

### **BARNSTABLE MUNICIPAL AIRPORT**

#### **BOARDMAN-POLANDO FIELD**

480 BARNSTABLE ROAD, 2ND FLOOR

HYANNIS, MA 02601

www.town.