0	81.0	70	130				
Ethylbenzene	89.64	1.00	100	0	89.6	70	130				
m,p-Xylene	151.6	1.00	200	0.1	75.7	70	130				
o-Xylene	88.52	1.00	100	0	88.5	70	130				
Naphthalene	91.16	1.00	100	0	91.2	70	130				
Surr: 2,5-Dibromotoluene FID	81.07	0	100	0	81.1	70	130				
Surr: 2,5-Dibromotoluene PID	101.3	0	100	0	101	70	130				

Sample ID: LCSD	SampType: LCSD	TestCode: VPH_W2	Units: µg/L	Prep Date:	RunNo: 50547
Client ID: ZZZZZ	Batch ID: R50547	TestNo: VPH		Analysis Date: 6/6/2013	SeqNo: 573129

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	84.90	1.00	100	0	84.9	70	130	81.52	4.06	25	
2,2,4-Trimethylpentane	91.91	1.00	100	0.16	91.8	70	130	87.1	5.37	25	
2-Methylpentane	87.62	1.00	100	0	87.6	70	130	82.67	5.81	25	
n-Butylcyclohexane	80.35	1.00	100	0	80.4	70	130	84.08	4.54	25	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306012
Project:

TestCode: VPH_W2

Sample ID: LCSD	SampType: LCSD	TestCode: VPH_W2	Units: µg/L	Prep Date:	RunNo: 50547
Client ID: ZZZZZ	Batch ID: R50547	TestNo: VPH		Analysis Date: 6/6/2013	SeqNo: 573129

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
n-Decane	85.78	1.00	100	0.0149	85.8	70	130	82.01	4.49	25	
n-Nonane	83.02	1.00	100	0.01028	83.0	30	130	85.69	3.17	25	
n-Pentane	96.16	1.00	100	0	96.2	70	130	89.62	7.04	25	
C9-C10 Aromatic Hydrocarbons	88.64	50.0	100	0	88.6	70	130	88.39	0.282	25	
Unadjusted C5-C8 Aliphatic Hydrocarbo	222.3	100	300	0	74.1	70	130	209	6.18	25	
Unadjusted C9-C12 Aliphatic Hydrocarb	216.4	100	300	0	72.1	70	130	218.4	0.920	25	
Methyl Tert-Butyl Ether	84.73	1.00	100	0	84.7	70	130	80.62	4.97	25	
Benzene	87.79	1.00	100	0	87.8	70	130	80.49	8.68	25	
Toluene	86.46	1.00	100	0	86.5	70	130	81.02	6.50	25	
Ethylbenzene	88.98	1.00	100	0	89.0	70	130	89.64	0.739	25	
m,p-Xylene	145.7	1.00	200	0.1	72.8	70	130	151.6	3.96	25	
o-Xylene	89.68	1.00	100	0	89.7	70	130	88.52	1.30	25	
Naphthalene	119.2	1.00	100	0	119	70	130	91.16	26.7	25	R
Surr: 2,5-Dibromotoluene FID	84.61	0	100	0	84.6	70	130	0	0	0	
Surr: 2,5-Dibromotoluene PID	86.55	0	100	0	86.6	70	130	0	0	0	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

1306012 PAGE 1 OF 1

CHAIN OF CUSTODY RECORD

GeoLabs, Inc. *Environmental Laboratories*
45 Johnson Lane, Braintree, MA 02184
p 781.848.7844 • f 781.848.7811
www.geolabs.com

Sample Handling: circle choice
Filtration: Done / Not Needed / Lab to do
Preservation: Lab to do Y / N

Special Instructions
CAM Compliant
Improperly Preserved EPH - C6

Turnaround: circle one
1-day (3-day) 2-day 5 / 7-days

Data Delivery: circle choice (s)
Fax (email)
Format:
Excel (PDF)

Requirements: circle choice (s)
GW-1 (MCP Methods) S-1 DEP QC Other _____
CT RCP (Reasonable Confidence Protocols)
State / Fed Program - Criteria _____

Client: Clean Harbors
Address: 42 Longwater Drive Norwell MA
Contact: Rich MacCarthy

Phone: 617-799-6189
Fax: 781-871-0640
email: maccarthy.rm@cleanharbors.com

Project: Nacoran - Arlington
Project PO: _____
Invoice to *: _____

Preservative: 1

COLLECTION DATE 2013	TIME	SAMPLED BY	SAMPLE LOCATION / ID	CONTAINER TYPE	CONTAINER QUANTITY	MATRIX	COMP	GRAB	GeoLabs SAMPLE NUMBER	Analysis Requested: VPH	Analysis Requested: EPH (4 fractions)	Lab Use Only: TEMPERATURE	Lab Use Only: LAB PH
6/3	1600	RM	WS-1	V/AG	2/1	OT		✓	1306012-001	✓	✓	1/5	
↓	1628	JT	WS-2	↓	↓	↓		✓	002	✓	✓		
↓	1707	RM	WS-3	↓	↓	↓		✓	003	✓	✓		

Matrix Codes:
GW = Ground Water DW = Drinking Water S = Soil A = Air
WW = Waste Water SL = Sludge O = Oil OT = Other

Received on Ice ☐

Preservatives
1 = Hcl 3 = H2SO4 5 = NaOH 7 = Other
2 = HNO3 4 = Na2S2O3 6 = MEOH

Containers:
A = Amber B = Bag O = Other
G = Glass P = Plastic
S = Summa V = Voa

Relinquished by: _____ Date / Time 6/4/13
_____ 6/4/13 10:50

Received by: _____ Date / Time 6/4/13 9:50
_____ 6/4/13 10:50

CT (PH-0148) NH (2508) MA (MA-015) RI (LA000252)

ANALYTICAL REPORT

Tuesday, June 18, 2013

GeoLabs, Inc.
45 Johnson Lane
Braintree MA 02184
Tele: 781 848 7844
Fax: 781 848 7811

Rich MacCarthy
Clean Harbors
42 Longwater Drive
Norwell, MA 02061

TEL: (781) 792-5822
FAX: (781) 792-5938

Project: Noonan - Arlington
Location:

Order No.: 1306067

Dear Rich MacCarthy:

GeoLabs, Inc. received 6 sample(s) on 6/7/2013 for the analyses presented in the following report.

The laboratory results in this report relate only to samples submitted. All data for associated QC met method or laboratory specifications, except where noted in the Case Narrative.

Analytical methods and results meet requirements of 310CMR 40.1056(J) as per MADEP Compendium of Analytical Methods (CAM).

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

David Mick
Laboratory Director

For current certifications, please visit our website at www.geolabs.com

Certifications:

CT (PH-0148) - MA (M-MA015) - NH (2508) - RI (LA000252)

Accredited in Accordance with NELAC

MassDEP Analytical Protocol Certification Form

Laboratory Name: GeoLabs, Inc. Project #:

Project Location: Noonan- Arlington RTN:

This form provides certification for the following data set: 1306067 (001-006)

Matrices: ☐ Groundwater/Surface Water ☒ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other-wastewater

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☒	8081 Pesicides CAM V B ☐	7196 Hex Cr CAM VI B ☐		MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☒	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐		TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII 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 ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ 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 ☐ No
D	Does the laboratory report comply with all reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analtyical Data"?	☒ Yes ☐ No
E	VPH, EPH, APH and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications.)	☒ 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 ☐ 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 protocol(s)?	☒ Yes ☐ No

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usablility and representativeness requirements described in 310 CMR 40. 1056 (2) (k) and WSC-07-350.**

H	Were **all** QC performance standards as specified in the CAM protocol(s) achieved?	☐ Yes ☒ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes ☒ No[1]

[1] *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: _____ **Position: Laboratory Director**

Printed Name: David Mick **Date:** June 18, 2013

Date: *18-Jun-13*

CLIENT:	Clean Harbors
Project:	Noonan - Arlington
Lab Order:	1306067

CASE NARRATIVE

Physical Condition of Samples

The project was received by the laboratory in satisfactory condition. The sample(s) were received undamaged, in appropriate containers with the correct preservation.

Project Documentation

The project was accompanied by satisfactory Chain of Custody documentation.

Analysis of Sample(s)

EPH carbon ranges and diesel targets only reported via MADEP EPH, per client request.

All extractable samples were extracted and analyzed and any Volatile samples were analyzed within method specified holding times and according to GeoLabs documented Standard Operating Procedure. The following analytical anomalies or non-conformances were noted by the laboratory during the processing of these samples:

EPHP- Samples 001 and 002- Naphthalene is reported with an 'E' value.
EPHT- Sample 002- surrogates are diluted out of sample.

SIGNATURE: David Mick LAB DIRECTOR

PRINTED NAME: David Mick DATE: 06/18/13

CLIENT:	Clean Harbors
Project:	Noonan - Arlington
Lab Order:	1306067

CASE NARRATIVE

EPH Methods

Method for Ranges: MADEP EPH 04-1.1
Method for Target Analytes: 8270 GC/MS

Carbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
C11-C22 Aromatic Hydrocarbons exclude concentrations of Target PAH Analytes

CERTIFICATION:
Were all QA/QC procedures REQUIRED by the EPH Method followed? YES
Were all performance/acceptance standards achieved? YES
Were any significant modifications made to the EPH method? NO

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

SIGNATURE:  LAB DIRECTOR

PRINTED NAME: David Mick DATE: 06/18/13

CLIENT:	Clean Harbors
Project:	Noonan - Arlington
Lab Order:	1306067

CASE NARRATIVE

VPH Methods

Method for Ranges: MADEP VPH 04-1.1
Method for Target Analytes: MADEP VPH 04-1.1

Soil sample(s) were received in MeOH and soil was completely covered by MeOH.
Soil sample(s) ratio 1:1 +/- 25%

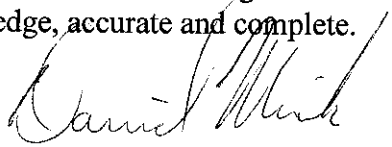
Carbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range. (MTBE, Benzene, Toluene)

C9-C12 Aliphatic Hydrocarbons exclude concentration of Target Analytes eluting in that range (Ethylbenzene, m&p-Xylenes, o-Xylene) AND concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION
Were all QA/QC procedures REQUIRED by the VPH Method followed? YES
Were all QA/QC performance/acceptance standards achieved? YES
Were any significant modifications made to the VPH method, as specified in Sec. 11.3? NO

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

SIGNATURE:  POSITION: LAB DIRECTOR

PRINTED NAME: David Mick

DATE: 06/18/13

ANALYTICAL REPORT

Reported Date: 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-16
Lab Order:	1306067	**Collection Date:**	6/5/2013 11:00:00 AM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-001	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Adjusted C11-C22 Aromatics	*2120*	192		mg/Kg-dry	10	6/12/2013
C09-C18 Aliphatics	*2860*	962		mg/Kg-dry	50	6/12/2013
C19-C36 Aliphatics	*1090*	192		mg/Kg-dry	10	6/12/2013
Unadjusted C11-C22 Aromatics	*2210*	192		mg/Kg-dry	10	6/12/2013
Surr: 1-Chlorooctadecane	59.1	40-140		%REC	1	6/12/2013
Surr: o-Terphenyl	79.6	40-140		%REC	1	6/12/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Naphthalene	*24.3*	0.128		mg/Kg-dry	1	6/12/2013 9:30:00 PM
2-Methylnaphthalene	*61.1*	0.128	E	mg/Kg-dry	1	6/12/2013 9:30:00 PM
Acenaphthene	ND	0.128		mg/Kg-dry	1	6/12/2013 9:30:00 PM
Phenanthrene	*8.04*	0.128		mg/Kg-dry	1	6/12/2013 9:30:00 PM
Total PAH Target Concentration	*93.4*	0.128		mg/Kg-dry	1	6/12/2013 9:30:00 PM
Surr: 2,2-Difluorobiphenyl	55.6	40-140		%REC	1	6/12/2013 9:30:00 PM
Surr: 2-Fluorobiphenyl	48.4	40-140		%REC	1	6/12/2013 9:30:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
Unadjusted C5-C8 Aliphatic HC	*50.9*	12.8		mg/Kg-dry	1	6/13/2013 2:32:00 AM
Unadjusted C9-C12 Aliphatic HC	*328*	128		mg/Kg-dry	10	6/13/2013 1:04:00 AM
Methyl Tert-Butyl Ether	ND	0.128		mg/Kg-dry	1	6/13/2013 2:32:00 AM
Benzene	ND	0.128		mg/Kg-dry	1	6/13/2013 2:32:00 AM
Toluene	*17.9*	0.128		mg/Kg-dry	1	6/13/2013 2:32:00 AM
Ethylbenzene	*29.1*	0.128		mg/Kg-dry	1	6/13/2013 2:32:00 AM
m,p-Xylene	*64.1*	1.28		mg/Kg-dry	10	6/13/2013 1:04:00 AM
o-Xylene	*42.7*	1.28		mg/Kg-dry	10	6/13/2013 1:04:00 AM
Naphthalene	ND	0.128		mg/Kg-dry	1	6/13/2013 2:32:00 AM
C9-C10 Aromatic Hydrocarbons	*488*	128		mg/Kg-dry	10	6/13/2013 1:04:00 AM
Adjusted C5-C8 Aliphatic HC	*33.0*	12.8		mg/Kg-dry	1	6/13/2013 2:32:00 AM
Adjusted C9-C12 Aliphatic HC	ND	12.8		mg/Kg-dry	1	6/13/2013 2:32:00 AM
Surr: 2,5-Dibromotoluene FID	93.1	70-130		%REC	10	6/13/2013 1:04:00 AM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- BRL Below Reporting Limit
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT

Reported Date: 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-16
Lab Order:	1306067	**Collection Date:**	6/5/2013 11:00:00 AM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-001	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:		**Prep Date:**				
Surr: 2,5-Dibromotoluene FID	108	70-130		%REC	1	6/13/2013 2:32:00 AM
Surr: 2,5-Dibromotoluene PID	84.6	70-130		%REC	10	6/13/2013 1:04:00 AM
Surr: 2,5-Dibromotoluene PID	120	70-130		%REC	1	6/13/2013 2:32:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT **Reported Date:** 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-18
Lab Order:	1306067	**Collection Date:**	6/5/2013 12:00:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-002	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Spr)				**Prep Date:** 6/10/2013 2:57:17 PM		
Adjusted C11-C22 Aromatics	*1220*	170		mg/Kg-dry	10	6/12/2013
C09-C18 Aliphatics	*2720*	852		mg/Kg-dry	50	6/12/2013
C19-C36 Aliphatics	*942*	170		mg/Kg-dry	10	6/12/2013
Unadjusted C11-C22 Aromatics	*1270*	170		mg/Kg-dry	10	6/12/2013
Surr: 1-Chlorooctadecane	0	40-140	S	%REC	10	6/12/2013
Surr: o-Terphenyl	0	40-140	S	%REC	10	6/12/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Spr)				**Prep Date:** 6/10/2013 2:57:17 PM		
Naphthalene	*10.9*	0.114		mg/Kg-dry	1	6/12/2013 10:07:00 PM
2-Methylnaphthalene	*30.6*	0.114	E	mg/Kg-dry	1	6/12/2013 10:07:00 PM
Acenaphthene	ND	0.114		mg/Kg-dry	1	6/12/2013 10:07:00 PM
Phenanthrene	*5.43*	0.114		mg/Kg-dry	1	6/12/2013 10:07:00 PM
Total PAH Target Concentration	*46.9*	0.114		mg/Kg-dry	1	6/12/2013 10:07:00 PM
Surr: 2,2-Difluorobiphenyl	54.6	40-140		%REC	1	6/12/2013 10:07:00 PM
Surr: 2-Fluorobiphenyl	49.8	40-140		%REC	1	6/12/2013 10:07:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:				**Prep Date:**		
Unadjusted C5-C8 Aliphatic HC	*42.4*	11.4		mg/Kg-dry	1	6/13/2013 3:15:00 AM
Unadjusted C9-C12 Aliphatic HC	*485*	114		mg/Kg-dry	10	6/13/2013 1:48:00 AM
Methyl Tert-Butyl Ether	ND	0.114		mg/Kg-dry	1	6/13/2013 3:15:00 AM
Benzene	ND	0.114		mg/Kg-dry	1	6/13/2013 3:15:00 AM
Toluene	*16.2*	0.114		mg/Kg-dry	1	6/13/2013 3:15:00 AM
Ethylbenzene	*23.7*	0.114		mg/Kg-dry	1	6/13/2013 3:15:00 AM
m,p-Xylene	*58.8*	1.14		mg/Kg-dry	10	6/13/2013 1:48:00 AM
o-Xylene	*30.5*	0.114		mg/Kg-dry	1	6/13/2013 3:15:00 AM
Naphthalene	ND	0.114		mg/Kg-dry	1	6/13/2013 3:15:00 AM
C9-C10 Aromatic Hydrocarbons	*593*	114		mg/Kg-dry	10	6/13/2013 1:48:00 AM
Adjusted C5-C8 Aliphatic HC	*26.2*	11.4		mg/Kg-dry	1	6/13/2013 3:15:00 AM
Adjusted C9-C12 Aliphatic HC	ND	11.4		mg/Kg-dry	1	6/13/2013 3:15:00 AM
Surr: 2,5-Dibromotoluene FID	86.2	70-130		%REC	10	6/13/2013 1:48:00 AM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- BRL Below Reporting Limit
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

ANALYTICAL REPORT **Reported Date:** 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-18
Lab Order:	1306067	**Collection Date:**	6/5/2013 12:00:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-002	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:		**Prep Date:**				
Surr: 2,5-Dibromotoluene FID	218	70-130	S	%REC	1	6/13/2013 3:15:00 AM
Surr: 2,5-Dibromotoluene PID	87.2	70-130		%REC	10	6/13/2013 1:48:00 AM
Surr: 2,5-Dibromotoluene PID	118	70-130		%REC	1	6/13/2013 3:15:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

ANALYTICAL REPORT **Reported Date:** 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-25
Lab Order:	1306067	**Collection Date:**	6/5/2013 4:30:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-003	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Adjusted C11-C22 Aromatics	ND	16.5		mg/Kg-dry	1	6/12/2013
C09-C18 Aliphatics	ND	16.5		mg/Kg-dry	1	6/12/2013
C19-C36 Aliphatics	ND	16.5		mg/Kg-dry	1	6/12/2013
Unadjusted C11-C22 Aromatics	ND	16.5		mg/Kg-dry	1	6/12/2013
Surr: 1-Chlorooctadecane	61.8	40-140		%REC	1	6/12/2013
Surr: o-Terphenyl	68.6	40-140		%REC	1	6/12/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Naphthalene	ND	0.110		mg/Kg-dry	1	6/12/2013 10:44:00 PM
2-Methylnaphthalene	ND	0.110		mg/Kg-dry	1	6/12/2013 10:44:00 PM
Acenaphthene	ND	0.110		mg/Kg-dry	1	6/12/2013 10:44:00 PM
Phenanthrene	ND	0.110		mg/Kg-dry	1	6/12/2013 10:44:00 PM
Total PAH Target Concentration	ND	0.110		mg/Kg-dry	1	6/12/2013 10:44:00 PM
Surr: 2,2-Difluorobiphenyl	52.1	40-140		%REC	1	6/12/2013 10:44:00 PM
Surr: 2-Fluorobiphenyl	57.4	40-140		%REC	1	6/12/2013 10:44:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
Unadjusted C5-C8 Aliphatic HC	ND	11.0		mg/Kg-dry	1	6/12/2013 10:09:00 AM
Unadjusted C9-C12 Aliphatic HC	ND	11.0		mg/Kg-dry	1	6/12/2013 10:09:00 AM
Methyl Tert-Butyl Ether	ND	0.110		mg/Kg-dry	1	6/12/2013 10:09:00 AM
Benzene	ND	0.110		mg/Kg-dry	1	6/12/2013 10:09:00 AM
Toluene	ND	0.110		mg/Kg-dry	1	6/12/2013 10:09:00 AM
Ethylbenzene	*0.143*	0.110		mg/Kg-dry	1	6/12/2013 10:09:00 AM
m,p-Xylene	*0.375*	0.110		mg/Kg-dry	1	6/12/2013 10:09:00 AM
o-Xylene	*0.789*	0.110		mg/Kg-dry	1	6/12/2013 10:09:00 AM
Naphthalene	ND	0.110		mg/Kg-dry	1	6/12/2013 10:09:00 AM
C9-C10 Aromatic Hydrocarbons	ND	11.0		mg/Kg-dry	1	6/12/2013 10:09:00 AM
Adjusted C5-C8 Aliphatic HC	ND	11.0		mg/Kg-dry	1	6/12/2013 10:09:00 AM
Adjusted C9-C12 Aliphatic HC	ND	11.0		mg/Kg-dry	1	6/12/2013 10:09:00 AM
Surr: 2,5-Dibromotoluene FID	90.2	70-130		%REC	1	6/12/2013 10:09:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT **Reported Date:** 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-25
Lab Order:	1306067	**Collection Date:**	6/5/2013 4:30:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-003	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: ZC
Prep Method:			**Prep Date:**			
Surr: 2,5-Dibromotoluene PID	89.8	70-130		%REC	1	6/12/2013 10:09:00 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT **Reported Date:** 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-37
Lab Order:	1306067	**Collection Date:**	6/5/2013 2:00:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-004	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Adjusted C11-C22 Aromatics	ND	17.6		mg/Kg-dry	1	6/12/2013
C09-C18 Aliphatics	ND	17.6		mg/Kg-dry	1	6/12/2013
C19-C36 Aliphatics	ND	17.6		mg/Kg-dry	1	6/12/2013
Unadjusted C11-C22 Aromatics	ND	17.6		mg/Kg-dry	1	6/12/2013
Surr: 1-Chlorooctadecane	42.1	40-140		%REC	1	6/12/2013
Surr: o-Terphenyl	67.5	40-140		%REC	1	6/12/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Naphthalene	*0.168*	0.118		mg/Kg-dry	1	6/12/2013 11:21:00 PM
2-Methylnaphthalene	*0.566*	0.118		mg/Kg-dry	1	6/12/2013 11:21:00 PM
Acenaphthene	ND	0.118		mg/Kg-dry	1	6/12/2013 11:21:00 PM
Phenanthrene	ND	0.118		mg/Kg-dry	1	6/12/2013 11:21:00 PM
Total PAH Target Concentration	*0.734*	0.118		mg/Kg-dry	1	6/12/2013 11:21:00 PM
Surr: 2,2-Difluorobiphenyl	49.9	40-140		%REC	1	6/12/2013 11:21:00 PM
Surr: 2-Fluorobiphenyl	55.2	40-140		%REC	1	6/12/2013 11:21:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
Unadjusted C5-C8 Aliphatic HC	ND	11.8		mg/Kg-dry	1	6/12/2013 10:52:00 AM
Unadjusted C9-C12 Aliphatic HC	ND	11.8		mg/Kg-dry	1	6/12/2013 10:52:00 AM
Methyl Tert-Butyl Ether	ND	0.118		mg/Kg-dry	1	6/12/2013 10:52:00 AM
Benzene	ND	0.118		mg/Kg-dry	1	6/12/2013 10:52:00 AM
Toluene	ND	0.118		mg/Kg-dry	1	6/12/2013 10:52:00 AM
Ethylbenzene	ND	0.118		mg/Kg-dry	1	6/12/2013 10:52:00 AM
m,p-Xylene	ND	0.118		mg/Kg-dry	1	6/12/2013 10:52:00 AM
o-Xylene	*0.694*	0.118		mg/Kg-dry	1	6/12/2013 10:52:00 AM
Naphthalene	ND	0.118		mg/Kg-dry	1	6/12/2013 10:52:00 AM
C9-C10 Aromatic Hydrocarbons	ND	11.8		mg/Kg-dry	1	6/12/2013 10:52:00 AM
Adjusted C5-C8 Aliphatic HC	ND	11.8		mg/Kg-dry	1	6/12/2013 10:52:00 AM
Adjusted C9-C12 Aliphatic HC	ND	11.8		mg/Kg-dry	1	6/12/2013 10:52:00 AM
Surr: 2,5-Dibromotoluene FID	88.0	70-130		%REC	1	6/12/2013 10:52:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

ANALYTICAL REPORT

Reported Date: 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-37
Lab Order:	1306067	**Collection Date:**	6/5/2013 2:00:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-004	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: ZC
Prep Method:		**Prep Date:**				
Surr: 2,5-Dibromotoluene PID	83.2	70-130		%REC	1	6/12/2013 10:52:00 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT

Reported Date: 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-39
Lab Order:	1306067	**Collection Date:**	6/5/2013 2:30:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-005	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Adjusted C11-C22 Aromatics	ND	16.3		mg/Kg-dry	1	6/12/2013
C09-C18 Aliphatics	*24.4*	16.3		mg/Kg-dry	1	6/12/2013
C19-C36 Aliphatics	ND	16.3		mg/Kg-dry	1	6/12/2013
Unadjusted C11-C22 Aromatics	ND	16.3		mg/Kg-dry	1	6/12/2013
Surr: 1-Chlorooctadecane	40.1	40-140		%REC	1	6/12/2013
Surr: o-Terphenyl	74.7	40-140		%REC	1	6/12/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Naphthalene	ND	0.109		mg/Kg-dry	1	6/12/2013 11:58:00 PM
2-Methylnaphthalene	*0.486*	0.109		mg/Kg-dry	1	6/12/2013 11:58:00 PM
Acenaphthene	ND	0.109		mg/Kg-dry	1	6/12/2013 11:58:00 PM
Phenanthrene	*0.113*	0.109		mg/Kg-dry	1	6/12/2013 11:58:00 PM
Total PAH Target Concentration	*0.599*	0.109		mg/Kg-dry	1	6/12/2013 11:58:00 PM
Surr: 2,2-Difluorobiphenyl	40.0	40-140		%REC	1	6/12/2013 11:58:00 PM
Surr: 2-Fluorobiphenyl	41.3	40-140		%REC	1	6/12/2013 11:58:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
Unadjusted C5-C8 Aliphatic HC	ND	10.9		mg/Kg-dry	1	6/12/2013 11:36:00 AM
Unadjusted C9-C12 Aliphatic HC	ND	10.9		mg/Kg-dry	1	6/12/2013 11:36:00 AM
Methyl Tert-Butyl Ether	ND	0.109		mg/Kg-dry	1	6/12/2013 11:36:00 AM
Benzene	ND	0.109		mg/Kg-dry	1	6/12/2013 11:36:00 AM
Toluene	ND	0.109		mg/Kg-dry	1	6/12/2013 11:36:00 AM
Ethylbenzene	ND	0.109		mg/Kg-dry	1	6/12/2013 11:36:00 AM
m,p-Xylene	ND	0.109		mg/Kg-dry	1	6/12/2013 11:36:00 AM
o-Xylene	ND	0.109		mg/Kg-dry	1	6/12/2013 11:36:00 AM
Naphthalene	*0.610*	0.109		mg/Kg-dry	1	6/12/2013 11:36:00 AM
C9-C10 Aromatic Hydrocarbons	ND	10.9		mg/Kg-dry	1	6/12/2013 11:36:00 AM
Adjusted C5-C8 Aliphatic HC	ND	10.9		mg/Kg-dry	1	6/12/2013 11:36:00 AM
Adjusted C9-C12 Aliphatic HC	ND	10.9		mg/Kg-dry	1	6/12/2013 11:36:00 AM
Surr: 2,5-Dibromotoluene FID	85.9	70-130		%REC	1	6/12/2013 11:36:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

ANALYTICAL REPORT

Reported Date: 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-39
Lab Order:	1306067	**Collection Date:**	6/5/2013 2:30:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-005	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: ZC
Prep Method:			**Prep Date:**			
Surr: 2,5-Dibromotoluene PID	85.6	70-130		%REC	1	6/12/2013 11:36:00 AM

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT

Reported Date: 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-48
Lab Order:	1306067	**Collection Date:**	6/5/2013 3:30:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-006	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Spr)			**Prep Date:**	6/10/2013 2:57:17 PM		
Adjusted C11-C22 Aromatics	ND	17.0		mg/Kg-dry	1	6/12/2013
C09-C18 Aliphatics	ND	17.0		mg/Kg-dry	1	6/12/2013
C19-C36 Aliphatics	ND	17.0		mg/Kg-dry	1	6/12/2013
Unadjusted C11-C22 Aromatics	ND	17.0		mg/Kg-dry	1	6/12/2013
Surr: 1-Chlorooctadecane	58.8	40-140		%REC	1	6/12/2013
Surr: o-Terphenyl	77.9	40-140		%REC	1	6/12/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Spr)			**Prep Date:**	6/10/2013 2:57:17 PM		
Naphthalene	ND	0.114		mg/Kg-dry	1	6/13/2013 12:34:00 AM
2-Methylnaphthalene	*0.568*	0.114		mg/Kg-dry	1	6/13/2013 12:34:00 AM
Acenaphthene	ND	0.114		mg/Kg-dry	1	6/13/2013 12:34:00 AM
Phenanthrene	*0.156*	0.114		mg/Kg-dry	1	6/13/2013 12:34:00 AM
Total PAH Target Concentration	*0.724*	0.114		mg/Kg-dry	1	6/13/2013 12:34:00 AM
Surr: 2,2-Difluorobiphenyl	48.2	40-140		%REC	1	6/13/2013 12:34:00 AM
Surr: 2-Fluorobiphenyl	53.8	40-140		%REC	1	6/13/2013 12:34:00 AM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
Unadjusted C5-C8 Aliphatic HC	ND	11.4		mg/Kg-dry	1	6/13/2013 12:20:00 PM
Unadjusted C9-C12 Aliphatic HC	ND	11.4		mg/Kg-dry	1	6/13/2013 12:20:00 PM
Methyl Tert-Butyl Ether	ND	0.114		mg/Kg-dry	1	6/13/2013 12:20:00 PM
Benzene	ND	0.114		mg/Kg-dry	1	6/13/2013 12:20:00 PM
Toluene	ND	0.114		mg/Kg-dry	1	6/13/2013 12:20:00 PM
Ethylbenzene	*2.07*	0.114		mg/Kg-dry	1	6/13/2013 12:20:00 PM
m,p-Xylene	ND	0.114		mg/Kg-dry	1	6/13/2013 12:20:00 PM
o-Xylene	*0.670*	0.114		mg/Kg-dry	1	6/13/2013 12:20:00 PM
Naphthalene	ND	0.114		mg/Kg-dry	1	6/13/2013 12:20:00 PM
C9-C10 Aromatic Hydrocarbons	ND	11.4		mg/Kg-dry	1	6/13/2013 12:20:00 PM
Adjusted C5-C8 Aliphatic HC	ND	11.4		mg/Kg-dry	1	6/13/2013 12:20:00 PM
Adjusted C9-C12 Aliphatic HC	ND	11.4		mg/Kg-dry	1	6/13/2013 12:20:00 PM
Surr: 2,5-Dibromotoluene FID	87.5	70-130		%REC	1	6/13/2013 12:20:00 PM

Qualifiers:

- B Analyte detected in the associated Method Blank
- BRL Below Reporting Limit
- E Value above quantitation range
- H Holding times for preparation or analysis exceeded
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike Recovery outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT

Reported Date: 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	S-48
Lab Order:	1306067	**Collection Date:**	6/5/2013 3:30:00 PM
Project:	Noonan - Arlington	**Date Received:**	6/7/2013
Lab ID:	1306067-006	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:		**Prep Date:**				
Surr: 2,5-Dibromotoluene PID	83.6	70-130		%REC	1	6/13/2013 12:20:00 PM

Qualifiers:	B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
	S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL QC SUMMARY REPORT

Date: *18-Jun-13*

CLIENT: Clean Harbors
Work Order: 1306067
Project: Noonan - Arlington

TestCode: epht_s

Sample ID: MB-22432	SampType: mblk	TestCode: epht_s	Units: mg/Kg	Prep Date: 6/10/2013	RunNo: 50626
Client ID: ZZZZZ	Batch ID: 22432	TestNo: MADEP EPH (eph_Spr)		Analysis Date: 6/12/2013	SeqNo: 574371

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Adjusted C11-C22 Aromatics	ND	15.0									
C09-C18 Aliphatics	ND	15.0									
C19-C36 Aliphatics	ND	15.0									
Unadjusted C11-C22 Aromatics	ND	15.0									
Surr: 1-Chlorooctadecane	5.411	0	10	0	54.1	40	140				
Surr: o-Terphenyl	9.352	0	10	0	93.5	40	140				

Sample ID: LCS-22432	SampType: Lcs	TestCode: epht_s	Units: mg/Kg	Prep Date: 6/10/2013	RunNo: 50626
Client ID: ZZZZZ	Batch ID: 22432	TestNo: MADEP EPH (eph_Spr)		Analysis Date: 6/12/2013	SeqNo: 574372

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
C09-C18 Aliphatics	ND	15.0	10	0	58.3	40	140				
C19-C36 Aliphatics	ND	15.0	10	0	68.4	40	140				
Unadjusted C11-C22 Aromatics	ND	15.0	10	0	81.0	40	140				
Surr: 1-Chlorooctadecane	6.124	0	10	0	61.2	40	140				
Surr: o-Terphenyl	12.26	0	10	0	123	40	140				

Sample ID: LCS#2-22432	SampType: Lcsd	TestCode: epht_s	Units: mg/Kg	Prep Date: 6/10/2013	RunNo: 50626
Client ID: ZZZZZ	Batch ID: 22432	TestNo: MADEP EPH (eph_Spr)		Analysis Date: 6/12/2013	SeqNo: 574373

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
C09-C18 Aliphatics	ND	15.0	10	0	65.2	40	140	5.826	0	25	
C19-C36 Aliphatics	ND	15.0	10	0	70.6	40	140	6.836	0	25	
Unadjusted C11-C22 Aromatics	ND	15.0	10	0	43.1	40	140	8.095	0	25	
Surr: 1-Chlorooctadecane	5.107	0	10	0	51.1	40	140	0	0		
Surr: o-Terphenyl	7.149	0	10	0	71.5	40	140	0	0	0	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306067
Project: Noonan - Arlington

TestCode: VPH_S2

Sample ID: **MBLK**	SampType: **MBLK**	TestCode: **VPH_S2**	Units: **mg/Kg**	Prep Date:	RunNo: **50664**
Client ID: **ZZZZZ**	Batch ID: **R50664**	TestNo: **VPH**		Analysis Date: **6/12/2013**	SeqNo: **574266**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	0.100									
2,2,4-Trimethylpentane	ND	0.100									
2-Methylpentane	ND	0.100									
n-Butylcyclohexane	ND	0.100									
n-Decane	ND	0.100									
n-Nonane	ND	0.100									
n-Pentane	ND	0.100									
Unadjusted C5-C8 Aliphatic HC	ND	10.0									
Unadjusted C9-C12 Aliphatic HC	ND	10.0									
Methyl Tert-Butyl Ether	ND	0.100									
Benzene	ND	0.100									
Toluene	ND	0.100									
Ethylbenzene	ND	0.100									
m,p-Xylene	ND	0.100									
o-Xylene	ND	0.100									
Naphthalene	ND	0.100									
C9-C10 Aromatic Hydrocarbons	ND	10.0									
Surr: 2,5-Dibromotoluene FID	96.83	0	100	0	96.8	70	130				
Surr: 2,5-Dibromotoluene PID	86.83	0	100	0	86.8	70	130				

Sample ID: **LCS**	SampType: **LCS**	TestCode: **VPH_S2**	Units: **mg/Kg**	Prep Date:	RunNo: **50664**
Client ID: **ZZZZZ**	Batch ID: **R50664**	TestNo: **VPH**		Analysis Date: **6/12/2013**	SeqNo: **574264**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	80.55	0.100	100	0	80.6	70	130				
2,2,4-Trimethylpentane	97.61	0.100	100	0.008	97.6	70	130				
2-Methylpentane	97.73	0.100	100	0	97.7	70	130				

Qualifiers:
BRL Below Reporting Limit
J Analyte detected below quantitation limits
S Spike Recovery outside recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306067
Project: Noonan - Arlington

TestCode: VPH_S2

Sample ID: **LCS** SampType: **LCS** TestCode: **VPH_S2** Units: **mg/Kg** Prep Date: RunNo: **50664**
Client ID: **ZZZZZ** Batch ID: **R50664** TestNo: **VPH** Analysis Date: **6/12/2013** SeqNo: **574264**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
n-Butylcyclohexane	126.4	0.100	100	0	126	70	130				
n-Decane	123.5	0.100	100	0	123	70	130				
n-Nonane	116.4	0.100	100	0	116	30	130				
n-Pentane	102.5	0.100	100	0	103	70	130				
Unadjusted C5-C8 Aliphatic HC	240.7	10.0	300	0	80.2	70	130				
Unadjusted C9-C12 Aliphatic HC	343.2	10.0	300	0	114	70	130				
Methyl Tert-Butyl Ether	80.42	0.100	100	0	80.4	70	130				
Benzene	83.26	0.100	100	0	83.3	70	130				
Toluene	80.22	0.100	100	0.01	80.2	70	130				
Ethylbenzene	82.70	0.100	100	0.015	82.7	70	130				
m,p-Xylene	164.9	0.100	200	0	82.4	70	130				
o-Xylene	91.06	0.100	100	0	91.1	70	130				
Naphthalene	107.4	0.100	100	0	107	70	130				
C9-C10 Aromatic Hydrocarbons	88.32	10.0	100	0	88.3	70	130				
Surr: 2,5-Dibromotoluene FID	89.21	0	100	0	89.2	70	130				
Surr: 2,5-Dibromotoluene PID	83.74	0	100	0	83.7	70	130				

Sample ID: **LCSD** SampType: **LCSD** TestCode: **VPH_S2** Units: **mg/Kg** Prep Date: RunNo: **50664**
Client ID: **ZZZZZ** Batch ID: **R50664** TestNo: **VPH** Analysis Date: **6/12/2013** SeqNo: **574265**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	80.71	0.100	100	0	80.7	70	130	0	0	25	
2,2,4-Trimethylpentane	99.06	0.100	100	0.008	99.1	70	130	0	0	25	
2-Methylpentane	97.94	0.100	100	0	97.9	70	130	0	0	25	
n-Butylcyclohexane	123.4	0.100	100	0	123	70	130	0	0	25	
n-Decane	127.0	0.100	100	0	127	70	130	0	0	25	
n-Nonane	118.6	0.100	100	0	119	30	130	0	0	25	

Qualifiers:
BRL Below Reporting Limit
J Analyte detected below quantitation limits
S Spike Recovery outside recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306067
Project: Noonan - Arlington

TestCode: VPH_S2

Sample ID: LCSD	SampType: LCSD	TestCode: VPH_S2	Units: mg/Kg	Prep Date:	RunNo: 50664
Client ID: ZZZZZ	Batch ID: R50664	TestNo: VPH		Analysis Date: 6/12/2013	SeqNo: 574265

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
n-Pentane	103.0	0.100	100	0	103	70	130	0	0	25	
Unadjusted C5-C8 Aliphatic HC	242.2	10.0	300	0	80.7	70	130	0	0	25	
Unadjusted C9-C12 Aliphatic HC	357.3	10.0	300	0	119	70	130	0	0	25	
Methyl Tert-Butyl Ether	82.03	0.100	100	0	82.0	70	130	0	0	25	
Benzene	81.96	0.100	100	0	82.0	70	130	0	0	25	
Toluene	86.54	0.100	100	0.01	86.5	70	130	0	0	25	
Ethylbenzene	89.74	0.100	100	0.015	89.7	70	130	0	0	25	
m,p-Xylene	180.5	0.100	200	0	90.3	70	130	0	0	25	
o-Xylene	82.74	0.100	100	0	82.7	70	130	0	0	25	
Naphthalene	113.1	0.100	100	0	113	70	130	0	0	25	
C9-C10 Aromatic Hydrocarbons	88.33	10.0	100	0	88.3	70	130	0	0	25	
Surr: 2,5-Dibromotoluene FID	83.67	0	100	0	83.7	70	130	0	0	0	
Surr: 2,5-Dibromotoluene PID	88.66	0	100	0	88.7	70	130	0	0	0	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CHAIN OF CUSTODY RECORD

GeoLabs, Inc. *Environmental Laboratories*
45 Johnson Lane, Braintree, MA 02184
p 781.848.7844 • f 781.848.7811
www.geolabs.com

1300601 PAGE 1 OF 1

Sample Handling: circle choice
Filtration: Done / Not Needed / Lab to do
Preservation: Lab to do Y / (N)

Special Instructions
CAM Compliant

Turnaround: circle one
1-day 3-day
2-day (5 / 7-days)

Data Delivery: circle choice (s)
Fax (email)
Format:
Excel (PDF)

Requirements: circle choice (s)
GW-1 (MCP Methods)
S-1 DEP
QC Other _____
CT RCP (Reasonable Confidence Protocols)
State / Fed Program - Criteria _____

Client: Clean Harbors
Address: 42 Longwater Dr. Norwell, MA 02061
Contact: Rich MacCarthy

Phone: 781-792-5822
Fax: 781-871-0690
email: maccarthyr@cleanharbors.com

Project: Noonan-Arlington
Project PO: _____
Invoice to *: _____

Preserative: 6

COLLECTION DATE 2013	TIME	SAMPLED BY	SAMPLE LOCATION / ID	CONTAINER TYPE	CONTAINER QUANTITY	MATRIX	COMP	GRAB	GeoLabs SAMPLE NUMBER	Analysis Requested: VPH	Analysis Requested: EPH (4 Diesel Targets)	Lab Use Only: TEMPERATURE	Lab Use Only: LAB pH
6/5	1100	JT	S-16	V/G	1/1	S		✓	1300601-001	✓	✓	6	
6/5	1200		S-18	V/G		S		✓	002	✓	✓		
6/5	1630		S-25	V/G		S		✓	003	✓	✓		
6/6	1400		S-37	V/G		S		✓	004	✓	✓		
6/6	1430		S-39	V/G		S		✓	005	✓	✓		
6/6	1530	↓	S-48	V/G	↓	S		✓	006	✓	✓		

Matrix Codes:
GW = Ground Water DW = Drinking Water S = Soil A = Air
WW = Waste Water SL = Sludge O = Oil OT = Other

Received on Ice ☐

Preservatives
1 = Hcl 3 = H2SO4 5 = NaOH 7 = Other
2 = HNO3 4 = Na2S2O3 6 = MEOH

Containers:
A = Amber B = Bag O = Other
G = Glass P = Plastic
S = Summa V = Voa

Relinquished by: _____ Date / Time: 6/7/13 @ 1715

Received by: _____ Date / Time: 6-7-13 5:15

 THANK YOU - WE APPRECIATE YOUR BUSINESS *All discounting will be removed after 90 days* * All Payment terms are NET 30 Days. A late payment charge of 1.5% per mont or 18% per year, together with expenses above and beyond collection costs, inclyding attoreny"s fees and court costs, will be applied to balances that go beyond NET 30 days.

CT (PH-0148) NH (2508) MA (MA-015) RI (LA000252)

ANALYTICAL REPORT

Tuesday, June 18, 2013

GeoLabs, Inc.
45 Johnson Lane
Braintree MA 02184
Tele: 781 848 7844
Fax: 781 848 7811

Rich MacCarthy
Clean Harbors
42 Longwater Drive
Norwell, MA 02061

TEL: (781) 792-5822
FAX: (781) 792-5938

Project: Noonan Park
Location:

Order No.: 1306066

Dear Rich MacCarthy:

GeoLabs, Inc. received 1 sample(s) on 6/7/2013 for the analyses presented in the following report.

The laboratory results in this report relate only to samples submitted. All data for associated QC met method or laboratory specifications, except where noted in the Case Narrative.

Analytical methods and results meet requirements of 310CMR 40.1056(J) as per MADEP Compendium of Analytical Methods (CAM).

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

David Mick
Laboratory Director

For current certifications, please visit our website at www.geolabs.com
Certifications:
CT (PH-0148) - MA (M-MA015) - NH (2508) - RI (LA000252)
Accredited in Accordance with NELAC

MassDEP Analytical Protocol Certification Form

Laboratory Name: GeoLabs, Inc. Project #:

Project Location: Noonan- Park RTN:

This form provides certification for the following data set: 1306066-001

Matrices: ☐ Groundwater/Surface Water ☒ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other-wastewater

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☐	8081 Pesicides CAM V B ☐	7196 Hex Cr CAM VI B ☐		MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☒	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐		TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII 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 ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ 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 ☐ No
D	Does the laboratory report comply with all reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analtyical Data"?	☒ Yes ☐ No
E	VPH, EPH, APH and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications.)	☒ 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 ☐ 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 protocol(s)?	☒ Yes ☐ No

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usablility and representativeness requirements described in 310 CMR 40. 1056 (2) (k) and WSC-07-350.**

H	Were **all** QC performance standards as specified in the CAM protocol(s) achieved?	☒ Yes ☐ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes ☒ No[1]

[1] *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: _____ **Position: Laboratory Director**

Printed Name: David Mick **Date:** June 18, 2013

Date: *18-Jun-13*

CLIENT: Clean Harbors
Project: Noonan Park
Lab Order: 1306066

CASE NARRATIVE

Physical Condition of Samples

The project was received by the laboratory in satisfactory condition. The sample(s) were received undamaged, in appropriate containers with the correct preservation.

Project Documentation

The project was accompanied by satisfactory Chain of Custody documentation.

Analysis of Sample(s)

EPH carbon ranges and diesel targets only reported via MADEP EPH, per client request.

All extractable samples were extracted and analyzed and any Volatile samples were analyzed within method specified holding times and according to GeoLabs documented Standard Operating Procedure. No analytical anomalies or non-conformances were noted by the laboratory during the processing of these samples.

SIGNATURE: David Mick LAB DIRECTOR

PRINTED NAME: David Mick DATE: 06/18/13

CLIENT:	Clean Harbors
Project:	Noonan Park
Lab Order:	1306066

CASE NARRATIVE

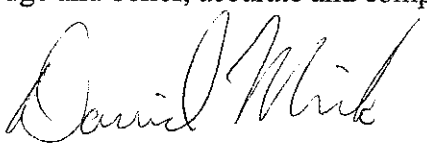
EPH Methods

Method for Ranges: MADEP EPH 04-1.1
Method for Target Analytes: 8270 GC/MS

Carbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
C11-C22 Aromatic Hydrocarbons exclude concentrations of Target PAH Analytes

CERTIFICATION:
Were all QA/QC procedures REQUIRED by the EPH Method followed? YES
Were all performance/acceptance standards achieved? YES
Were any significant modifications made to the EPH method? NO

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

SIGNATURE:  LAB DIRECTOR

PRINTED NAME: David Mick DATE: 06/18/13

ANALYTICAL REPORT

Reported Date: 18-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	SS-12
Lab Order:	1306066	**Collection Date:**	6/6/2013 6:00:00 PM
Project:	Noonan Park	**Date Received:**	6/7/2013
Lab ID:	1306066-001	**Matrix:**	SOIL

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Adjusted C11-C22 Aromatics	ND	16.3		mg/Kg-dry	1	6/12/2013
C09-C18 Aliphatics	ND	16.3		mg/Kg-dry	1	6/12/2013
C19-C36 Aliphatics	ND	16.3		mg/Kg-dry	1	6/12/2013
Unadjusted C11-C22 Aromatics	ND	16.3		mg/Kg-dry	1	6/12/2013
Surr: 1-Chlorooctadecane	63.9	40-140		%REC	1	6/12/2013
Surr: o-Terphenyl	88.2	40-140		%REC	1	6/12/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Spr)			**Prep Date:**	**6/10/2013 2:57:17 PM**		
Naphthalene	ND	0.109		mg/Kg-dry	1	6/13/2013 1:11:00 AM
2-Methylnaphthalene	ND	0.109		mg/Kg-dry	1	6/13/2013 1:11:00 AM
Acenaphthene	ND	0.109		mg/Kg-dry	1	6/13/2013 1:11:00 AM
Phenanthrene	*0.255*	0.109		mg/Kg-dry	1	6/13/2013 1:11:00 AM
Total PAH Target Concentration	*0.255*	0.109		mg/Kg-dry	1	6/13/2013 1:11:00 AM
Surr: 2,2-Difluorobiphenyl	50.9	40-140		%REC	1	6/13/2013 1:11:00 AM
Surr: 2-Fluorobiphenyl	55.5	40-140		%REC	1	6/13/2013 1:11:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL QC SUMMARY REPORT

Date: *18-Jun-13*

CLIENT: Clean Harbors
Work Order: 1306066
Project: Noonan Park

TestCode: epht_s

Sample ID: MB-22432	SampType: mblk	TestCode: epht_s	Units: mg/Kg	Prep Date: 6/10/2013	RunNo: 50626
Client ID: ZZZZZ	Batch ID: 22432	TestNo: MADEP EPH (eph_Spr)		Analysis Date: 6/12/2013	SeqNo: 574371

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Adjusted C11-C22 Aromatics	ND	15.0									
C09-C18 Aliphatics	ND	15.0									
C19-C36 Aliphatics	ND	15.0									
Unadjusted C11-C22 Aromatics	ND	15.0									
Surr: 1-Chlorooctadecane	5.411	0	10	0	54.1	40	140				
Surr: o-Terphenyl	9.352	0	10	0	93.5	40	140				

Sample ID: LCS-22432	SampType: Lcs	TestCode: epht_s	Units: mg/Kg	Prep Date: 6/10/2013	RunNo: 50626
Client ID: ZZZZZ	Batch ID: 22432	TestNo: MADEP EPH (eph_Spr)		Analysis Date: 6/12/2013	SeqNo: 574372

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
C09-C18 Aliphatics	ND	15.0	10	0	58.3	40	140				
C19-C36 Aliphatics	ND	15.0	10	0	68.4	40	140				
Unadjusted C11-C22 Aromatics	ND	15.0	10	0	81.0	40	140				
Surr: 1-Chlorooctadecane	6.124	0	10	0	61.2	40	140				
Surr: o-Terphenyl	12.26	0	10	0	123	40	140				

Sample ID: LCS#2-22432	SampType: Lcsd	TestCode: epht_s	Units: mg/Kg	Prep Date: 6/10/2013	RunNo: 50626
Client ID: ZZZZZ	Batch ID: 22432	TestNo: MADEP EPH (eph_Spr)		Analysis Date: 6/12/2013	SeqNo: 574373

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
C09-C18 Aliphatics	ND	15.0	10	0	65.2	40	140	5.826	0	25	
C19-C36 Aliphatics	ND	15.0	10	0	70.6	40	140	6.836	0	25	
Unadjusted C11-C22 Aromatics	ND	15.0	10	0	43.1	40	140	8.095	0	25	
Surr: 1-Chlorooctadecane	5.107	0	10	0	51.1	40	140	0	0		
Surr: o-Terphenyl	7.149	0	10	0	71.5	40	140	0	0	0	

Qualifiers:
BRL Below Reporting Limit
J Analyte detected below quantitation limits
S Spike Recovery outside recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

1306066 PAGE 1 OF 1

CHAIN OF CUSTODY RECORD

GeoLabs, Inc. *Environmental Laboratories*
45 Johnson Lane, Braintree, MA 02184
p 781.848.7844 • f 781.848.7811
www.geolabs.com

Sample Handling: circle choice
Filtration: Done / Not Needed / Lab to do
Preservation: Lab to do Y / N

Special Instructions
CAM Compliant

Turnaround: circle one
1-day 3-day
2-day 5/7-days

Data Delivery: circle choice (s)
Fax email
Format:
Excel PDF

Requirements: circle choice (s)
GW-1 MCP Methods
S-1 DEP
QC Other _____
CT RCP (Reasonable Confidence Protocols)
State / Fed Program - Criteria _____

Client: Clean Harbors
Address: 42 Longwater Drive
Norwell, MA 02061
Contact: Rich MacCarthy

Phone: 781-792-5822
Fax: 781-871-0690
email: maccarthy@cleanharbors.com

Project: Noonan - Park
Project PO: _____
Invoice to *: _____

Preservative:

COLLECTION DATE 2013	TIME	SAMPLED BY	SAMPLE LOCATION / ID	CONTAINER TYPE	CONTAINER QUANTITY	MATRIX	COMP	GRAB	GeoLabs SAMPLE NUMBER	Analysis Requested: EPH (4 Diesel Targets)							Lab Use Only: TEMPERATURE	Lab Use Only: LAB PH
6/6	1800	JT	SS-12	G	1	S		✓	60606-001	✓							6	

Matrix Codes:
GW = Ground Water DW = Drinking Water S = Soil A = Air
WW = Waste Water SL = Sludge O = Oil OT = Other

Received on Ice ☐

Preservatives
1 = Hcl 3 = H2SO4 5 = NaOH 7 = Other
2 = HNO3 4 = Na2S2O3 6 = MEOH

Containers:
A = Amber B = Bag O = Other
G = Glass P = Plastic
S = Summa V = Voa

Relinquished by: _____ Date / Time 6/7/13 @ 1715

Received by: _____ Date / Time 6-7-13 515

ANALYTICAL REPORT

Monday, June 17, 2013

GeoLabs, Inc.
45 Johnson Lane
Braintree MA
Tele: 781 848 7844
Fax: 781 848 7811

Rich MacCarthy
Clean Harbors
42 Longwater Drive
Norwell, MA 02061

TEL: (781) 792-5822
FAX: (781) 792-5938

Project:
Location: Noonan-Arlington

Order No.: 1306012

Dear Rich MacCarthy:

GeoLabs, Inc. received 3 sample(s) on 6/4/2013 for the analyses presented in the following report.

The laboratory results in this report relate only to samples submitted. All data for associated QC met method or laboratory specifications, except where noted in the Case Narrative.

Report is being re-issued with additional comments on Case Narrative. Analytical methods and results meet requirements of 310CMR 40.1056(J) as per MADEP Compendium of Analytical Methods (CAM).

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

David Mick
Laboratory Director

For current certifications, please visit our website at
Certifications:
CT (PH-0148) - MA (M-MA015) - NH (2508) - RI (LA000252)
Accredited in Accordance with

MassDEP Analytical Protocol Certification Form

Laboratory Name: GeoLabs, Inc. Project #:

Project Location: Noonan-Arlington RTN:

This form provides certification for the following data set: 1306012 (001-003)

Matrices: ☒ Groundwater/Surface Water ☐ Soil/Sediment ☐ Drinking Water ☐ Air ☐ Other-wastewater

CAM Protocol (check all that apply below):

8260 VOC CAM II A ☐	7470/7471 Hg CAM III B ☐	MassDEP VPH CAM IV A ☒	8081 Pesicides CAM V B ☐	7196 Hex Cr CAM VI B ☐		MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☒	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐		TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII 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 ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ 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 ☐ No
D	Does the laboratory report comply with all reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analtyical Data"?	☒ Yes ☐ No
E	VPH, EPH, APH and TO-15 only:	
	a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications.)	☒ 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 ☐ 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 protocol(s)?	☒ Yes ☐ No

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usablility and representativeness requirements described in 310 CMR 40. 1056 (2) (k) and WSC-07-350.**

H	Were **all** QC performance standards as specified in the CAM protocol(s) achieved?	☐ Yes ☒ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes ☒ No[1]

[1] *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: David Mick **Position: Laboratory Director**

Printed Name: David Mick **Date:** June 17, 2013

Date: *17-Jun-13*

CLIENT: Clean Harbors
Project:
Lab Order: 1306012

CASE NARRATIVE

Physical Condition of Samples

The project was received by the laboratory in satisfactory condition. The sample(s) were received undamaged, in appropriate containers with the correct preservation, with the following exception: Samples were unpreserved, but brought directly from the field.

Project Documentation

The project was accompanied by satisfactory Chain of Custody documentation.

Analysis of Sample(s)

Carbon ranges and diesel targets only analyzed via MADEP EPH method, per client request.

All extractable samples were extracted and analyzed and any Volatile samples were analyzed within method specified holding times and according to GeoLabs documented Standard Operating Procedure. The following analytical anomalies or non-conformances were noted by the laboratory during the processing of these samples:

VPH LCSD RPD % Recovery for Naphthalene is outside of recovery limits.

SIGNATURE:  LAB DIRECTOR

PRINTED NAME: David Mick DATE: 06/17/13

CLIENT: Clean Harbors
Project:
Lab Order: 1306012

CASE NARRATIVE

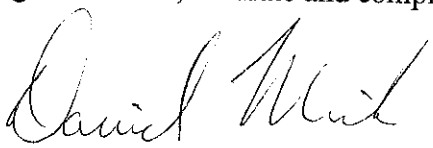
EPH Methods

Method for Ranges: MADEP EPH 04-1.1
Method for Target Analytes: 8270 GC/MS

Carbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
C11-C22 Aromatic Hydrocarbons exclude concentrations of Target PAH Analytes

CERTIFICATION:
Were all QA/QC procedures REQUIRED by the EPH Method followed? YES
Were all performance/acceptance standards achieved? YES
Were any significant modifications made to the EPH method? NO

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

SIGNATURE:  LAB DIRECTOR

PRINTED NAME: David Mick DATE: 06/17/13

CLIENT: Clean Harbors
Project:
Lab Order: 1306012

CASE NARRATIVE

VPH Methods

Method for Ranges: MADEP VPH 04-1.1
Method for Target Analytes: MADEP VPH 04-1.1

Soil sample(s) were received in MeOH and soil was completely covered by MeOH.
Soil sample(s) ratio 1:1 +/- 25%

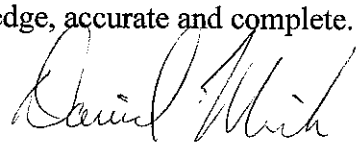
Carbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range. (MTBE, Benzene, Toluene)

C9-C12 Aliphatic Hydrocarbons exclude concentration of Target Analytes eluting in that range (Ethylbenzene, m&p-Xylenes, o-Xylene) AND concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION
Were all QA/QC procedures REQUIRED by the VPH Method followed? YES
Were all QA/QC performance/acceptance standards achieved? NO (See Case Narrative)
Were any significant modifications made to the VPH method, as specified in Sec. 11.3? NO

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

SIGNATURE:  POSITION: LAB DIRECTOR

PRINTED NAME: David Mick

DATE: 06/17/13

ANALYTICAL REPORT **Reported Date:** 17-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-1
Lab Order:	1306012	**Collection Date:**	6/3/2013 4:00:00 PM
Project:		**Date Received:**	6/4/2013
Lab ID:	1306012-001	**Matrix:**	WATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/4/2013 8:59:14 AM**		
Adjusted C11-C22 Aromatics	ND	103		µg/L	1	6/7/2013
C09-C18 Aliphatics	ND	103		µg/L	1	6/7/2013
C19-C36 Aliphatics	*118*	103		µg/L	1	6/7/2013
Unadjusted C11-C22 Aromatics	ND	103		µg/L	1	6/7/2013
Surr: 1-Chlorooctadecane	52.3	40-140		%REC	1	6/7/2013
Surr: o-Terphenyl	77.8	40-140		%REC	1	6/7/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/4/2013 8:59:14 AM**		
Naphthalene	ND	1.03		µg/L	1	6/6/2013 12:09:00 PM
2-Methylnaphthalene	*5.91*	1.03		µg/L	1	6/6/2013 12:09:00 PM
Acenaphthene	ND	1.03		µg/L	1	6/6/2013 12:09:00 PM
Phenanthrene	ND	1.03		µg/L	1	6/6/2013 12:09:00 PM
Total PAH Target Concentration	*5.91*	1.03		µg/L	1	6/6/2013 12:09:00 PM
Surr: 2,2-Difluorobiphenyl	51.2	40-140		%REC	1	6/6/2013 12:09:00 PM
Surr: 2-Fluorobiphenyl	54.3	40-140		%REC	1	6/6/2013 12:09:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
C9-C10 Aromatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 12:33:00 PM
Unadjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 12:33:00 PM
Unadjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 12:33:00 PM
Methyl Tert-Butyl Ether	ND	1.00		µg/L	1	6/6/2013 12:33:00 PM
Benzene	ND	1.00		µg/L	1	6/6/2013 12:33:00 PM
Toluene	*2.06*	1.00		µg/L	1	6/6/2013 12:33:00 PM
Ethylbenzene	*1.23*	1.00		µg/L	1	6/6/2013 12:33:00 PM
m,p-Xylene	*3.16*	1.00		µg/L	1	6/6/2013 12:33:00 PM
o-Xylene	*7.46*	1.00		µg/L	1	6/6/2013 12:33:00 PM
Naphthalene	ND	1.00		µg/L	1	6/6/2013 12:33:00 PM
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 12:33:00 PM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- BRL Below Reporting Limit
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

ANALYTICAL REPORT

Reported Date: 17-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-1
Lab Order:	1306012	**Collection Date:**	6/3/2013 4:00:00 PM
Project:		**Date Received:**	6/4/2013
Lab ID:	1306012-001	**Matrix:**	WATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: ZC
Prep Method:		**Prep Date:**				
Adjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 12:33:00 PM
Surr: 2,5-Dibromotoluene FID	119	70-130		%REC	1	6/6/2013 12:33:00 PM
Surr: 2,5-Dibromotoluene PID	85.0	70-130		%REC	1	6/6/2013 12:33:00 PM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT **Reported Date:** 17-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-2
Lab Order:	1306012	**Collection Date:**	6/3/2013 4:28:00 PM
Project:		**Date Received:**	6/4/2013
Lab ID:	1306012-002	**Matrix:**	WATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/4/2013 8:59:14 AM**		
Adjusted C11-C22 Aromatics	ND	101		µg/L	1	6/7/2013
C09-C18 Aliphatics	ND	101		µg/L	1	6/7/2013
C19-C36 Aliphatics	ND	101		µg/L	1	6/7/2013
Unadjusted C11-C22 Aromatics	ND	101		µg/L	1	6/7/2013
Surr: 1-Chlorooctadecane	72.7	40-140		%REC	1	6/7/2013
Surr: o-Terphenyl	76.9	40-140		%REC	1	6/7/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/4/2013 8:59:14 AM**		
Naphthalene	ND	1.01		µg/L	1	6/6/2013 12:47:00 PM
2-Methylnaphthalene	ND	1.01		µg/L	1	6/6/2013 12:47:00 PM
Acenaphthene	ND	1.01		µg/L	1	6/6/2013 12:47:00 PM
Phenanthrene	ND	1.01		µg/L	1	6/6/2013 12:47:00 PM
Total PAH Target Concentration	ND	1.01		µg/L	1	6/6/2013 12:47:00 PM
Surr: 2,2-Difluorobiphenyl	52.1	40-140		%REC	1	6/6/2013 12:47:00 PM
Surr: 2-Fluorobiphenyl	57.1	40-140		%REC	1	6/6/2013 12:47:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
C9-C10 Aromatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 1:21:00 AM
Unadjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 1:21:00 AM
Unadjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 1:21:00 AM
Methyl Tert-Butyl Ether	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
Benzene	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
Toluene	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
Ethylbenzene	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
m,p-Xylene	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
o-Xylene	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
Naphthalene	ND	1.00		µg/L	1	6/6/2013 1:21:00 AM
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 1:21:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT

Reported Date: 17-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-2
Lab Order:	1306012	**Collection Date:**	6/3/2013 4:28:00 PM
Project:		**Date Received:**	6/4/2013
Lab ID:	1306012-002	**Matrix:**	WATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:		**Prep Date:**				
Adjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 1:21:00 AM
Surr: 2,5-Dibromotoluene FID	128	70-130		%REC	1	6/6/2013 1:21:00 AM
Surr: 2,5-Dibromotoluene PID	87.5	70-130		%REC	1	6/6/2013 1:21:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT **Reported Date:** 17-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-3
Lab Order:	1306012	**Collection Date:**	6/3/2013 5:07:00 PM
Project:		**Date Received:**	6/4/2013
Lab ID:	1306012-003	**Matrix:**	WATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Wpr)			**Prep Date:**	6/4/2013 8:59:14 AM		
Adjusted C11-C22 Aromatics	ND	101		µg/L	1	6/7/2013
C09-C18 Aliphatics	ND	101		µg/L	1	6/7/2013
C19-C36 Aliphatics	ND	101		µg/L	1	6/7/2013
Unadjusted C11-C22 Aromatics	ND	101		µg/L	1	6/7/2013
Surr: 1-Chlorooctadecane	60.4	40-140		%REC	1	6/7/2013
Surr: o-Terphenyl	65.6	40-140		%REC	1	6/7/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Wpr)			**Prep Date:**	6/4/2013 8:59:14 AM		
Naphthalene	ND	1.01		µg/L	1	6/6/2013 1:25:00 PM
2-Methylnaphthalene	ND	1.01		µg/L	1	6/6/2013 1:25:00 PM
Acenaphthene	ND	1.01		µg/L	1	6/6/2013 1:25:00 PM
Phenanthrene	ND	1.01		µg/L	1	6/6/2013 1:25:00 PM
Total PAH Target Concentration	ND	1.01		µg/L	1	6/6/2013 1:25:00 PM
Surr: 2,2-Difluorobiphenyl	55.6	40-140		%REC	1	6/6/2013 1:25:00 PM
Surr: 2-Fluorobiphenyl	53.8	40-140		%REC	1	6/6/2013 1:25:00 PM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
C9-C10 Aromatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 2:08:00 AM
Unadjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 2:08:00 AM
Unadjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 2:08:00 AM
Methyl Tert-Butyl Ether	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
Benzene	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
Toluene	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
Ethylbenzene	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
m,p-Xylene	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
o-Xylene	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
Naphthalene	ND	1.00		µg/L	1	6/6/2013 2:08:00 AM
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 2:08:00 AM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- BRL Below Reporting Limit
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

ANALYTICAL REPORT **Reported Date:** 17-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-3
Lab Order:	1306012	**Collection Date:**	6/3/2013 5:07:00 PM
Project:		**Date Received:**	6/4/2013
Lab ID:	1306012-003	**Matrix:**	WATER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: ZC
Prep Method:		**Prep Date:**				
Adjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/6/2013 2:08:00 AM
Surr: 2,5-Dibromotoluene FID	109	70-130		%REC	1	6/6/2013 2:08:00 AM
Surr: 2,5-Dibromotoluene PID	82.8	70-130		%REC	1	6/6/2013 2:08:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL QC SUMMARY REPORT

Date: *17-Jun-13*

CLIENT: Clean Harbors
Work Order: 1306012
Project:

TestCode: EPHP_W_DIESEL

Sample ID: **MB-22401**	SampType: **MBLK**	TestCode: **EPHP_W_DIE** Units: **µg/L**	Prep Date: **6/4/2013**	RunNo: **50506**
Client ID: **ZZZZZ**	Batch ID: **22401**	TestNo: **MADEP EPH_ (eph_Wpr)**	Analysis Date: **6/5/2013**	SeqNo: **573403**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	1.00									
2-Methylnaphthalene	ND	1.00									
Acenaphthene	ND	1.00									
Phenanthrene	ND	1.00									
Total PAH Target Concentration	ND	1.00									
Surr: 2,2-Difluorobiphenyl	10.72	0	25	0	42.9	40	140				
Surr: 2-Fluorobiphenyl	12.01	0	25	0	48.0	40	140				

Sample ID: **LCS-22401**	SampType: **LCS**	TestCode: **EPHP_W_DIE** Units: **µg/L**	Prep Date: **6/4/2013**	RunNo: **50506**
Client ID: **ZZZZZ**	Batch ID: **22401**	TestNo: **MADEP EPH_ (eph_Wpr)**	Analysis Date: **6/5/2013**	SeqNo: **573401**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	20.77	1.00	50	0	41.5	40	140				
2-Methylnaphthalene	23.32	1.00	50	0	46.6	40	140				
Acenaphthene	26.57	1.00	50	0	53.1	40	140				
Phenanthrene	38.55	1.00	50	0	77.1	40	140				
Surr: 2,2-Difluorobiphenyl	11.72	0	25	0	46.9	40	140				
Surr: 2-Fluorobiphenyl	12.73	0	25	0	50.9	40	140				

Sample ID: **LCSD-22401**	SampType: **LCSD**	TestCode: **EPHP_W_DIE** Units: **µg/L**	Prep Date: **6/4/2013**	RunNo: **50506**
Client ID: **ZZZZZ**	Batch ID: **22401**	TestNo: **MADEP EPH_ (eph_Wpr)**	Analysis Date: **6/5/2013**	SeqNo: **573402**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	22.59	1.00	50	0	45.2	40	140	20.77	8.39	50	
2-Methylnaphthalene	25.52	1.00	50	0	51.0	40	140	23.32	9.01	50	
Acenaphthene	28.37	1.00	50	0	56.7	40	140	26.57	6.55	50	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306012
Project:

TestCode: EPHP_W_DIESEL

Sample ID: LCSD-22401	SampType: LCSD	TestCode: EPHP_W_DIE	Units: µg/L	Prep Date: 6/4/2013	RunNo: 50506
Client ID: ZZZZZ	Batch ID: 22401	TestNo: MADEP EPH_ (eph_Wpr)		Analysis Date: 6/5/2013	SeqNo: 573402

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Phenanthrene	40.41	1.00	50	0	80.8	40	140	38.55	4.71	50	
Surr: 2,2-Difluorobiphenyl	12.41	0	25	0	49.6	40	140	0	0	0	
Surr: 2-Fluorobiphenyl	12.64	0	25	0	50.6	40	140	0	0	0	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306012
Project:

TestCode: epht_w

Sample ID: **MB-22401**	SampType: **mblk**	TestCode: **epht_w**	Units: **µg/L**	Prep Date: **6/4/2013**	RunNo: **50494**
Client ID: **ZZZZZ**	Batch ID: **22401**	TestNo: **MADEP EPH**	**(eph_Wpr)**	Analysis Date: **6/4/2013**	SeqNo: **573366**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Adjusted C11-C22 Aromatics	ND	100									
C09-C18 Aliphatics	ND	100									
C19-C36 Aliphatics	ND	100									
Unadjusted C11-C22 Aromatics	ND	100									
Surr: 1-Chlorooctadecane	60.63	0	100	0	60.6	40	140				
Surr: o-Terphenyl	66.70	0	100	0	66.7	40	140				

Sample ID: **LCS-22401**	SampType: **Lcs**	TestCode: **epht_w**	Units: **µg/L**	Prep Date: **6/4/2013**	RunNo: **50494**
Client ID: **ZZZZZ**	Batch ID: **22401**	TestNo: **MADEP EPH**	**(eph_Wpr)**	Analysis Date: **6/4/2013**	SeqNo: **573367**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
C09-C18 Aliphatics	ND	100	100	0	50.9	40	140				
C19-C36 Aliphatics	ND	100	100	0	49.0	40	140				
Unadjusted C11-C22 Aromatics	ND	100	100	0	49.8	40	140				
Surr: 1-Chlorooctadecane	58.92	0	100	0	58.9	40	140				
Surr: o-Terphenyl	65.93	0	100	0	65.9	40	140				

Sample ID: **LCSD-22401**	SampType: **Lcsd**	TestCode: **epht_w**	Units: **µg/L**	Prep Date: **6/4/2013**	RunNo: **50494**
Client ID: **ZZZZZ**	Batch ID: **22401**	TestNo: **MADEP EPH**	**(eph_Wpr)**	Analysis Date: **6/4/2013**	SeqNo: **573368**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
C09-C18 Aliphatics	ND	100	100	0	57.3	40	140	50.92	0	25	
C19-C36 Aliphatics	ND	100	100	0	47.8	40	140	49	0	25	
Unadjusted C11-C22 Aromatics	ND	100	100	0	64.9	40	140	49.82	0	25	
Surr: 1-Chlorooctadecane	59.71	0	100	0	59.7	40	140	0	0	0	
Surr: o-Terphenyl	82.41	0	100	0	82.4	40	140	0	0	0	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306012
Project:

TestCode: VPH_W2

Sample ID: **MBLK** SampType: **MBLK** TestCode: **VPH_W2** Units: **µg/L** Prep Date: RunNo: **50547**
Client ID: **ZZZZZ** Batch ID: **R50547** TestNo: **VPH** Analysis Date: **6/6/2013** SeqNo: **573130**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.00									
2,2,4-Trimethylpentane	ND	1.00									
2-Methylpentane	ND	1.00									
n-Butylcyclohexane	ND	1.00									
n-Decane	ND	1.00									
n-Nonane	ND	1.00									
n-Pentane	ND	1.00									
C9-C10 Aromatic Hydrocarbons	ND	100									
Unadjusted C5-C8 Aliphatic Hydrocarbo	ND	100									
Unadjusted C9-C12 Aliphatic Hydrocarb	ND	100									
Methyl Tert-Butyl Ether	ND	1.00									
Benzene	ND	1.00									
Toluene	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Naphthalene	ND	1.00									
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100									
Adjusted C9-C12 Aliphatic Hydrocarbon	ND	100									
Surr: 2,5-Dibromotoluene FID	89.04	0	100	0	89.0	70	130				
Surr: 2,5-Dibromotoluene PID	88.42	0	100	0	88.4	70	130				

Sample ID: **LCS** SampType: **LCS** TestCode: **VPH_W2** Units: **µg/L** Prep Date: RunNo: **50547**
Client ID: **ZZZZZ** Batch ID: **R50547** TestNo: **VPH** Analysis Date: **6/5/2013** SeqNo: **573128**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	81.52	1.00	100	0	81.5	70	130				

Qualifiers:
BRL Below Reporting Limit
J Analyte detected below quantitation limits
S Spike Recovery outside recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306012
Project:

TestCode: VPH_W2

Sample ID: LCS	SampType: LCS	TestCode: VPH_W2	Units: µg/L	Prep Date:	RunNo: 50547
Client ID: ZZZZZ	Batch ID: R50547	TestNo: VPH		Analysis Date: 6/5/2013	SeqNo: 573128

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,2,4-Trimethylpentane	87.10	1.00	100	0.16	86.9	70	130				
2-Methylpentane	82.67	1.00	100	0	82.7	70	130				
n-Butylcyclohexane	84.08	1.00	100	0	84.1	70	130				
n-Decane	82.01	1.00	100	0.0149	82.0	70	130				
n-Nonane	85.69	1.00	100	0.01028	85.7	30	130				
n-Pentane	89.62	1.00	100	0	89.6	70	130				
C9-C10 Aromatic Hydrocarbons	88.39	50.0	100	0	88.4	70	130				
Unadjusted C5-C8 Aliphatic Hydrocarbo	209.0	100	300	0	69.7	70	130				
Unadjusted C9-C12 Aliphatic Hydrocarb	218.4	100	300	0	72.8	70	130				
Methyl Tert-Butyl Ether	80.62	1.00	100	0	80.6	70	130				
Benzene	80.49	1.00	100	0	80.5	70	130				
Toluene	81.02	1.00	100	0	81.0	70	130				
Ethylbenzene	89.64	1.00	100	0	89.6	70	130				
m,p-Xylene	151.6	1.00	200	0.1	75.7	70	130				
o-Xylene	88.52	1.00	100	0	88.5	70	130				
Naphthalene	91.16	1.00	100	0	91.2	70	130				
Surr: 2,5-Dibromotoluene FID	81.07	0	100	0	81.1	70	130				
Surr: 2,5-Dibromotoluene PID	101.3	0	100	0	101	70	130				

Sample ID: LCSD	SampType: LCSD	TestCode: VPH_W2	Units: µg/L	Prep Date:	RunNo: 50547
Client ID: ZZZZZ	Batch ID: R50547	TestNo: VPH		Analysis Date: 6/6/2013	SeqNo: 573129

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	84.90	1.00	100	0	84.9	70	130	81.52	4.06	25	
2,2,4-Trimethylpentane	91.91	1.00	100	0.16	91.8	70	130	87.1	5.37	25	
2-Methylpentane	87.62	1.00	100	0	87.6	70	130	82.67	5.81	25	
n-Butylcyclohexane	80.35	1.00	100	0	80.4	70	130	84.08	4.54	25	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306012
Project:

TestCode: VPH_W2

Sample ID: LCSD	SampType: LCSD	TestCode: VPH_W2	Units: µg/L	Prep Date:	RunNo: 50547
Client ID: ZZZZZ	Batch ID: R50547	TestNo: VPH		Analysis Date: 6/6/2013	SeqNo: 573129

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
n-Decane	85.78	1.00	100	0.0149	85.8	70	130	82.01	4.49	25	
n-Nonane	83.02	1.00	100	0.01028	83.0	30	130	85.69	3.17	25	
n-Pentane	96.16	1.00	100	0	96.2	70	130	89.62	7.04	25	
C9-C10 Aromatic Hydrocarbons	88.64	50.0	100	0	88.6	70	130	88.39	0.282	25	
Unadjusted C5-C8 Aliphatic Hydrocarbo	222.3	100	300	0	74.1	70	130	209	6.18	25	
Unadjusted C9-C12 Aliphatic Hydrocarb	216.4	100	300	0	72.1	70	130	218.4	0.920	25	
Methyl Tert-Butyl Ether	84.73	1.00	100	0	84.7	70	130	80.62	4.97	25	
Benzene	87.79	1.00	100	0	87.8	70	130	80.49	8.68	25	
Toluene	86.46	1.00	100	0	86.5	70	130	81.02	6.50	25	
Ethylbenzene	88.98	1.00	100	0	89.0	70	130	89.64	0.739	25	
m,p-Xylene	145.7	1.00	200	0.1	72.8	70	130	151.6	3.96	25	
o-Xylene	89.68	1.00	100	0	89.7	70	130	88.52	1.30	25	
Naphthalene	119.2	1.00	100	0	119	70	130	91.16	26.7	25	R
Surr: 2,5-Dibromotoluene FID	84.61	0	100	0	84.6	70	130	0	0	0	
Surr: 2,5-Dibromotoluene PID	86.55	0	100	0	86.6	70	130	0	0	0	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

1306012 PAGE 1 OF 1

CHAIN OF CUSTODY RECORD

GeoLabs, Inc. *Environmental Laboratories*
45 Johnson Lane, Braintree, MA 02184
p 781.848.7844 • f 781.848.7811
www.geolabs.com

Sample Handling: circle choice
Filtration: Done / Not Needed / Lab to do
Preservation: Lab to do Y / N

Special Instructions
CAM Compliant
Improperly Preserved EPH - C6

Turnaround: circle one
1-day (3-day) 2-day 5 / 7-days

Data Delivery: circle choice (s)
Fax (email)
Format:
Excel (PDF)

Requirements: circle choice (s)
GW-1 (MCP Methods) S-1 DEP QC Other _____
CT RCP (Reasonable Confidence Protocols)
State / Fed Program - Criteria _____

Client: Clean Harbors
Address: 42 Longwater Drive Norwell MA
Contact: Rich MacCarthy

Phone: 617-799-6189
Fax: 781-871-0640
email: maccarthy.rm@cleanharbors.com

Project: Nacoran - Arlington
Project PO: _____
Invoice to *: _____

Preservative: 1

COLLECTION DATE 2013	TIME	SAMPLED BY	SAMPLE LOCATION / ID	CONTAINER TYPE	CONTAINER QUANTITY	MATRIX	COMP	GRAB	GeoLabs SAMPLE NUMBER	Analysis Requested: VPH	Analysis Requested: EPH (4 fractions)	Lab Use Only: TEMPERATURE	Lab Use Only: LAB PH
6/3	1600	RM	WS-1	V/AG	2/1	OT		✓	1306012-001	✓	✓	1/5	
↓	1628	JT	WS-2	↓	↓	↓		✓	002	✓	✓		
↓	1707	RM	WS-3	↓	↓	↓		✓	003	✓	✓		

Matrix Codes:
GW = Ground Water DW = Drinking Water S = Soil A = Air
WW = Waste Water SL = Sludge O = Oil OT = Other

Received on Ice ☐

Preservatives
1 = Hcl 3 = H2SO4 5 = NaOH 7 = Other
2 = HNO3 4 = Na2S2O3 6 = MEOH

Containers:
A = Amber B = Bag O = Other
G = Glass P = Plastic
S = Summa V = Voa

Relinquished by: _____ Date / Time 6/4/13
_____ 6/4/13 10:50

Received by: _____ Date / Time 6/4/13 9:50
_____ 6/4/13 10:50

CT (PH-0148) NH (2508) MA (MA-015) RI (LA000252)

ANALYTICAL REPORT

Thursday, June 20, 2013

GeoLabs, Inc.
45 Johnson Lane
Braintree MA 02184
Tele: 781 848 7844
Fax: 781 848 7811

Rich MacCarthy
Clean Harbors
42 Longwater Drive
Norwell, MA 02061

TEL: (781) 792-5822
FAX: (781) 792-5938

Project: EO5401971
Location: Noonan-Arlington

Order No.: 1306097

Dear Rich MacCarthy:

GeoLabs, Inc. received 3 sample(s) on 6/11/2013 for the analyses presented in the following report.

The laboratory results in this report relate only to samples submitted. All data for associated QC met method or laboratory specifications, except where noted in the Case Narrative.

Analytical methods and results meet requirements of 310CMR 40.1056(J) as per MADEP Compendium of Analytical Methods (CAM).

If you have any questions regarding these tests results, please feel free to call.

Sincerely,

David Mick
Laboratory Director

For current certifications, please visit our website at www.geolabs.com
Certifications:
CT (PH-0148) - MA (M-MA015) - NH (2508) - RI (LA000252)
Accredited in Accordance with NELAC

MassDEP Analytical Protocol Certification Form

Laboratory Name: GeoLabs, Inc. Project #: EO 5401971

Project Location: 1306097 (001-003) RTN:

This form provides certification for the following data set: 1305102-001

Matrices: ☐ Groundwater/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 CAM IV A ☒	8081 Pesicides CAM V B ☐	7196 Hex Cr CAM VI B ☐		MassDEP APH CAM IX A ☐
8270 SVOC CAM II B ☐	7010 Metals CAM III C ☐	MassDEP EPH CAM IV B ☒	8151 Herbicides CAM V C ☐	8330 Explosives CAM VIII A ☐		TO-15 VOC CAM IX B ☐
6010 Metals CAM III A ☐	6020 Metals CAM III D ☐	8082 PCB CAM V A ☐	9014 Total Cyanide/PAC CAM VI A ☐	6860 Perchlorate CAM VIII 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 ☐ No
B	Were the analytical method(s) and all associated QC requirements specified in the selected CAM protocol(s) followed?	☒ Yes ☐ 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 ☐ No
D	Does the laboratory report comply with all reporting requirements specified in CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analtyical Data"?	☒ Yes ☐ No
E	VPH, EPH, APH and TO-15 only: a. VPH, EPH, and APH Methods only: Was each method conducted without significant modification(s)? (Refer to the individual method(s) for a list of significant modifications.)	☒ 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 ☐ 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 protocol(s)?	☒ Yes ☐ No[1]

***Data User Note:* Data that achieve "Presumptive Certainty" status may not necessarily meet the data usablility and representativeness requirements described in 310 CMR 40. 1056 (2) (k) and WSC-07-350.**

H	Were **all** QC performance standards as specified in the CAM protocol(s) achieved?	☐ Yes ☒ No[1]
I	Were results reported for the complete analyte list specified in the selected CAM protocol(s)?	☐ Yes ☒ No[1]

[1] *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: David Mick **Position: Laboratory Director**

Printed Name: David Mick **Date:** June 20, 2013

Date: *20-Jun-13*

CLIENT:	Clean Harbors
Project:	EO5401971
Lab Order:	1306097

CASE NARRATIVE

Physical Condition of Samples

The project was received by the laboratory in satisfactory condition. The sample(s) were received undamaged, in appropriate containers with the correct preservation.

Project Documentation

The project was accompanied by satisfactory Chain of Custody documentation.

Analysis of Sample(s)

EPH carbon ranges and diesel targets only reported via method MADEP EPH, per client request.

All extractable samples were extracted and analyzed and any Volatile samples were analyzed within method specified holding times and according to GeoLabs documented Standard Operating Procedure. The following analytical anomalies or non-conformances were noted by the laboratory during the processing of these samples:

EPHP LCS & LCSD % Recovery for Naphthalene is outside of recovery limits.
EPHT LCSD % Recovery for Unadjusted C11-C22 Aromatics is outside of recovery limits.

SIGNATURE: David Mick LAB DIRECTOR

PRINTED NAME: David Mick DATE: 06/20/13

CLIENT:	Clean Harbors
Project:	EO5401971
Lab Order:	1306097

CASE NARRATIVE

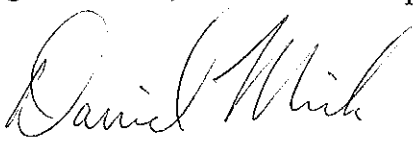
EPH Methods

Method for Ranges: MADEP EPH 04-1.1
Method for Target Analytes: 8270 GC/MS

Carbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range
C11-C22 Aromatic Hydrocarbons exclude concentrations of Target PAH Analytes

CERTIFICATION:
Were all QA/QC procedures REQUIRED by the EPH Method followed? YES
Were all performance/acceptance standards achieved? NO (See Case Narrative)
Were any significant modifications made to the EPH method? NO

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

SIGNATURE:  LAB DIRECTOR

PRINTED NAME: David Mick DATE: 06/20/13

CLIENT:	Clean Harbors
Project:	EO5401971
Lab Order:	1306097

CASE NARRATIVE

VPH Methods

Method for Ranges: MADEP VPH 04-1.1
Method for Target Analytes: MADEP VPH 04-1.1

Soil sample(s) were received in MeOH and soil was completely covered by MeOH.
Soil sample(s) ratio 1:1 +/- 25%

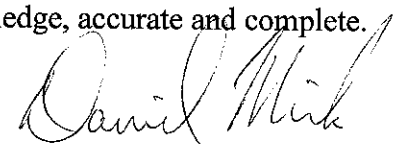
Carbon Range data exclude concentrations of any surrogate(s) and/or internal standards eluting in that range.

C5-C8 Aliphatic Hydrocarbons exclude the concentration of Target Analytes eluting in that range. (MTBE, Benzene, Toluene)

C9-C12 Aliphatic Hydrocarbons exclude concentration of Target Analytes eluting in that range (Ethylbenzene, m&p-Xylenes, o-Xylene) AND concentration of C9-C10 Aromatic Hydrocarbons.

CERTIFICATION
Were all QA/QC procedures REQUIRED by the VPH Method followed? YES
Were all QA/QC performance/acceptance standards achieved? YES
Were any significant modifications made to the VPH method, as specified in Sec. 11.3? NO

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

SIGNATURE:  POSITION: LAB DIRECTOR

PRINTED NAME: David Mick

DATE: 06/20/13

ANALYTICAL REPORT **Reported Date:** 20-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-1A
Lab Order:	1306097	**Collection Date:**	6/10/2013 10:00:00 AM
Project:	EO5401971	**Date Received:**	6/11/2013
Lab ID:	1306097-001	**Matrix:**	OTHER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/17/2013 8:43:10 AM**		
Adjusted C11-C22 Aromatics	ND	103		µg/L	1	6/17/2013
C09-C18 Aliphatics	ND	103		µg/L	1	6/17/2013
C19-C36 Aliphatics	ND	103		µg/L	1	6/17/2013
Unadjusted C11-C22 Aromatics	ND	103		µg/L	1	6/17/2013
Surr: 1-Chlorooctadecane	67.0	40-140		%REC	1	6/17/2013
Surr: o-Terphenyl	70.9	40-140		%REC	1	6/17/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/17/2013 8:43:10 AM**		
Naphthalene	ND	1.03		µg/L	1	1/6/2006 2:39:00 AM
2-Methylnaphthalene	ND	1.03		µg/L	1	1/6/2006 2:39:00 AM
Acenaphthene	ND	1.03		µg/L	1	1/6/2006 2:39:00 AM
Phenanthrene	ND	1.03		µg/L	1	1/6/2006 2:39:00 AM
Total PAH Target Concentration	ND	1.03		µg/L	1	1/6/2006 2:39:00 AM
Surr: 2,2-Difluorobiphenyl	55.3	40-140		%REC	1	1/6/2006 2:39:00 AM
Surr: 2-Fluorobiphenyl	65.5	40-140		%REC	1	1/6/2006 2:39:00 AM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
C9-C10 Aromatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:04:00 AM
Unadjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:04:00 AM
Unadjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:04:00 AM
Methyl Tert-Butyl Ether	ND	1.00		µg/L	1	6/12/2013 8:04:00 AM
Benzene	ND	1.00		µg/L	1	6/12/2013 8:04:00 AM
Toluene	ND	1.00		µg/L	1	6/12/2013 8:04:00 AM
Ethylbenzene	ND	1.00		µg/L	1	6/12/2013 8:04:00 AM
m,p-Xylene	*2.63*	1.00		µg/L	1	6/12/2013 8:04:00 AM
o-Xylene	*6.50*	1.00		µg/L	1	6/12/2013 8:04:00 AM
Naphthalene	ND	1.00		µg/L	1	6/12/2013 8:04:00 AM
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:04:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

ANALYTICAL REPORT **Reported Date:** 20-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-1A
Lab Order:	1306097	**Collection Date:**	6/10/2013 10:00:00 AM
Project:	EO5401971	**Date Received:**	6/11/2013
Lab ID:	1306097-001	**Matrix:**	OTHER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: ZC
Prep Method:		**Prep Date:**				
Adjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:04:00 AM
Surr: 2,5-Dibromotoluene FID	95.2	70-130		%REC	1	6/12/2013 8:04:00 AM
Surr: 2,5-Dibromotoluene PID	80.1	70-130		%REC	1	6/12/2013 8:04:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

ANALYTICAL REPORT **Reported Date:** 20-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-2A
Lab Order:	1306097	**Collection Date:**	6/10/2013 10:30:00 AM
Project:	EO5401971	**Date Received:**	6/11/2013
Lab ID:	1306097-002	**Matrix:**	OTHER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/17/2013 8:43:10 AM**		
Adjusted C11-C22 Aromatics	ND	103		µg/L	1	6/17/2013
C09-C18 Aliphatics	ND	103		µg/L	1	6/17/2013
C19-C36 Aliphatics	ND	103		µg/L	1	6/17/2013
Unadjusted C11-C22 Aromatics	ND	103		µg/L	1	6/17/2013
Surr: 1-Chlorooctadecane	62.6	40-140		%REC	1	6/17/2013
Surr: o-Terphenyl	71.9	40-140		%REC	1	6/17/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/17/2013 8:43:10 AM**		
Naphthalene	ND	1.03		µg/L	1	1/6/2006 3:16:00 AM
2-Methylnaphthalene	ND	1.03		µg/L	1	1/6/2006 3:16:00 AM
Acenaphthene	ND	1.03		µg/L	1	1/6/2006 3:16:00 AM
Phenanthrene	ND	1.03		µg/L	1	1/6/2006 3:16:00 AM
Total PAH Target Concentration	ND	1.03		µg/L	1	1/6/2006 3:16:00 AM
Surr: 2,2-Difluorobiphenyl	53.0	40-140		%REC	1	1/6/2006 3:16:00 AM
Surr: 2-Fluorobiphenyl	65.0	40-140		%REC	1	1/6/2006 3:16:00 AM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
C9-C10 Aromatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:45:00 AM
Unadjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:45:00 AM
Unadjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:45:00 AM
Methyl Tert-Butyl Ether	ND	1.00		µg/L	1	6/12/2013 8:45:00 AM
Benzene	ND	1.00		µg/L	1	6/12/2013 8:45:00 AM
Toluene	ND	1.00		µg/L	1	6/12/2013 8:45:00 AM
Ethylbenzene	ND	1.00		µg/L	1	6/12/2013 8:45:00 AM
m,p-Xylene	ND	1.00		µg/L	1	6/12/2013 8:45:00 AM
o-Xylene	ND	1.00		µg/L	1	6/12/2013 8:45:00 AM
Naphthalene	ND	1.00		µg/L	1	6/12/2013 8:45:00 AM
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:45:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT

Reported Date: 20-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-2A
Lab Order:	1306097	**Collection Date:**	6/10/2013 10:30:00 AM
Project:	EO5401971	**Date Received:**	6/11/2013
Lab ID:	1306097-002	**Matrix:**	OTHER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: ZC
Prep Method:		**Prep Date:**				
Adjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 8:45:00 AM
Surr: 2,5-Dibromotoluene FID	82.1	70-130		%REC	1	6/12/2013 8:45:00 AM
Surr: 2,5-Dibromotoluene PID	81.6	70-130		%REC	1	6/12/2013 8:45:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

ANALYTICAL REPORT **Reported Date:** 20-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-3A
Lab Order:	1306097	**Collection Date:**	6/10/2013 11:00:00 AM
Project:	EO5401971	**Date Received:**	6/11/2013
Lab ID:	1306097-003	**Matrix:**	OTHER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
EPH RANGES - MADEP EPH						Analyst: **KG**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/17/2013 8:43:10 AM**		
Adjusted C11-C22 Aromatics	ND	102		µg/L	1	6/17/2013
C09-C18 Aliphatics	ND	102		µg/L	1	6/17/2013
C19-C36 Aliphatics	ND	102		µg/L	1	6/17/2013
Unadjusted C11-C22 Aromatics	ND	102		µg/L	1	6/17/2013
Surr: 1-Chlorooctadecane	65.3	40-140		%REC	1	6/17/2013
Surr: o-Terphenyl	82.2	40-140		%REC	1	6/17/2013
EPH TARGET ANALYTES - MADEP EPH						Analyst: **Jsi**
Prep Method: (eph_Wpr)			**Prep Date:**	**6/17/2013 8:43:10 AM**		
Naphthalene	ND	1.02		µg/L	1	1/6/2006 3:49:00 AM
2-Methylnaphthalene	ND	1.02		µg/L	1	1/6/2006 3:49:00 AM
Acenaphthene	ND	1.02		µg/L	1	1/6/2006 3:49:00 AM
Phenanthrene	ND	1.02		µg/L	1	1/6/2006 3:49:00 AM
Total PAH Target Concentration	ND	1.02		µg/L	1	1/6/2006 3:49:00 AM
Surr: 2,2-Difluorobiphenyl	52.8	40-140		%REC	1	1/6/2006 3:49:00 AM
Surr: 2-Fluorobiphenyl	59.2	40-140		%REC	1	1/6/2006 3:49:00 AM
VPH - MADEP VPH						Analyst: **ZC**
Prep Method:			**Prep Date:**			
C9-C10 Aromatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 9:27:00 AM
Unadjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 9:27:00 AM
Unadjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 9:27:00 AM
Methyl Tert-Butyl Ether	ND	1.00		µg/L	1	6/12/2013 9:27:00 AM
Benzene	ND	1.00		µg/L	1	6/12/2013 9:27:00 AM
Toluene	ND	1.00		µg/L	1	6/12/2013 9:27:00 AM
Ethylbenzene	ND	1.00		µg/L	1	6/12/2013 9:27:00 AM
m,p-Xylene	ND	1.00		µg/L	1	6/12/2013 9:27:00 AM
o-Xylene	ND	1.00		µg/L	1	6/12/2013 9:27:00 AM
Naphthalene	ND	1.00		µg/L	1	6/12/2013 9:27:00 AM
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 9:27:00 AM

Qualifiers:

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- BRL Below Reporting Limit
- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit

ANALYTICAL REPORT **Reported Date:** 20-Jun-13

CLIENT:	Clean Harbors	**Client Sample ID:**	WS-3A
Lab Order:	1306097	**Collection Date:**	6/10/2013 11:00:00 AM
Project:	EO5401971	**Date Received:**	6/11/2013
Lab ID:	1306097-003	**Matrix:**	OTHER

Analyses	Result	Det. Limit	Qual	Units	DF	Date Analyzed
VPH - MADEP VPH						Analyst: ZC
Prep Method:		**Prep Date:**				
Adjusted C9-C12 Aliphatic Hydrocarbons	ND	100		µg/L	1	6/12/2013 9:27:00 AM
Surr: 2,5-Dibromotoluene FID	83.2	70-130		%REC	1	6/12/2013 9:27:00 AM
Surr: 2,5-Dibromotoluene PID	81.4	70-130		%REC	1	6/12/2013 9:27:00 AM

Qualifiers:

B	Analyte detected in the associated Method Blank	BRL	Below Reporting Limit
E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
J	Analyte detected below quantitation limits	ND	Not Detected at the Reporting Limit
S	Spike Recovery outside recovery limits		

ANALYTICAL QC SUMMARY REPORT

Date: *20-Jun-13*

CLIENT: Clean Harbors
Work Order: 1306097
Project: EO5401971

TestCode: EPHP_W_DIESEL

Sample ID: **mb-22473**	SampType: **MBLK**	TestCode: **EPHP_W_DIE** Units: **µg/L**	Prep Date: **6/17/2013**	RunNo: **50724**
Client ID: **ZZZZZ**	Batch ID: **22473**	TestNo: **MADEP EPH_ (eph_Wpr)**	Analysis Date: **1/6/2006**	SeqNo: **574956**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	ND	1.00									
2-Methylnaphthalene	ND	1.00									
Acenaphthene	ND	1.00									
Phenanthrene	ND	1.00									
Total PAH Target Concentration	ND	1.00									
Surr: 2,2-Difluorobiphenyl	13.69	0	25	0	54.8	40	140				
Surr: 2-Fluorobiphenyl	15.74	0	25	0	63.0	40	140				

Sample ID: **lcs-22473**	SampType: **LCS**	TestCode: **EPHP_W_DIE** Units: **µg/L**	Prep Date: **6/17/2013**	RunNo: **50724**
Client ID: **ZZZZZ**	Batch ID: **22473**	TestNo: **MADEP EPH_ (eph_Wpr)**	Analysis Date: **1/6/2006**	SeqNo: **574957**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	17.50	1.00	50	0	35.0	40	140				S
2-Methylnaphthalene	24.44	1.00	50	0	48.9	40	140				
Acenaphthene	26.63	1.00	50	0	53.3	40	140				
Phenanthrene	35.77	1.00	50	0	71.5	40	140				
Total PAH Target Concentration	104.3	1.00									
Surr: 2,2-Difluorobiphenyl	14.97	0	25	0	59.9	40	140				
Surr: 2-Fluorobiphenyl	17.55	0	25	0	70.2	40	140				

Sample ID: **lcs1-22473**	SampType: **LCSD**	TestCode: **EPHP_W_DIE** Units: **µg/L**	Prep Date: **6/17/2013**	RunNo: **50724**
Client ID: **ZZZZZ**	Batch ID: **22473**	TestNo: **MADEP EPH_ (eph_Wpr)**	Analysis Date: **1/6/2006**	SeqNo: **574958**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	17.04	1.00	50	0	34.1	40	140				S
2-Methylnaphthalene	21.02	1.00	50	0	42.0	40	140				

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306097
Project: EO5401971

TestCode: EPHP_W_DIESEL

Sample ID: lcs1-22473	SampType: LCSD	TestCode: EPHP_W_DIE	Units: µg/L	Prep Date: 6/17/2013	RunNo: 50724
Client ID: ZZZZZ	Batch ID: 22473	TestNo: MADEP EPH_ (eph_Wpr)		Analysis Date: 1/6/2006	SeqNo: 574958

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Acenaphthene	22.97	1.00	50	0	45.9	40	140				
Phenanthrene	30.33	1.00	50	0	60.7	40	140				
Total PAH Target Concentration	91.36	1.00									
Surr: 2,2-Difluorobiphenyl	14.79	0	25	0	59.2	40	140				
Surr: 2-Fluorobiphenyl	16.97	0	25	0	67.9	40	140				

Sample ID: LCS1-22473	SampType: LCSD	TestCode: EPHP_W_DIE	Units: µg/L	Prep Date: 6/17/2013	RunNo: 50768
Client ID: ZZZZZ	Batch ID: 22473	TestNo: MADEP EPH_ (eph_Wpr)		Analysis Date: 1/7/2006	SeqNo: 575266

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Naphthalene	29.55	1.00	50	0	59.1	40	140				
2-Methylnaphthalene	32.38	1.00	50	0	64.8	40	140				
Acenaphthene	33.05	1.00	50	0	66.1	40	140				
Phenanthrene	38.99	1.00	50	0	78.0	40	140				
Total PAH Target Concentration	134.0	1.00									
Surr: 2,2-Difluorobiphenyl	15.88	0	25	0	63.5	40	140				
Surr: 2-Fluorobiphenyl	18.16	0	25	0	72.6	40	140				

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306097
Project: EO5401971

TestCode: epht_w

Sample ID: MB-22473	SampType: mblk	TestCode: epht_w	Units: µg/L	Prep Date: 6/17/2013	RunNo: 50706
Client ID: ZZZZZ	Batch ID: 22473	TestNo: MADEP EPH (eph_Wpr)		Analysis Date: 6/17/2013	SeqNo: 574828

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Adjusted C11-C22 Aromatics	ND	100									
C09-C18 Aliphatics	ND	100									
C19-C36 Aliphatics	ND	100									
Unadjusted C11-C22 Aromatics	ND	100									
Surr: 1-Chlorooctadecane	52.51	0	100	0	52.5	40	140				
Surr: o-Terphenyl	62.20	0	100	0	62.2	40	140				

Sample ID: LCS-22473	SampType: Lcs	TestCode: epht_w	Units: µg/L	Prep Date: 6/17/2013	RunNo: 50706
Client ID: ZZZZZ	Batch ID: 22473	TestNo: MADEP EPH (eph_Wpr)		Analysis Date: 6/17/2013	SeqNo: 574829

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
C09-C18 Aliphatics	ND	100	100	0	50.7	40	140				
C19-C36 Aliphatics	ND	100	100	0	53.7	40	140				
Unadjusted C11-C22 Aromatics	ND	100	100	0	42.2	40	140				
Surr: 1-Chlorooctadecane	67.81	0	100	0	67.8	40	140				
Surr: o-Terphenyl	80.10	0	100	0	80.1	40	140				

Sample ID: LCS1-22473	SampType: Lcsd	TestCode: epht_w	Units: µg/L	Prep Date: 6/17/2013	RunNo: 50706
Client ID: ZZZZZ	Batch ID: 22473	TestNo: MADEP EPH (eph_Wpr)		Analysis Date: 6/17/2013	SeqNo: 574830

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
C09-C18 Aliphatics	ND	100	100	0	46.5	40	140	50.65	0	25	
C19-C36 Aliphatics	ND	100	100	0	42.8	40	140	53.68	0	25	
Unadjusted C11-C22 Aromatics	ND	100	100	0	33.3	40	140	42.16	0	25	S
Surr: 1-Chlorooctadecane	51.61	0	100	0	51.6	40	140	0	0	0	
Surr: o-Terphenyl	66.78	0	100	0	66.8	40	140	0	0	0	

Qualifiers:
BRL Below Reporting Limit
J Analyte detected below quantitation limits
S Spike Recovery outside recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306097
Project: EO5401971

TestCode: VPH_W2

Sample ID: **MBLK** SampType: **MBLK** TestCode: **VPH_W2** Units: **µg/L** Prep Date: RunNo: **50661**
Client ID: **ZZZZZ** Batch ID: **R50661** TestNo: **VPH** Analysis Date: **6/12/2013** SeqNo: **574234**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	ND	1.00									
2,2,4-Trimethylpentane	ND	1.00									
2-Methylpentane	ND	1.00									
n-Butylcyclohexane	ND	1.00									
n-Decane	ND	1.00									
n-Nonane	ND	1.00									
n-Pentane	ND	1.00									
C9-C10 Aromatic Hydrocarbons	ND	100									
Unadjusted C5-C8 Aliphatic Hydrocarbo	ND	100									
Unadjusted C9-C12 Aliphatic Hydrocarb	ND	100									
Methyl Tert-Butyl Ether	ND	1.00									
Benzene	ND	1.00									
Toluene	ND	1.00									
Ethylbenzene	ND	1.00									
m,p-Xylene	ND	1.00									
o-Xylene	ND	1.00									
Naphthalene	ND	1.00									
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100									
Adjusted C9-C12 Aliphatic Hydrocarbon	ND	100									
Surr: 2,5-Dibromotoluene FID	96.83	0	100	0	96.8	70	130				
Surr: 2,5-Dibromotoluene PID	86.83	0	100	0	86.8	70	130				

Sample ID: **LCS** SampType: **LCS** TestCode: **VPH_W2** Units: **µg/L** Prep Date: RunNo: **50661**
Client ID: **ZZZZZ** Batch ID: **R50661** TestNo: **VPH** Analysis Date: **6/12/2013** SeqNo: **574232**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	80.55	1.00	100	0	80.6	70	130				

Qualifiers:
BRL Below Reporting Limit
J Analyte detected below quantitation limits
S Spike Recovery outside recovery limits
E Value above quantitation range
ND Not Detected at the Reporting Limit
H Holding times for preparation or analysis exceeded
R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306097
Project: EO5401971

TestCode: VPH_W2

Sample ID: LCS	SampType: LCS	TestCode: VPH_W2	Units: µg/L	Prep Date:	RunNo: 50661
Client ID: ZZZZZ	Batch ID: R50661	TestNo: VPH		Analysis Date: 6/12/2013	SeqNo: 574232

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2,2,4-Trimethylpentane	97.61	1.00	100	0.08	97.5	70	130				
2-Methylpentane	97.73	1.00	100	0	97.7	70	130				
n-Butylcyclohexane	126.4	1.00	100	0	126	70	130				
n-Decane	123.5	1.00	100	0	123	70	130				
n-Nonane	116.4	1.00	100	0	116	30	130				
n-Pentane	102.5	1.00	100	0	103	70	130				
C9-C10 Aromatic Hydrocarbons	ND	100	100	0	88.3	70	130				
Unadjusted C5-C8 Aliphatic Hydrocarbo	240.7	100	300	0	80.2	70	130				
Unadjusted C9-C12 Aliphatic Hydrocarb	343.2	100	300	0	114	70	130				
Methyl Tert-Butyl Ether	80.42	1.00	100	0	80.4	70	130				
Benzene	83.26	1.00	100	0	83.3	70	130				
Toluene	80.22	1.00	100	0.1	80.1	70	130				
Ethylbenzene	82.70	1.00	100	0.15	82.6	70	130				
m,p-Xylene	164.9	1.00	200	0.1	82.4	70	130				
o-Xylene	91.06	1.00	100	0	91.1	70	130				
Naphthalene	107.4	1.00	100	0	107	70	130				
Adjusted C5-C8 Aliphatic Hydrocarbons	ND	100									
Adjusted C9-C12 Aliphatic Hydrocarbon	ND	100									
Surr: 2,5-Dibromotoluene FID	89.21	0	100	0	89.2	70	130				
Surr: 2,5-Dibromotoluene PID	83.74	0	100	0	83.7	70	130				

Sample ID: LCSD	SampType: LCSD	TestCode: VPH_W2	Units: µg/L	Prep Date:	RunNo: 50661
Client ID: ZZZZZ	Batch ID: R50661	TestNo: VPH		Analysis Date: 6/12/2013	SeqNo: 574233

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,2,4-Trimethylbenzene	80.71	1.00	100	0	80.7	70	130	80.55	0.198	25	
2,2,4-Trimethylpentane	99.06	1.00	100	0.08	99.0	70	130	97.61	1.47	25	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CLIENT: Clean Harbors
Work Order: 1306097
Project: EO5401971

TestCode: VPH_W2

Sample ID: **LCSD**	SampType: **LCSD**	TestCode: **VPH_W2**	Units: **µg/L**	Prep Date:		RunNo: **50661**
Client ID: **ZZZZZ**	Batch ID: **R50661**	TestNo: **VPH**		Analysis Date: **6/12/2013**		SeqNo: **574233**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
2-Methylpentane	97.94	1.00	100	0	97.9	70	130	97.73	0.215	25	
n-Butylcyclohexane	123.4	1.00	100	0	123	70	130	126.4	2.46	25	
n-Decane	127.0	1.00	100	0	127	70	130	123.5	2.81	25	
n-Nonane	118.6	1.00	100	0	119	30	130	116.4	1.86	25	
n-Pentane	103.0	1.00	100	0	103	70	130	102.5	0.448	25	
C9-C10 Aromatic Hydrocarbons	ND	100	100	0	88.3	70	130	88.32	0.0113	25	
Unadjusted C5-C8 Aliphatic Hydrocarbo	242.2	100	300	0	80.7	70	130	240.7	0.642	25	
Unadjusted C9-C12 Aliphatic Hydrocarb	357.3	100	300	0	119	70	130	343.2	4.02	25	
Methyl Tert-Butyl Ether	82.03	1.00	100	0	82.0	70	130	80.42	1.98	25	
Benzene	81.96	1.00	100	0	82.0	70	130	83.26	1.57	25	
Toluene	86.54	1.00	100	0.1	86.4	70	130	80.22	7.58	25	
Ethylbenzene	89.74	1.00	100	0.15	89.6	70	130	82.7	8.17	25	
m,p-Xylene	180.5	1.00	200	0.1	90.2	70	130	164.9	9.08	25	
o-Xylene	82.74	1.00	100	0	82.7	70	130	91.06	9.57	25	
Naphthalene	113.1	1.00	100	0	113	70	130	107.4	5.19	25	
Surr: 2,5-Dibromotoluene FID	83.67	0	100	0	83.7	70	130	0	0	0	
Surr: 2,5-Dibromotoluene PID	88.66	0	100	0	88.7	70	130	0	0	0	

Qualifiers:

- BRL Below Reporting Limit
- J Analyte detected below quantitation limits
- S Spike Recovery outside recovery limits
- E Value above quantitation range
- ND Not Detected at the Reporting Limit
- H Holding times for preparation or analysis exceeded
- R RPD outside recovery limits

GeoLabs, Inc.
45 Johnson Lane ~ Braintree MA 02184 ~ 781 848 7844 ~ 781 848 7811

CHAIN OF CUSTODY RECORD

1306097 PAGE 1 OF 1

GeoLabs, Inc. *Environmental Laboratories*
45 Johnson Lane, Braintree, MA 02184
p 781.848.7844 • f 781.848.7811
www.geolabs.com

Sample Handling: circle choice
Filtration: Done / Not Needed / Lab to do
Preservation: Lab to do Y / N

Special Instructions

Turnaround: circle one
1-day 3-day
2-day 5 / 7-days

Data Delivery: circle choice (s)
Fax email
Format:
Excel PDF

Requirements: circle choice (s)
GW-1 MCP Methods
S-1 DEP
QC Other
CT RCP (Reasonable Confidence Protocols)
State / Fed Program - Criteria

Client: CHES
Address: 42 Longwater Dr.
Norwell, MA
Contact: R Mac Castagna

Phone: 781.792.5822
Fax:
email:

Project: Noonan Arlington
Project PO: E0540971
Invoice to *:

Preservative:

COLLECTION DATE	TIME	SAMPLED BY	SAMPLE LOCATION / ID	CONTAINER TYPE	CONTAINER QUANITY	MATRIX	COMP	GRAB	GeoLabs SAMPLE NUMBER	Analysis Requested: VPH	Analysis Requested: EPH + 4 diesel fingerprints	Lab Use Only: TEMPERATURE	Lab Use Only: LAB pH
6/10	1000	RM	WS 1A	V/AG	3	OT			6097-001	✓	✓		
↓	1030	↓	WS 2A	↓	↓	↓			002	✓	✓		
↓	1100	↓	WS 3A	↓	↓	↓			003	✓	✓		

Matrix Codes:
GW = Ground Water DW = Drinking Water S = Soil A = Air
WW = Waste Water SL = Sludge O = Oil OT = Other

Received on Ice

Preservatives
1 = Hcl 3 = H2SO4 5 = NaOH 7 = Other
2 = HNO3 4 = Na2S2O3 6 = MEOH

Containers:
A = Amber B = Bag O = Other
G = Glass P = Plastic
S = Summa V = Voa

Relinquished by:	Date / Time	Received by:	Date / Time
	6/11/13		6/11/13 3:30
	6/11/13 4:10		6/11/13 4:10pm

2010730.J&P.C of CR.09/22/10 * Terms: Payment due within 30 days unless other arrangements are made. Past due balances subject to interest and collection cost.
Note: Homeowners and Law Firms must pay when dropping off samples. We accept cash, check and credit cards.

CT (PH-0148) NH (2508) NJ (MA-009) RI (LA000252) ME (MA 0016)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) SB 539 8072-002 TR# 2118 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
MP508 587 1046	1	1800 483 3718	004869341 FLE

GENERATOR

5. Generator's Name and Mailing Address
J.P. NOONAN TRANSPORTATION
415 WEST ST.
WEST BRIDGE WATER MA. 02379
Generator's Phone: (508) 588-8026 ATTN: BOB DUPUIS

Generator's Site Address (if different than mailing address)
MYSTIC VALLEY PKWY. & MCDFORD ST.
ARLINGTON MA. 02474

6. Transporter 1 Company Name
CLEAN HARBORS ENVIRONMENTAL SERVICES INC.
U.S. EPA ID Number
MAD 039322250

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

8. Designated Facility Name and Site Address
CLEAN HARBORS ENVIRONMENTAL SERVICES INC.
37 RUMMERY RD.
SOUTH PORTLAND ME 04106
Facility's Phone: 207 772 2201
U.S. EPA ID Number
MED 980 672 182

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, (WATER, OIL)	01	TT	5020	G	MA99		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
IA CH 640184

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 J.P. NOONAN — Bill Campopiano
Signature: Bill Campopiano
Month: 06 Day: 06 Year: 13

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: Bill Burns — Signature: Bill Burns — Month: 06 Day: 06 Year: 13
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.
H039			

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: Carl Baxter — Signature: — Month: 06 Day: 06 Year: 13

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

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

TRL#2117

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) SB 5398072-002 Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MP5085871046
2. Page 1 of: 1
3. Emergency Response Phone: 1-800 483-3718
4. Manifest Tracking Number: 004869342 FLE

GENERATOR

5. Generator's Name and Mailing Address
J.P. NOONAN TRANSPORTATION
415 WEST ST.
WEST BRIDGEWATER MA. 02379

Generator's Site Address (if different than mailing address)
MYSTIC VALLEY PKWY & MEDFORD ST.
ARLINGTON MA 02474

Generator's Phone: (508) 588-8026 ATTN: BOB DUPUIS

6. Transporter 1 Company Name: CLEAN HARBORS ENVIRONMENTAL SERVICES INC.
U.S. EPA ID Number: MAD 039322250

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

8. Designated Facility Name and Site Address
CLEAN HARBORS ENVIRONMENTAL SERVICES INC.
57 RUMMERY RD.
SO. PORTLAND ME, 04106
Facility's Phone: 207 772 2201
U.S. EPA ID Number: MED 980672182.

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 (WATER,OIL)	01	TT	5000	G	MA99
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1A 2H640184

DESILTEST 21000 PPM

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 J.P. NOONAN BILL CAMPOPIANO
Signature:
Month: 06 Day: 06 Year: 13

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: PAUL POSALIES
Signature:
Month: 06 Day: 06 Year: 13
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. H039 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: CARL BOSTON
Signature:
Month: 06 Day: 06 Year: 13

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

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) SB5398072-002 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
MP5085871046	1	800.483.3718	004888392 FLE

GENERATOR

5. Generator's Name and Mailing Address
J.P. Noonan Transportation
415 West St.
West Bridgewater, MA. 02379
Generator's Phone: 508-588-8026 Attn: Bob DuPuis

Generator's Site Address (if different than mailing address)
Mystic Valley Pkwy & Medford St.
Arlington, MA. 02474

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 Environmental Services, Inc
37 Rumery St.
South Portland, ME. 04106
Facility's Phone: 207-772-2201 — U.S. EPA ID Number: MED980672182

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 (OIL & WATER)	001	TT	~~5000~~ 7200	G	MA98		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1. CH640184
Dexil test <1000 PPM

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: X Bill Campopiano (ON BEHALF OF J.P. NOONAN) — Signature: X [signature] — Month: 06 Day: 06 Year: 13

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: X Bill Burns — Signature: X [signature] — Month: 06 Day: 06 Year: 13

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.
H039			

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: Brian Leask — Signature: [signature] — Month: 06 Day: 10 Year: 13

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

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

TRL2119

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) SB5398072002 SC PPW 3/3/2011 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
	MP5085871040	1	(800)483-3718	006572211 FLE

GENERATOR

5. Generator's Name and Mailing Address
JP Noonan Transportation
415 West Street
West Bridgewater, MA 02379
Generator's Phone: (508) 587-1041

Generator's Site Address (if different than mailing address)
Mystic Valley Pkwy @ Medford Street
Arlington,MA 02474

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 Env Services Inc
37 Rumery Road
South Portland, ME 04106
Facility's Phone: (207)772-2201

U.S. EPA ID Number
MED980672182

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, (WATER, OIL)	001	TT	5309	G	MA98
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1.CH640184

Drill <1000 PPM

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 J.P. NOONAN — X Bill Campopiano
Signature: X Bill Campopiano
Month: 06 Day: 07 Year: 13

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: BOB WEST
Signature: Bob West
Month: 06 Day: 07 Year: 13

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.
H039			

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: TROY WARDEN
Signature:
Month: 6 Day: 7 Year: 13

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

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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

TRL2137

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) SB5398072-002 SC PPW 3/3/2011 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
	MP5085871046	1	(800)483-3718	006572213 FLE

GENERATOR

5. Generator's Name and Mailing Address
JP Noonan Transportation
415 West Street
West Bridgewater, MA 02379
Generator's Phone: (508) 587-1014

Generator's Site Address (if different than mailing address)
Mystic Valley Pkwy @ Medford Street
Arlington,MA 02474

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 Env Services Inc
37 Rumery Road
South Portland, ME 04106
Facility's Phone: (207) 772-2201
U.S. EPA ID Number: MED980672182

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, (WATER, OIL)	001	TT	~~5000~~ 8040 (est)	G	MA98		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1.CH640184
Halogens <1000

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: X On Behalf of J.P. Noonan Bill Campbell
Signature: X
Month: 06 Day: 07 Year: 13

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: Bob West
Signature: Bob West
Month: 06 Day: 07 Year: 13
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.
H039			

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: TROY NADEAU
Signature
Month: 6 Day: 7 Year: 13

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

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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

318

SB5398072002 SC PPW 3/3/2011

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
	MP5085871046	1	(800)483-3718	006572212 FLE

5. Generator's Name and Mailing Address
JP Noonan Transportation
415 West Street
West Bridgewater, MA 02379
Generator's Phone: (508) 587-1046

Generator's Site Address (if different than mailing address)
Mystic Valley Pkwy @ Medford Street
Arlington, MA 02474

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 Env Services Inc
37 Rumery Road
South Portland, ME 04106
Facility's Phone: (207) 772-2201
U.S. EPA ID Number: MED980672182

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, (WATER, OIL)	001	TT	4227	G	MA98		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1. CH640184
Dexil 41000 ppm

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 — Month 06 Day 10 Year 13

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: Jim Bracken — Signature — Month 06 Day 10 Year 13

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.
H039			

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 06 Day 10 Year 13

GENERATOR — TRANSPORTER — DESIGNATED FACILITY

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

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) SB5398072001 SC PPW 3/3/2011 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
MP5085871046	1	(800)483-3718	006572191 FLE

GENERATOR

5. Generator's Name and Mailing Address
JP Noonan Transportation
415 West Street
West Bridgewater, MA 02379
Generator's Phone: (508) 587-1046 (ATTN: BOB DUPUIS)

Generator's Site Address (if different than mailing address)
Mystic Valley Pkwy @ Medford Street
Arlington, MA 02474

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, (OIL, DEBRIS)**	1	CM	18	Y	MA01
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1.chasb8200B
TR4258
Cust # CHIU252143

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: Michael Cadigan on Behalf of J.P Noonan — Signature — Month 6 Day 5 Year 13

INT'L

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

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Michael Cadigan — Signature — Month 6 Day 5 Year 13
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:
U.S. EPA ID Number

18b. Alternate Facility (or Generator)
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 — Month 6 Day 5 Year 13

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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

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

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) SB5398072-001 Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MP5085871046
2. Page 1 of: 1
3. Emergency Response Phone: 800 483 3718
4. Manifest Tracking Number: 000626607 FLE

5. Generator's Name and Mailing Address
J.P. NOONAN TRANSPORTATION
415 WEST ST
WEST BRIDGEWATER MA. 02379

Generator's Site Address (if different than mailing address)
MYSTIC VALLEY PKWY. @ MEDFORD ST.
ARLINGTON MA. 02474

Generator's Phone: 508 587-1046 ATTN: BOB DUPUIS

6. Transporter 1 Company Name: CLEAN HARBORS ENVIRONMENTAL SERVICES INC.
U.S. EPA ID Number: MAD 039322250

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

8. Designated Facility Name and Site Address
CLEAN HARBORS OF BRAINTREE INC.
1 HILL AVE.
BRAINTREE MA. 02184
Facility's Phone: 781-380-7100
U.S. EPA ID Number: MAD 053452637

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, (OIL DEBRIS)	001	CM	20	Y	MA01		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1 CHASB 8200B
TR 4258 CHIU 258067

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 J.P. NOONAN BILL CAMPOPIANO
Signature
Month Day Year: 06 07 13

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: Michael Cardigan
Signature
Month Day Year: 06 07 13
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:
U.S. EPA ID Number

18b. Alternate Facility (or Generator)
Facility's Phone:
Month Day Year
18c. Signature of Alternate Facility (or Generator)

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
Signature
Month Day Year: 06 07 13

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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

#4155

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) SBS398072 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
	MES088266255	1	(800) 483-3318	004869344 FLE

GENERATOR

5. Generator's Name and Mailing Address: S.P Noonan Transportation, 436 West Street, West Bridgewater, MA 02379
Generator's Site Address (if different than mailing address): 188 Medford Street, Arlington, MA 02128
Generator's Phone: (508) 857-4667

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 — U.S. EPA ID Number: MAD053452632
Facility's Phone: (781) 380-1100

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	TT	5	Y	MA01
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. ~~EM358~~ CHB-26B (HH)

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 Sean Leary — Signature: Sean Leary — Month 6 Day 2 Year 13

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit: Date leaving U.S.:

TRANSPORTER

Transporter signature (for exports only):

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Sean Leary — Signature: Sean Leary — Month 6 Day 2 Year 13
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: U.S. EPA ID Number

18b. Alternate Facility (or Generator) — Month Day Year
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)

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: Hugus Hoang — Signature: Hugus — Month 6 Day 3 Year 13

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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

#4260

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) SBS398022-001 Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MPS085871046
2. Page 1 of: 1
3. Emergency Response Phone: (800) 423-3718
4. Manifest Tracking Number: 004869343 FLE

5. Generator's Name and Mailing Address: J.P NOONAN TRANSPORTATION, 415 West Street, West Bridgewater, MA 02379
Generator's Site Address (if different than mailing address): Mystic Valley Pkwy & Medford St, Arlington, MA 02474
Generator's Phone: (508) 587-1046

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
U.S. EPA ID Number: MAD053452637
Facility's Phone: (781) 380-7100

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 (Oil Debris)	001	TT	6	Y	MA04
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1. Chasb8200B

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 Leary on behalf of J.P. NOONAN
Signature:
Month 6 Day 6 Year 13

INTERNATIONAL SHIPMENTS
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 Leary
Signature:
Month 6 Day 6 Year 13
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: U.S. EPA ID Number
18b. Alternate Facility (or Generator)
Facility's Phone: Month Day Year
18c. Signature of Alternate Facility (or Generator)
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: Keith Mulcahy
Signature:
Month 6 Day 6 Year 13

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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

4/21

SB5398072-001 SC PPW 3/3/2011 Form Approved. OMB No. 2050-0039

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

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: MP5085871046
2. Page 1 of: 1
3. Emergency Response Phone: (800)483-3718
4. Manifest Tracking Number: 006572488 FLE

5. Generator's Name and Mailing Address
JP Noonan Transportation
415 West Street
West Bridgewater, MA 02379
Generator's Phone: 508-587-1046

Generator's Site Address (if different than mailing address)
Mystic Valley Pkwy @ Medford Street
Arlington,MA 02474

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 SLUDGE)	XX1	T	8	Y	MA01		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1.chb-26B

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: Adam Anderson on behalf of Generator
Signature: Adam Anderson
Month: 6 Day: 26 Year: 13

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: Adam Anderson
Signature: Adam Anderson
Month: 6 Day: 26 Year: 13
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:
U.S. EPA ID Number:
18b. Alternate Facility (or Generator)
Facility's Phone:
Month: Day: Year:
18c. Signature of Alternate Facility (or Generator)

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: Donna Robado
Signature: Donna Robado
Month: 6 Day: 26 Year: 13

DESIGNATED FACILITY TO DESTINATION STATE (IF REQUIRED)

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

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

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number: 3 - 31576

A. LOCATION OF SITE OR DISPOSAL SITE WHERE REMEDIATION WASTE WAS GENERATED:

1. Release Name/Location Aid: INTERSECTION WITH MYSTIC VALLEY PKWY
2. Street Address: 188 MEDFORD STREET
3. City/Town: ARLINGTON 4. Zip Code:
5. ☐ Check here if a Tier Classification Submittal has been provided to DEP for this disposal site:
   ☐ a. Tier 1A ☐ b. Tier 1B ☐ b. Tier 1C ☐ d. Tier II
6. If applicable provide the Permit Number:

B. THIS FORM IS BEING USED TO: (check one: B1-B4):

☑ 1. Submit a **Bill of Lading (BOL)** to transport Remediation Waste to Temporary Storage or a Receiving Facility. Response Actions associated with this BOL (check all that apply):

- ☑ a. Immediate Response Action (IRA)
- ☐ b. Release Abatement Measure (RAM)
- ☐ c. Downgradient Property Status (DPS)
- ☐ d. Utility Release Abatement Measure (URAM)
- ☐ e. Comprehensive Response Actions
- ☐ f.. Limited Removal Action (LRA): (must be retained pursuant to 310 CMR 40.0034(6); can't be submitted via eDEP)
- ☐ g. Other

☐ 2. Submit an Attestation of Completion of **Shipment to Temporary Storage** (Sections C, F and J are not required):

☐ 3. Submit an Attestation of Completion of **Shipment to a Receiving Facility** (Sections C, F and J are not required):

☐ 4. Certify that Remediation Waste Was **Not Shipped, and the Bill of Lading is Void.** (Sections C, D, E, and F are not required)

5. Date Bill of Lading submitted to the Department: _____ (mm/dd/yyyy) b. eDEP Transaction ID:

6. Period of Generation Associated with this Bill of Lading 6/1/2013 (mm/dd/yyyy) to 6/10/2013 (mm/dd/yyyy)

(All sections of this transmittal form must be filled out unless otherwise noted)

The Bill of Lading is not considered complete until the Attestation of Completion of Shipment is received by the Department.

C. DESCRIPTION OF WASTE AND WASTE SOURCE:

1. Contaminated Media /Debris (check all that apply):

☑ a. Soil ☐ b. Groundwater ☐ c. Surface Water ☐ d. Sediment ☐ e. Vegetation or Organic Debris

☐ f. Demolition/Construction Waste ☐ g. Inorganic Absorbent Materials ☐ h. Other:

2. Uncontainerized Waste (check all that apply):

☐ a. Inorganic Absorbent Materials ☐ b. Other:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

BWSC112

Release Tracking Number
3 - 31576

C. DESCRIPTION OF WASTE AND WASTE SOURCE (cont.):

3. Containerized Waste (check all that apply):
☐ a. Tank Bottoms/Sludges ☐ b. Containers ☐ c. Drums ☐ d. Engineered Impoundments
☐ e. Other:

4. Estimated Quantity: 50 ☑ Tons ☐ Cu. Yds. ☐ Gallons

5. Contaminant Source (check one):
☑ a. Transportation Accident ☐ b. Underground Storage Tank ☐ c. Brownfields Redevelopment
☐ d. Other:

6. Type of Contaminant (check all that apply):
☐ a. Gasoline ☐ b. Diesel Fuel ☑ c. #2 Fuel Oil ☐ d. #4 Fuel Oil ☐ e. #6 Fuel Oil ☐ f. Jet Fuel
☐ g. Waste Oil ☐ h. Kerosene ☐ i. Chlorinated Solvents ☐ j. Urban Fill ☐ k. Other:

7. Constituents of Concern (check all that apply):
☐ a. As ☐ b. Cd ☐ c. Cr ☐ d. Pb ☐ e. Hg ☑ f. EPH/TPH ☐ g. VPH
☐ h. PCBs ☐ i. VOCs ☐ j. SVOCs ☐ k. Other:

8. If applicable, check the box for the Reportable Concentration Category of the site:
☐ a. RCS-1 ☐ b. RCS-2 ☐ c. RCGW-1 ☐ d. RCGW-2

9. Remediation Waste Characterization Documentation (check at least one):
☑ a. Site History Information ☐ b. Sampling Analytical Methods and Procedures ☐ c. Laboratory Data
☐ d. Field Screening Data ☐ e. Characterization Documentation previously submitted to the Department
i. Date submitted: (mm/dd/yyyy) ii. Type of Documentation:

D. TRANSPORTER OR COMMON CARRIER INFORMATION:

1. Transporter/Common Carrier Name: CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.
2. Contact First Name: FRANK 3. Last Name: PHILLION
4. Street: 609 PLEASANT STREET 5. Title: SUPERVISOR
6. City/Town: WEYMOUTH 7. State: MA 8. Zip Code: 02189-0000
9. Telephone: (781) 803-4132 10. Ext: 11. Fax:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

BWSC112

Release Tracking Number
3 - 31576

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

1. Operator/Facility Name: ENVIRONMENTAL SOIL MANAGEMENT, INC.
2. Contact First Name: STEPHEN 3. Last Name: RAPER
4. Street: 67 INTERNATIONAL DRIVE 5. Title: COMPLIANCE MANAGER
6. City/Town: LOUDON 7. State: NH 8. Zip Code: 03307-0000
9. Telephone: (603) 783-0228 10. Ext: 11. Fax: (603) 783-0104
12. Type of Facility: (Check one)
    a. Temporary Storage i. Period of Temporary Storage: (mm/dd/yyyy) to (mm/dd/yyyy)
    ii. Reason for Temporary Storage:
    ☐ b. Asphalt Batch/Hot Mix ☐ c. Landfill/Disposal ☐ d. Landfill/Structural Fill ☐ e. Landfill/Daily Cover
    ☐ f. Asphalt Batch/Cold Mix ☑ g. Thermal Processing ☐ h. Incinerator ☐ i. Other:
13. Division of Hazardous Waste/Class A Permit Number:
14. Division of Solid Waste Permit Number: DES-SW-SP-96-002
15. EPA Identification Number: NH5986485852

F. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this submittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief, the assessment action(s) undertaken to characterize the Remediation Waste which is (are) the subject of this submittal for acceptance at the facility identified in this submittal comply with applicable provisions of 310 CMR 40.0000, and such facility is permitted to accept Remediation Waste having the characteristics described in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: 8959
2. First Name: ANTHONY M 3. Last Name: DELTUFO
4. Telephone: (781) 792-5819 5. Ext.
6. FAX: (781) 792-5938
7. Signature: ANTHONY M DELTUFO
8. Date: 6/6/2013 (mm/dd/yyyy)
9. LSP Stamp:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number: 3 - 31576

G. PERSON SUBMITTING BILL OF LADING:

1. Check all that apply: ☐ a. change in contact name ☐ b. Change of address ☑ c. change in person undertaking response actions
2. Name of Organization: J.P. NOONAN TRANSPORTATION, INC.
3. Contact First Name: ROBERT 4. Last Name: DUPUIS
5. Street: 415 WEST STREET 6. Title: SAFETY DIRECTOR
7. City/Town: WEST BRIDGEWATER 8. State: MA 9. Zip Code: 02379-0000
10. Telephone: (508) 588-8026 11. Ext: 12. Fax:

H. RELATIONSHIP TO SITE OF PERSON SUBMITTING BILL OF LADING: ☐ Check here to change relationship

☑ 1. RP or PRP: ☐ a. Owner ☐ b. Operator ☐ c. Generator ☑ d. Transporter
☐ e. Other RP or PRP Specify:

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c.21E, s.2):

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c.21E, s.5(j))

☐ 4. Any Other person Undertaking Response Actions: Specify Relationship:

I. REQUIRED ATTACHMENTS AND SUBMITTALS :

☑ 1. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approvals issued by DEP or EPA. If the box is checked, you must attach a statement identifying the applicable provisions thereof.

☐ 2. Check here if any non-updatable information provided on this form is incorrect, e. g. property address. Send corrections to BWSC.eDEP@state.ma.us

☑ 3. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.

J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING :

1. I, ANTHONY DELTUFO, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: ANTHONY DELTUFO 3. Title: AGENT

4. For: J.P. NOONAN TRANSPORTATION, INC. (Name of person or entity recorded in Section H) 5. Date: 6/6/2013 (mm/dd/yyyy)

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number
3 - 31576

J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING (cont.) :

☑ 6. Check here if the address of the person providing certification is different from address recorded in Section H.

7. Street: 42 LONGWATER DRIVE

8. City/Town: NORWELL 9. State: MA 10. Zip Code: 02061-9149

11. Telephone: (781) 792-5819 12. Ext: 13. Fax: (781) 871-0690

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO $10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (MassDEP USE ONLY):

Received by DEP on

6/6/2013 4:14:37 PM

J.P. NOONAN TRANSPORTATION, INC.

415 WEST STREET · P.O. BOX 400
WEST BRIDGEWATER, MA 02379-0400
TEL (508) 588-8026
FAX (508) 587-2876

September 6, 2011

Mr. Anthony M. DelTufo, LSP
Clean Harbors Environmental Services, Inc.
42 Longwater Drive
Norwell, MA 02061

Re: Agent Authorization for DEP Submittals

Dear Mr. DelTufo:

On behalf of J.P. Noonan Transportation, Inc. (J.P. Noonan), I authorize Clean Harbors Environmental Services, Inc. (CHES) representatives to sign Massachusetts Department of Environmental Protection (DEP) Bureau of Waste Site Cleanup (BWSC) transmittal forms, bills of lading and/or uniform hazardous waste manifests, as Agent for J.P. Noonan, when I am unable to do so. This authorization is in accordance with Section 310 CMR 40.0009(2) of the Massachusetts Contingency Plan. I also authorize CHES to make electronic submittals of DEP documents. I understand that J.P. Noonan remains fully liable under federal and state laws and regulations with regard to Certifications of Person Undertaking Response Actions contained in the DEP transmittal forms as the generator and responsible party, and that CHES would be signing solely for our convenience.

Sincerely,

Authorized Representative

Title: DIRECTOR OF SAFETY

Environmental Services
Remedial Investigations
42 Longwater Drive
Norwell, MA 02061
(781) 792-5000
http://www.cleanharbors.com/

BILL OF LADING SUPPORT DOCUMENTATION

NO. 2 FUEL OIL RELEASE
MYSTIC VALLEY PARKWAY AT MEDFORD STREET
ARLINGTON, MASSACHUSETTS
DEP Release Tracking Number: 3-31576

Background

On May 31, 2013, Clean Harbors Environmental Services, Inc. (CHES) was contracted by J.P. Noonan. Transportation, Inc. (JP Noonan) to perform an Immediate Response Action (IRA) after a release of virgin No. 2 fuel oil from a tanker truck at the intersection of Mystic Valley Parkway and Medford Street in Arlington, Massachusetts (site). The truck overturned at the rotary at the intersection of the two streets, spilling its load of fuel oil. The IRA involved the recovery of oil from the Mystic River, the use of absorbent material to contain the release and the removal of soils and other media that were impacted by the release. Verbal approval has been received from MADEP to remove up to 50 cubic yards of soil during the IRA. The site is located within a residential area and, as such, no contaminants are suspected at the site other than the released virgin No. 2 fuel oil. As such, the soils are suitable for shipment to the Environmental Soil Management, Inc. (ESMI) thermal processing facility located in Loudon, New Hampshire for treatment and recycling.

Remediation Waste Characterization

Soils have been characterized as being impacted by virgin No. 2 fuel oil due to a spill which occurred due to a traffic accident involving a tanker truck carrying a load of No. 2 fuel oil.

Statement of Provisions

The spill occurred as the result of an traffic accident involving a tanker truck, and verbal approval was obtained from MADEP to complete the IRA activities described herein.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

Release Tracking Number
3 - 31576

BILL OF LADING (pursuant to 310 CMR 40.0030)

A. LOCATION OF SITE OR DISPOSAL SITE WHERE REMEDIATION WASTE WAS GENERATED:

1. Release Name/Location Aid: INTERSECTION WITH MYSTIC VALLEY PKWY
2. Street Address: 188 MEDFORD STREET
3. City/Town: ARLINGTON 4. Zip Code:
5. ☐ Check here if a Tier Classification Submittal has been provided to DEP for this disposal site:
   ☐ a. Tier 1A ☐ b. Tier 1B ☐ b. Tier 1C ☐ d. Tier II
6. If applicable provide the Permit Number:

B. THIS FORM IS BEING USED TO: (check one: B1-B4):

☐ 1. Submit a **Bill of Lading (BOL)** to transport Remediation Waste to Temporary Storage or a Receiving Facility.
Response Actions associated with this BOL (check all that apply):

- ☐ a. Immediate Response Action (IRA)
- ☐ b. Release Abatement Measure (RAM)
- ☐ c. Downgradient Property Status (DPS)
- ☐ d. Utility Release Abatement Measure (URAM)
- ☐ e. Comprehensive Response Actions
- ☐ f.. Limited Removal Action (LRA): (must be retained pursuant to 310 CMR 40.0034(6); can't be submitted via eDEP)
- ☐ g. Other

☐ 2. Submit an Attestation of Completion of **Shipment to Temporary Storage** (Sections C, F and J are not required):

☑ 3. Submit an Attestation of Completion of **Shipment to a Receiving Facility** (Sections C, F and J are not required):

☐ 4. Certify that Remediation Waste Was **Not Shipped, and the Bill of Lading is Void.** (Sections C, D, E, and F are not required)

5. Date Bill of Lading submitted to the Department: 6/6/2013 4:14:37 F (mm/dd/yyyy) b. eDEP Transaction ID: 569044

6. Period of Generation Associated with this Bill of Lading 6/1/2013 (mm/dd/yyyy) to 6/10/2013 (mm/dd/yyyy)

(All sections of this transmittal form must be filled out unless otherwise noted)
The Bill of Lading is not considered complete until the Attestation of Completion of Shipment is received by the Department.

C. DESCRIPTION OF WASTE AND WASTE SOURCE:

1. Contaminated Media /Debris (check all that apply):
   ☐ a. Soil ☐ b. Groundwater ☐ c. Surface Water ☐ d. Sediment ☐ e. Vegetation or Organic Debris
   ☐ f. Demolition/Construction Waste ☐ g. Inorganic Absorbent Materials ☐ h. Other:
2. Uncontainerized Waste (check all that apply):
   ☐ a. Inorganic Absorbent Materials ☐ b. Other:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BILL OF LADING (pursuant to 310 CMR 40.0030)

BWSC112

Release Tracking Number
3 - 31576

C. DESCRIPTION OF WASTE AND WASTE SOURCE (cont.):

3. Containerized Waste (check all that apply):
   ☐ a. Tank Bottoms/Sludges ☐ b. Containers ☐ c. Drums ☐ d. Engineered Impoundments
   ☐ e. Other:
4. Estimated Quantity: ☐ Tons ☐ Cu. Yds. ☐ Gallons
5. Contaminant Source (check one):
   ☐ a. Transportation Accident ☐ b. Underground Storage Tank ☐ c. Brownfields Redevelopment
   ☐ d. Other:
6. Type of Contaminant (check all that apply):
   ☐ a. Gasoline ☐ b. Diesel Fuel ☐ c. #2 Fuel Oil ☐ d. #4 Fuel Oil ☐ e. #6 Fuel Oil ☐ f. Jet Fuel
   ☐ g. Waste Oil ☐ h. Kerosene ☐ i. Chlorinated Solvents ☐ j. Urban Fill ☐ k. Other:
7. Constituents of Concern (check all that apply):
   ☐ a. As ☐ b. Cd ☐ c. Cr ☐ d. Pb ☐ e. Hg ☐ f. EPH/TPH ☐ g. VPH
   ☐ h. PCBs ☐ i. VOCs ☐ j. SVOCs ☐ k. Other:
8. If applicable, check the box for the Reportable Concentration Category of the site:
   ☐ a. RCS-1 ☐ b. RCS-2 ☐ c. RCGW-1 ☐ d. RCGW-2
9. Remediation Waste Characterization Documentation (check at least one):
   ☐ a. Site History Information ☐ b. Sampling Analytical Methods and Procedures ☐ c. Laboratory Data
   ☐ d. Field Screening Data ☐ e. Characterization Documentation previously submitted to the Department
   i. Date submitted: (mm/dd/yyyy) ii. Type of Documentation:

D. TRANSPORTER OR COMMON CARRIER INFORMATION:

1. Transporter/Common Carrier Name: CLEAN HARBORS ENV. SERVICES, INC
2. Contact First Name: FRANK 3. Last Name: PHILLION
4. Street: 609 PLEASANT STREET 5. Title: SUPERVISOR
6. City/Town: WEYMOUTH 7. State: MA 8. Zip Code: 02189-0000
9. Telephone: (781) 803-4132 10. Ext: 11. Fax:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number
3 - 31576

E. RECEIVING FACILITY/TEMPORARY STORAGE LOCATION:

1. Operator/Facility Name: ENVIRONMENTAL SOIL MANAGEMENT, INC.
2. Contact First Name: STEPHEN 3. Last Name: RAPER
4. Street: 67 INTERNATIONAL DRIVE 5. Title: COMPLIANCE MANAGER
6. City/Town: LOUDON 7. State: NH 8. Zip Code: 03307-0000
9. Telephone: (603) 783-0228 10. Ext: 11. Fax:
12. Type of Facility: (Check one)
    a. Temporary Storage i. Period of Temporary Storage: (mm/dd/yyyy) to (mm/dd/yyyy)
    ii. Reason for Temporary Storage:
    ☐ b. Asphalt Batch/Hot Mix ☐ c. Landfill/Disposal ☐ d. Landfill/Structural Fill ☐ e. Landfill/Daily Cover
    ☐ f. Asphalt Batch/Cold Mix ☑ g. Thermal Processing ☐ h. Incinerator ☐ i. Other:
13. Division of Hazardous Waste/Class A Permit Number:
14. Division of Solid Waste Permit Number: DES-SW-SP-96-002
15. EPA Identification Number: NH5986485852

F. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this submittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief, the assessment action(s) undertaken to characterize the Remediation Waste which is (are) the subject of this submittal for acceptance at the facility identified in this submittal comply with applicable provisions of 310 CMR 40.0000, and such facility is permitted to accept Remediation Waste having the characteristics described in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #:
2. First Name: 3. Last Name:
4. Telephone: 5. Ext.
6. FAX:
7. Signature:
8. Date: (mm/dd/yyyy)
9. LSP Stamp:

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number
3 - 31576

G. PERSON SUBMITTING BILL OF LADING:

1. Check all that apply: ☐ a. change in contact name ☐ b. Change of address ☐ c. change in person undertaking response actions

2. Name of Organization: JP NOONAN TRANSPORTATION INC

3. Contact First Name: BOB 4. Last Name: DUPUIS

5. Street: PO BOX 400 415 WEST ST 6. Title: DAFETY MANAGER

7. City/Town: WEST BRIDGEWATER 8. State: MA 9. Zip Code: 02379-1030

10. Telephone: (508) 588-8026 11. Ext: 12. Fax:

H. RELATIONSHIP TO SITE OF PERSON SUBMITTING BILL OF LADING: ☐ Check here to change relationship

☑ 1. RP or PRP: ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter

☑ e. Other RP or PRP Specify: NON-SPECIFIED PRP

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c.21E, s.2):

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c.21E, s.5(j))

☐ 4. Any Other person Undertaking Response Actions: Specify Relationship:

I. REQUIRED ATTACHMENTS AND SUBMITTALS :

☐ 1. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approvals issued by DEP or EPA. If the box is checked, you must attach a statement identifying the applicable provisions thereof.

☐ 2. Check here if any non-updatable information provided on this form is incorrect, e. g. property address. Send corrections to BWSC.eDEP@state.ma.us

☐ 3. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.

J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING :

1. I, _____, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: _____ 3. Title: _____

4. For: _____ 5. Date: _____
(Name of person or entity recorded in Section H) (mm/dd/yyyy)

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number
3 - 31576

J. CERTIFICATION OF PERSON SUBMITTING BILL OF LADING (cont.) :

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section H.

7. Street:

8. City/Town: 9. State: 10. Zip Code:

11. Telephone: 12. Ext: 13. Fax:

YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO $10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (MassDEP USE ONLY):

Received by DEP on

7/3/2013 10:39:20 AM

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112A

BILL OF LADING (pursuant to 310 CMR 40.0030)

Release Tracking Number
3 - 31576

SUMMARY OF SHIPMENT SHEET 1 **OF** 1

A. SUMMARY OF SHIPMENT (To be filled out by the receiving facility upon receipt of Remediation Waste):

1. Date of Shipment: (mm/dd/yyyy)	2. Date of Receipt: (mm/dd/yyyy)	3. Number of Loads Shipped:	4. Daily Volume Shipped: ☐ yds³ ☑ tons ☐ gals
6/10/2013	6/10/2013	2.00	36.99
6/11/2013	6/11/2013	1.00	16.66
5. Totals Recorded on this Summary of Shipment Sheet:		3.00	53.65

B. ☐ Check here if additional BWSC112A BOL Summary Sheets are needed.

Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC112B

Release Tracking Number
3 - 31576

BILL OF LADING (pursuant to 310 CMR 40.0030)
SUMMARY SHEET SIGNATURE PAGE

A. ACKNOWLEDGEMENT OF RECEIPT OF REMEDIATION WASTE AT RECEIVING FACILITY OR TEMPORARY STORAGE:

1. I, STEPHEN RAPER, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: STEPHEN RAPER
3. Title: COMPLIANCE MANAGER
4. For: ESMI
5. Date: 7/1/2013 (mm/dd/yyyy)
6. Date of Final Shipment associated with this Bill of Lading: 6/11/2013 (mm/dd/yyyy)

B. ACKNOWLEDGEMENT OF SHIPMENT AND RECEIPT OF REMEDIATION WASTE BY PERSON CONDUCTING RESPONSE ACTIONS ASSOCIATED WITH THIS BILL OF LADING:

1. I, ANTHONY DELTUFO, attest under the pains and penalties or perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: ANTHONY DELTUFO
3. Title: AGENT
4. For: JP NOONAN TRANSPORTATION INC (Name of person or entity recorded in Section G)
5. Date: 7/3/2013 (mm/dd/yyyy)

☑ 6. Check here if the address of the person providing certification is different from address recorded in BWSC112 Section H.

7. Street: 42 LONGWATER DRIVE
8. City/Town: NORWELL
9. State: MA
10. Zip Code: 02061-9149
11. Telephone: (781) 792-5819
12. Ext:
13. Fax: (781) 871-0690

☐ 14. Check here if attaching optional supporting documentation such as copies of Load Information Summary Sheets

Clean Harbors Environmental Services, Inc.
42 Longwater Drive
Norwell, MA 02061-9149
Phone: 781-792-5000
Fax: 781-792-5938
www.cleanharbors.com

June 12, 2013

Richard Jordan, Asst. V.P.
Winchester Savings Bank
661 Main Street
Winchester, Massachusetts 01890

Mr. Wayne A. Chouinard, Town Engineer
Town of Arlington
51 Grove Street
Arlington, Massachusetts 02476

Mr. Edward M. Lambert Jr., Commissioner
Mass Department of Conservation and Recreation
251 Causeway Street, Suite 900
Boston, Massachusetts 02114-2104

Re: Informational Notice of Environmental Sampling
No. 2 Fuel Oil Release
Medford Street and Mystic Valley Parkway
Arlington, Massachusetts
DEP Release Tracking No.: 3-31572

Dear Sirs:

On May 31, 2013, a release of an estimated 9,500 gallons of No. 2 fuel oil occurred at the above-referenced location. Clean Harbors Environmental Services, Inc. (CHES) conducted Immediate Response Actions in accordance with the Massachusetts Contingency Plan (MCP) on behalf of J.P. Noonan Transportation, Inc., the truck owner. These actions included cleaning the pavement and drainage system, recovery of fuel from the Mystic River, removal of impacted soils adjacent to the roadway and at locations adjacent to the river at between the Medford Street and River Street bridges. Soil samples were collected for field screening and laboratory analysis. Once the laboratory data have been received, I will send you a copy of the laboratory report, data tables and a site sketch when they are completed. Please contact me if you have any questions at 781-792-5822.

Sincerely,

Richard E. MacCarthy
Senior Remedial Engineer

Cc: Bob Dupuis
415 West Street
West Bridgewater, MA 02379

Project file EO5401971

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

3 | 31576

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 188 Medford Street

City/Town: Arlington Zip Code: 02474-3114

B. This notice is being provided to the following party:

1. Name: Richard Jordan

2. Street Address: 661 Main Street

City/Town: Winchester Zip Code: 01890

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: 188 Medford Street

City/Town: Arlington Zip Code: 02474-3114

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☐ residential ☑ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Soil Samples collected in front of Bank building in landscaped areas along sidewalk, under sidewalk and in grassy area along curb east of Bank driveway.

E. Contact information related to the party providing this notice:

Contact Name: Bob Dupuis

Street Address: 415 West Street

City/Town: West Bridgewater, MA Zip Code: 02379

Telephone: (508) 588-8026 Email: _____

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

3 | 31576

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 188 Medford Street

City/Town: Arlington Zip Code: 02474-3114

B. This notice is being provided to the following party:

1. Name: Town of Arlington

2. Street Address: 51 Grove Street

City/Town: Arlington Zip Code: _____

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: 188 Medford Street

City/Town: Arlington Zip Code: 02474-3114

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☐ residential ☐ commerical ☐ industrial ☐ school/playground ☑ Other roadway (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Soil Samples collected in front of Bank building in landscaped areas along sidewalk, under sidewalk and in grassy area along curb east of Bank driveway.

E. Contact information related to the party providing this notice:

Contact Name: Bob Dupuis

Street Address: 415 West Street

City/Town: West Bridgewater, MA Zip Code: 02379

Telephone: (508) 588-8026 Email: _____

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

3 | 31576

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 188 Medford Street

City/Town: Arlington Zip Code: 02474-3114

B. This notice is being provided to the following party:

1. Name: Edward Lambert

2. Street Address: 251 Causeway Street, Suite 900

City/Town: Boston Zip Code: 02114-2104

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: 188 Medford Street

City/Town: Arlington Zip Code: 02474-3114

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☐ residential ☐ commerical ☐ industrial ☐ school/playground ☑ Other road and parkway (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Soil Samples collected in front of Bank building in landscaped areas along sidewalk, under sidewalk, and along river between Medford and River Street bridges.

E. Contact information related to the party providing this notice:

Contact Name: Bob Dupuis

Street Address: 415 West Street

City/Town: West Bridgewater, MA Zip Code: 02379

Telephone: (508) 588-8026 Email: _____

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

#2 Fuel Oil Release – Mystic River
Cleanup Update #1

July 2, 2013

Clean Harbors Environmental Services (CHES) has been retained to conduct Licensed Site Professional (LSP) oversight and assessment of the response actions being conducted for the #2 fuel oil release to the Mystic River. The spill of approximately 9,600 gallons of #2 fuel oil occurred on May 31, 2013 from a tanker truck. The majority of the released oil was recovered in the early stages of response. Subsequent clean-up activities have focused on the remaining oil that impacted the Arlington shoreline. CHES has prepared this informational sheet to update interested parties as to the progress of the on-going response actions.

At the outset of the Shoreline Assessment conducted on June 4, 2013, the impacted area of the Mystic River was divided into thirty 100' sections, and target cleanup actions for each section were established. Then, after removal of all impacted debris (trash, leaves and brush), seven (7) areas identified along Arlington riverbank where petroleum sheen remained, or could be generated by disturbing soils/sediments, were identified. No areas were identified along the Medford shoreline. These areas are identified on the attached Remediation Plan.

The following activities have been performed from since the June 8th public meeting in Medford:

- Shoreline debris removal cleanup assessment completed along riverbanks (June 10, 2013).

- Additional water samples from the Mystic River were collected and analyzed for extractable and volatile petroleum hydrocarbons (EPH/VPH) on June 10, 2013. The results indicate no detectable EPH/VPH concentrations upstream and at the center of the site, and insignificant concentrations downstream of the site that are well below the lowest ecological criteria (see attached Table 1).

- The seven areas identified along the Arlington riverbank where petroleum sheen was present were secured using containment and absorbent boom to ensure that the areas have no negative impact on the waterway (June 10-11, 2013).

- All containment boom crossing the river were removed per Massachusetts Department of Environmental Protection (DEP) approval and traffic was opened to the public (June 12, 2013).

- An inspection was conducted along the Arlington shoreline between Medford Street and River Street bridges and verbal approval was obtained from the Arlington Conservation Commission to conduct water-washing and limited removal of sediments and sporadic fringing moss/soils to eliminate the source of petroleum sheen (June 13, 2013).

- An inspection was conducted along the Arlington shoreline between Medford Street and River Street bridges (June 20, 2013). Little or no petroleum sheen or odors were present at the seven containment areas.

- Water-washing and sediment/moss/soil removal was conducted at the seven areas identified along the Arlington riverbank (June 25-26, 2013).

- Notice of Intent was submitted to the Arlington Conservation Commission (June 25, 2013).

The following waste materials have been shipped off-site for disposal including:

- Approximately 50 tons of petroleum impacted soils generated during the cleanup at the Medford Street rotary.

- Approximately 31 cubic yards of petroleum impacted debris generated during the cleanup at the Medford Street rotary and associated drainage structure cleaning.

- Approximately 18 cubic yards of spent absorbent materials generated during the cleanup at the Mystic River.

- Approximately 35,000 gallons of an oil and water mixture generated during the cleanup.

- Approximately 8 cubic yards of petroleum impacted debris generated during the shoreline cleanup at the seven containment areas.

The seven containment areas will be monitored to determine if additional response actions are necessary. Inspections of the river and shoreline will be conducted during both high and low water levels within the river, and after heavy rainfall events to monitor the site for evidence of petroleum. Any such conditions will then be addressed in an appropriate manner. Maintenance of the boom will also be conducted as necessary.

An IRA Plan is being prepared for submittal to the DEP on or before July 30th. The IRA Plan will document the response actions taken to date, including all laboratory data obtained, and will propose subsequent response actions based on the data obtained.

Questions pertaining to these response actions can be directed to Anthony M. DelTufo, LSP, Clean Harbors Environmental Services, Inc. at 781-792-5819, or via e-mail at deltufot@cleanharbors.com.

Table 1
Laboratory Analysis of Surface Water Samples
188 Medford Street (at Mystic Valley Parkway), Arlington, MA

Sample Dates: June 3 & 10, 2013

Sample ID	WS-1	WS-1A	WS-2	WS-2A	WS-3	WS-3A	Lowest Ecological Criteria*
Sample Date:	6/3/2013	6/10/2013	6/3/2013	6/10/2013	6/3/2013	6/10/2013	
	(Downstream)	(Downstream)	(Middle)	(Middle)	(Upstream)	(Upstream)	
EPH (ug/l)							
C11-C22 Aromatics	ND(103)	ND(103)	ND(101)	ND(103)	ND(101)	ND(102)	5
C9-C18 Aliphatics	ND(103)	ND(103)	ND(101)	ND(103)	ND(101)	ND(102)	1,800
C19-C36 Aliphatics	118	ND(103)	ND(101)	ND(103)	ND(101)	ND(102)	2,100
Naphthalene	ND(1.03)	ND(1.03)	ND(1.01)	ND(1.03)	ND(1.01)	ND(1.02)	72
2-Methylnaphthalene	5.91	ND(1.03)	ND(1.01)	ND(1.03)	ND(1.01)	ND(1.02)	70
Acenaphthene	ND(1.03)	ND(1.03)	ND(1.01)	ND(1.03)	ND(1.01)	ND(1.02)	23
Phenanthrene	ND(1.03)	ND(1.03)	ND(1.01)	ND(1.03)	ND(1.01)	ND(1.02)	38
VPH (ug/l)							
C5-C8 Aliphatics	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	250
C9-C12 Aliphatics	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	1,800
C9-C10 Aromatics	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	ND(100)	540
Methyl Tert Butyl Ether	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	100,000
Benzene	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	460
Toluene	2.06	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	1,400
Ethylbenzene	1.23	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	181
Xylenes	10.62	9.13	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	200
Naphthalene	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	ND(1.00)	72

EPH = extractable petroleum hydrocarbons, VPH = volatile petroleum hydrocarbons, ND = not detected at the reporting limit
ug/l = micrograms per liter (parts per billion)
* = Lowest Ecologically Based Criteria from derivation of GW-3 Standards

Clean Harbors Environmental Services, Inc.
42 Longwater Drive
Norwell, MA 02061-9149
Phone: 781-792-5000
Fax: 781-792-5938
www.cleanharbors.com

June 25, 2013

Richard Jordan, Asst. V.P. (via email)
Winchester Savings Bank
661 Main Street
Winchester, Massachusetts 01890

Re: Informational Notice of Environmental Sampling
No. 2 Fuel Oil Release
188 Medford Street at Mystic Valley Parkway
Arlington, Massachusetts
DEP Release Tracking No.: 3-31576

Dear Mr. Jordan:

On May 31, 2013, a release of approximately 9,600 gallons of No. 2 fuel oil occurred at the above-referenced location due to a truck rollover. Clean Harbors Environmental Services, Inc. (CHES) conducted Immediate Response Actions in accordance with the Massachusetts Contingency Plan (MCP) on behalf of J.P. Noonan Transportation, Inc., the truck owner. These actions included cleaning the pavement and storm water drainage system, recovery of fuel from the Mystic River, removal of impacted soils adjacent to the roadway and at locations adjacent to the river between the Medford Street and River Street bridges. At the time of the release, a minor amount of fuel oil splashed onto the sidewalk and adjacent soil in front of your 188 Medford Street property. Also, some of the oil penetrated the seam between the sidewalk curb and roadway surface impacted the underlying soil. As a result, soil removal was conducted in front of 188 Medford Street on June 5th and 6th, 2013. The excavation included a small grassy area on the bank side of the sidewalk, which may extend onto the bank property. Based on the property boundary shown on the attached GIS map, it appears that most if not all of this small excavation falls within the roadway right-of-way, but it is possible that some of the grassy area excavation may have extended onto your property. During the excavation, soil samples were collected from the excavation limits for field screening and possible laboratory analysis. No visual or olfactory evidence of petroleum was noted in any of the samples from the grassy area excavation, and low field screening results were recorded. As such, none of these samples were submitted for laboratory analysis. Field screening results are summarized on Table 1 and the samples collected inside of the sidewalk are highlighted in yellow. A site sketch labeled as Figure 2 is attached showing the excavation and sample locations.

Samples from the street excavation showed higher field screening results, and some of these samples were submitted for laboratory analysis. The laboratory report is attached. As shown on Table 1 and the site sketch presented as Figure 2, a total of 55 samples were field screened for

volatile organic compounds (VOCs) using standard headspace screening methods and a MiniRAE photoionization detector (PID) calibrated to a benzene response factor. Soil removal was discontinued at certain locations adjacent to the roadway due to possible undermining of the pavement. Of the 55 samples, six samples were analyzed for extractable petroleum hydrocarbons (EPH) and volatile petroleum hydrocarbons (VPH) with No. 2 fuel oil specific target compounds. These samples are highlighted in green on Table 1, and the laboratory results are summarized in Table 2. The samples that were submitted for analysis consisted of the two samples with the highest VOC concentrations (S-16 and S-18, under the roadway), and four additional samples selected to provide geographic coverage of the excavated area.

The four samples selected for geographical coverage (S25, S37, S-39 and S-48) had similar or higher field screening results than the samples obtained closer to or on the bank property and can be used to safely approximate any remaining petroleum concentrations near or on the bank property. As shown on Table 2, only low or non-detectable EPH/VPH concentrations were reported. This data along with our field observations indicate that there is little or no petroleum concentrations remaining in the soils between the sidewalk and bank building, such that no further actions are warranted in this area. Please contact me at 781-792-5822 if you have any questions or would like to discuss this matter further.

Sincerely,

Richard E. MacCarthy
Senior Remedial Engineer

Cc: Bob Dupuis
415 West Street
West Bridgewater, MA 02379

Project file EO5401971

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

3 | 31576

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 188 Medford Street

City/Town: Arlington Zip Code: 02474-3114

B. This notice is being provided to the following party:

1. Name: Richard Jordan

2. Street Address: 661 Main Street

City/Town: Winchester Zip Code: 01890

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: 188 Medford Street

City/Town: Arlington Zip Code: 02474-3114

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☐ residential ☑ commerical ☐ industrial ☐ school/playground ☐ Other _____ (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Soil Samples collected in front of Bank building in landscaped areas along sidewalk, under sidewalk and in grassy area along curb east of Bank driveway.

E. Contact information related to the party providing this notice:

Contact Name: Bob Dupuis

Street Address: 415 West Street

City/Town: West Bridgewater, MA Zip Code: 02379

Telephone: (508) 588-8026 Email: _____

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

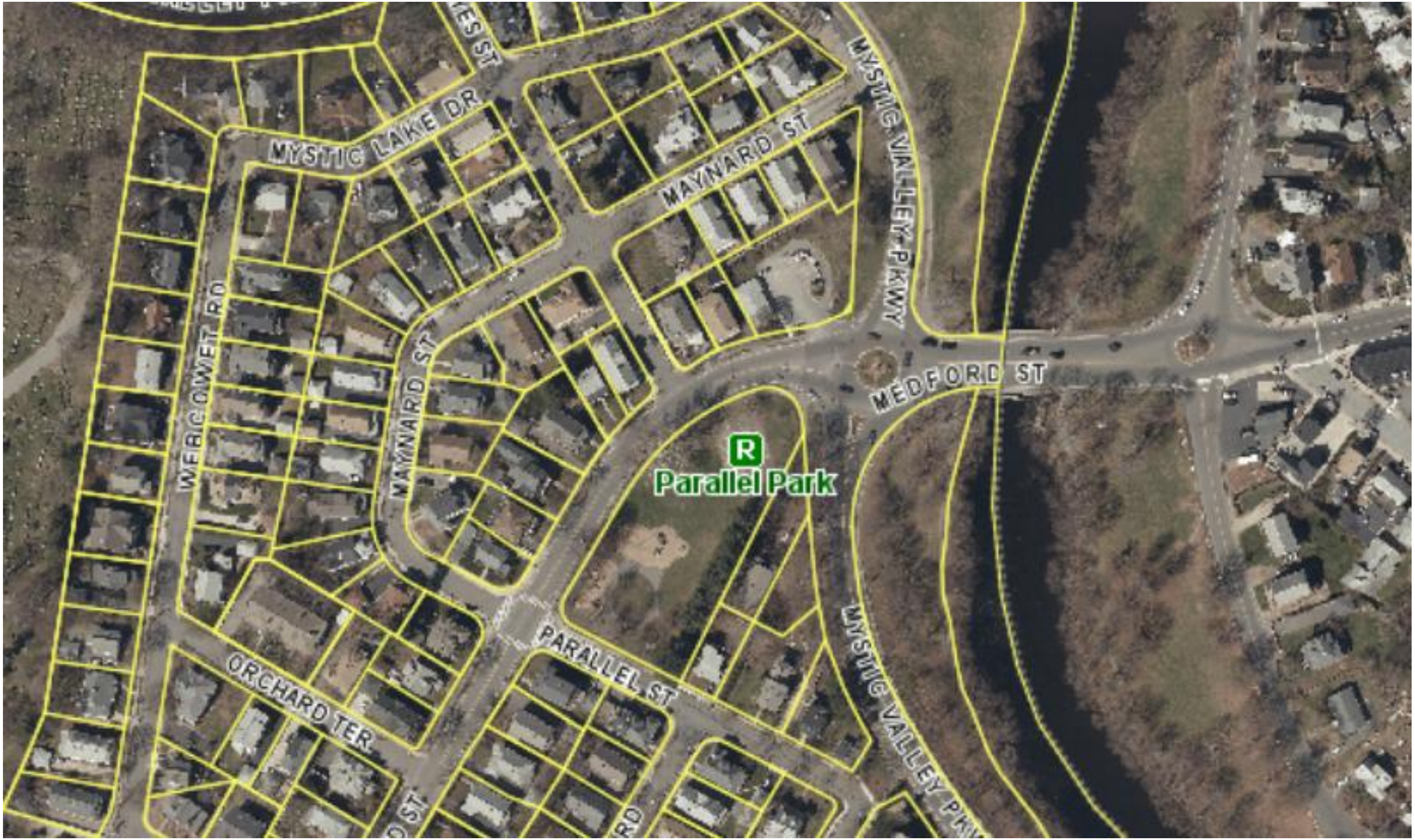
When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

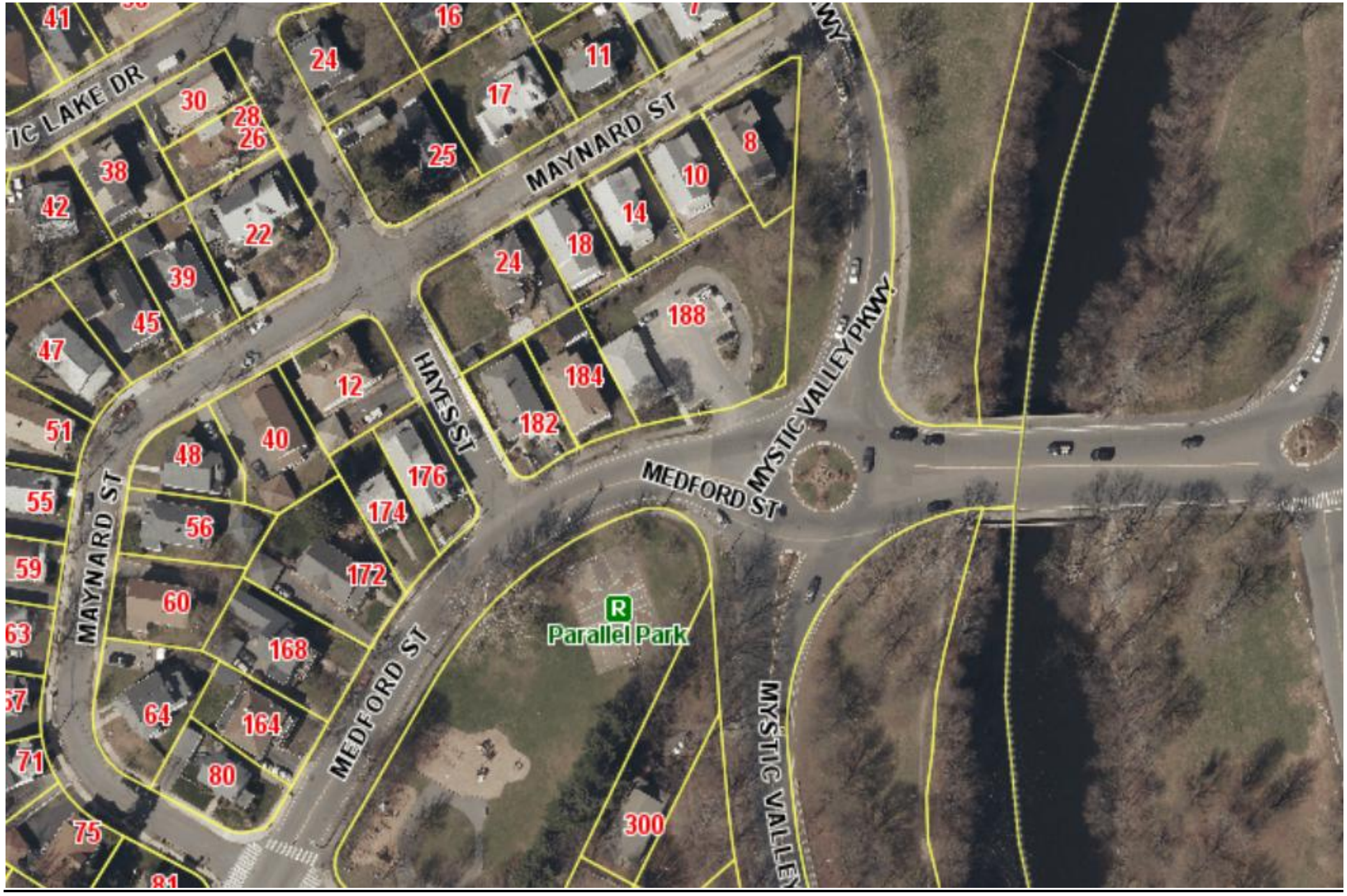
Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.



Arlington GIS Parcel boundaries



Arlington GIS Parcel boundaries with address

Table 1
Field Screening of Excavation Soil Samples
188 Medford Street (at Mystic Valley Parkway), Arlington, MA

Sample Dates: June 5 & 6, 2013

Sample ID	Sample Date:	Sample Depth	VOC Results	Notes/Observations:
		(inches)	*(ppm)*	
Winchester Bank Excavation				
S1	6/5/2013	36	8.7	floor
S2**	6/5/2013	0-3	1.5	surface outside of dead grass area
S3	6/5/2013	8	2.1	floor under sidewalk
S4**	6/5/2013	12	12.9	wall
S5	6/5/2013	36	5.4	wall
S6	6/5/2013	8	0.9	floor under sidewalk
S7**	6/5/2013	12	5.4	wall
S8**	6/5/2013	0-3	0.0	surface outside of excavation
S9	6/5/2013	18	452	below end of curb at manhole
S10	6/5/2013	0-3	0.3	floor under sidewalk and driveway
S11**	6/5/2013	6-8	4.2	below curb and landscaping transition
S12	6/5/2013	30	227	floor
S13	6/5/2013	36	664	floor
S14	6/5/2013	40	1.1	floor
S15	6/5/2013	0-3	4.7	floor under sidewalk at manhole
S16*	6/5/2013	24-30	783	wall below curb
S17	6/5/2013	28-36	534	wall below curb
S18*	6/5/2013	36-40	738	wall below curb
S19	6/5/2013	18-30	3.0	wall on Savings Bank side of deepest trench
S20	*6/5/2013*	*24-36*	*19.7*	*wall on Savings Bank side of deepest trench*
S20A	6/5/2013	24-36	10.3	wall on Savings Bank side of deepest trench
S21	6/5/2013	36-40	9.0	wall on Savings Bank side of deepest trench
S22	6/5/2013	24-36	10.3	wall below curb
S23	6/5/2013	20-26	186	wall below curb
S24	6/5/2013	34-40	2.8	wall below curb
S25*	6/5/2013	40	4.0	floor below curb wall
S26**	6/5/2013	0-3	0.7	surface outside of dead grass area
S27**	6/5/2013	0-3	0.3	surface outside of dead grass area
S28	6/5/2013	24	8.9	floor under sidewalk
S29**	6/5/2013	12	6.0	floor under dead grass area
S30	6/5/2013	20-26	480	wall below curb
S31	6/5/2013	34-40	402	wall below curb
S32	*6/5/2013*	*40*	*24.1*	*floor below curb wall*
S32A	6/5/2013	46	19.8	floor below curb wall
S33	6/5/2013	30	7.2	floor under sidewalk
S34**	6/5/2013	12	4.5	floor under dead grass area
S35	6/6/2013	24	3.6	wall
S36	6/6/2013	72	39.2	floor
S37*	6/6/2013	24	1.6	4" behind former curb location (curb removed)
S38	6/6/2013	64	1.2	floor
S39*	6/6/2013	24	16.2	wall below curb
S40	6/6/2013	24	0.7	floor
S41	*6/6/2013*	*24*	*87.4*	*floor*
S41A	6/6/2013	36	3.6	floor
S42	6/6/2013	24	4.2	floor under sidewalk
S43	6/6/2013	36-42	0.7	wall
S44	6/6/2013	60	87.2	floor
S45	6/6/2013	60	12.3	wall
S46	6/6/2013	48	3.4	floor under sidewalk
S47**	6/6/2013	12	0.7	floor
S48*	6/6/2013	20-26	79.0	wall
S49	6/6/2013	48	2.7	floor
S50**	6/6/2013	48	9.7	floor
S51	6/6/2013	20-26	414	wall below curb
Rotary Excavation				
S52	6/6/2013	6	2	floor
S53	6/6/2013	6	4.1	floor
S54	6/6/2013	6	5	floor
S55	6/6/2013	0-3	2.9	surface outside of dead grass area

Notes: Italicized font denotes soil was removed during subsequent soil removal.
* = sample submitted for laboratory analysis
** = sample possibly located on bank property

Table 2
Field Screening and Laboratory Analysis of Excavation Soil Samples
188 Medford Street (at Mystic Valley Parkway), Arlington, MA

Sample Dates: June 5 & 6, 2013

Sample ID	S-16	S-18	S-25	S-37	S-39	S-48	Method 1 Risk Standards*		
Depth (inches)	24-30	36-40	40	24	24	20-26	S-1/GW-2/3	S-2/GW-2/3	S-3/GW-2/3
Date:	6/5/2013	6/5/2013	6/5/2013	6/6/2013	6/6/2013	6/6/2013			
VOCs (ppm)	783	738	4.0	1.6	16.2	79.0			
EPH (mg/kg)									
C11-C22 Aromatics	**2,120**	**1,220**	ND(16.5)	ND(17.6)	ND(16.3)	ND(17.0)	1,000	3,000	5,000
C9-C18 Aliphatics	**2,860**	**2,720**	ND(16.5)	ND(17.6)	24.4	ND(17.0)	1,000	3,000	5,000
C19-C36 Aliphatics	1,090	942	ND(16.5)	ND(17.6)	ND(16.3)	ND(17.0)	3,000	5,000	5,000
Naphthalene	24.3	10.9	ND(0.110)	0.168	ND(0.109)	ND(0.114)	40 / 500	40 / 1,000	40 / 3,000
2-Methylnaphthalene	61.1	30.6	ND(0.110)	0.566	0.486	0.568	80 / 300	80 / 500	80 / 500
Acenaphthene	ND(0.128)	ND(0.114)	ND(0.110)	ND(0.118)	ND(0.109)	ND(0.114)	1,000	3,000	5,000
Phenanthrene	8.04	5.43	ND(0.110)	ND(0.118)	0.113	0.156	500	1,000	3,000
VPH (mg/kg)									
C5-C8 Aliphatics	33.0	26.2	ND(11.0)	ND(11.8)	ND(10.9)	ND(11.4)	100	500	500
C9-C12 Aliphatics	ND(12.8)	ND(11.4)	ND(11.0)	ND(11.8)	ND(10.9)	ND(11.4)	1,000	3,000	5,000
C9-C10 Aromatics	**488**	**593**	ND(11.0)	ND(11.8)	ND(10.9)	ND(11.4)	100	3,000	500
Methyl Tert Butyl Ether	ND(0.128)	ND(0.114)	ND(0.110)	ND(0.118)	ND(0.109)	ND(0.114)	100	100 / 500	100 / 500
Benzene	ND(0.128)	ND(0.114)	ND(0.110)	ND(0.118)	ND(0.109)	ND(0.114)	30	200	700 / 900
Toluene	17.9	16.2	ND(0.110)	ND(0.118)	ND(0.109)	ND(0.114)	500	1,000	2,000 / 3,000
Ethylbenzene	29.1	23.7	0.143	ND(0.118)	ND(0.109)	2.07	500	1,000	1,000 / 3,000
Xylenes	106.8	89.3	1.164	0.694	ND(0.109)	0.670	300 / 500	300 / 1,000	300 / 3,000
Naphthalene	ND(0.128)	ND(0.114)	ND(0.110)	ND(0.118)	0.610	ND(0.114)	40 / 500	40 / 1000	40 / 3000

VOCs = volatile organic compounds measured with a MiniRAE photoionization detector calibrated to a Benzene response
EPH = extractable petroleum hydrocarbons, VPH = volatile petroleum hydrocarbons
ppm = parts per million
mg/kg = milligrams per kilogram
* = Method 1 risk standards for S-1 and S-3 soil in a GW-2 or GW-3 groundwater area
Concentrations in **Bold** were above cleanup standards

Clean Harbors Environmental Services, Inc.
42 Longwater Drive
Norwell, MA 02061-9149
Phone: 781-792-5000
Fax: 781-792-5938
www.cleanharbors.com

July 26, 2013

Mr. Adam W. Chapdelaine
Arlington Town Manager
730 Massachusetts Avenue
Arlington, Massachusetts 02476

Mr. Edward M. Lambert Jr., Commissioner
Mass Department of Conservation and Recreation
251 Causeway Street, Suite 900
Boston, Massachusetts 02114-2104

Re: Informational Notice of Environmental Sampling and Laboratory Report Transmittal
No. 2 Fuel Oil Release
188 Medford Street at Mystic Valley Parkway
Arlington, Massachusetts
DEP Release Tracking No.: 3-31576

Dear Sirs:

On behalf of J.P. Noonan Transportation, Inc., Clean Harbors Environmental Services, Inc. (CHES) is submitting the attached Notice of Environmental Sampling (BWSC123) and transmittal of laboratory data. CHES is also submitting a copy of the Release Notification Form for the release. On May 31, 2013, a release of approximately 9,600 gallons of No. 2 fuel oil occurred at the above-referenced location due to a truck rollover. Clean Harbors Environmental Services, Inc. (CHES) conducted Immediate Response Actions in accordance with the Massachusetts Contingency Plan (MCP). These actions included cleaning the pavement and storm water drainage system, recovery of fuel from the Mystic River, surface water sampling and removal of impacted soils adjacent to the roadway and at locations adjacent to the river between the Medford Street and River Street bridges.

The attached preliminary Site Sketch, Aerial Photograph and Sampling Plan show the sample locations, and copies of the laboratory analytical results are attached. Further discussion regarding the analytical results will be available in the Immediate Response Action (IRA) Plan, to be submitted electronically to the Massachusetts Department of Environmental Protection (DEP) on or before July 30, 2013. The IRA Plan can be downloaded from the DEP website at http://public.dep.state.ma.us/wsc_viewer/main.aspx by entering the DEP Release Tracking Number referenced above. Local officials have the right to request Public Involvement Activities under 310 CMR 40.1403(9). No action other than the receipt of this letter is necessary by your office.

If you have any questions regarding this notice, please feel free to contact the undersigned at 781-792-5822.

Sincerely,

Richard E. MacCarthy
Senior Remedial Engineer

Cc: Cori Beckwith (via email)
Town of Arlington ConCom,
730 Mass Ave., Arlington, MA 02476

Alicia Hunt (via email)
City of Medford ConCom
85 George P. Hassett Dr., Medford, MA 02155

Bob Dupuis (via email)
415 West Street
West Bridgewater, MA 02379

Project file EO5401971

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

3 | 31576

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 188 Medford Street

City/Town: Arlington Zip Code: 02474-3114

B. This notice is being provided to the following party:

1. Name: Town of Arlington

2. Street Address: 730 Massachusetts Avenue

City/Town: Arlington Zip Code: 02476

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: 188 Medford Street

City/Town: Arlington Zip Code: 02474-3114

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☐ residential ☐ commerical ☐ industrial ☐ school/playground ☑ Other roadway (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Soil Samples collected in front of Bank building in landscaped areas along sidewalk, under sidewalk and in grassy area along curb east of Bank driveway.

E. Contact information related to the party providing this notice:

Contact Name: Bob Dupuis

Street Address: 415 West Street

City/Town: West Bridgewater, MA Zip Code: 02379

Telephone: (508) 588-8026 Email: _____

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

BWSC 123

This Notice is Related to Release Tracking Number

3 | 31576

A. The address of the disposal site related to this Notice and Release Tracking Number (provided above):

1. Street Address: 188 Medford Street

City/Town: Arlington Zip Code: 02474-3114

B. This notice is being provided to the following party:

1. Name: Edward Lambert

2. Street Address: 251 Causeway Street, Suite 900

City/Town: Boston Zip Code: 02114-2104

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: 188 Medford Street

City/Town: Arlington Zip Code: 02474-3114

2. MCP phase of work during which the sampling will be/has been conducted:

☑ Immediate Response Action
☐ Release Abatement Measure
☐ Utility-related Abatement Measure
☐ Phase I Initial Site Investigation
☐ Phase II Comprehensive Site Assessment
☐ Phase III Feasibility Evaluation
☐ Phase IV Remedy Implementation Plan
☐ Phase V/Remedy Operation Status
☐ Post-Class C Operation, Maintenance and Monitoring
☐ Other _____ (specify)

3. Description of property where sampling will be/has been conducted:

☐ residential ☐ commerical ☐ industrial ☐ school/playground ☑ Other road and parkway (specify)

4. Description of the sampling locations and types (e.g., soil, groundwater) to the extent known at the time of this notice.

Soil Samples collected in front of Bank building in landscaped areas along sidewalk, under sidewalk, and along river between Medford and River Street bridges.

E. Contact information related to the party providing this notice:

Contact Name: Bob Dupuis

Street Address: 415 West Street

City/Town: West Bridgewater, MA Zip Code: 02379

Telephone: (508) 588-8026 Email: _____

NOTICE OF ENVIRONMENTAL SAMPLING

As required by 310 CMR 40.1403(10) of the Massachusetts Contingency Plan

MASSACHUSETTS REGULATIONS THAT REQUIRE THIS NOTICE

This notice is being provided pursuant to the Massachusetts Contingency Plan and the notification requirement at 310 CMR 40.1403(10). The Massachusetts Contingency Plan is a state regulation that specifies requirements for parties who are taking actions to address releases of chemicals (oil or hazardous material) to the environment.

THE PERSON(S) PROVIDING THIS NOTICE

This notice has been sent to you by the party who is addressing a release of oil or hazardous material to the environment at the location listed in **Section A** on the reverse side of this form. (The regulations refer to the area where the oil or hazardous material is present as the "disposal site".)

PURPOSE OF THIS NOTICE

When environmental samples are taken as part of an investigation under the Massachusetts Contingency Plan at a property on behalf of someone other than the owner of the property, the regulations require that the property owner (listed in **Section B** on the reverse side of this form) be given notice of the environmental sampling. The regulations also require that the property owner subsequently receive the analytical results following the analysis of the environmental samples.

Section C on the reverse side of this form indicates the circumstance under which you are receiving this notice at this time. If you are receiving this notice to inform you of the analytical results following the analysis of the environmental samples, you should also have received, as an attachment, a copy of analytical results. These results should indicate the number and type(s) of samples (e.g., soil, groundwater) analyzed, any chemicals identified, and the measured concentrations of those chemicals.

Section D on the reverse side of this form identifies the property where the environmental sampling will be/has been conducted, provides a description of the sampling locations within the property, and indicates the phase of work under the Massachusetts Contingency Plan regulatory process during which the samples will be/were collected.

FOR MORE INFORMATION

Information about the general process for addressing releases of oil or hazardous material under the Massachusetts Contingency Plan and related public involvement opportunities may be found at http://www.mass.gov/dep/cleanup/oview.htm. For more information regarding this notice, you may contact the party listed in **Section E** on the reverse side of this form. Information about the disposal site identified in Section A is also available in files at the Massachusetts Department of Environmental Protection. See http://mass.gov/dep/about/region/schedule.htm if you would like to make an appointment to see these files. Please reference the **Release Tracking Number** listed in the upper right hand corner on the reverse side of this form when making file review appointments.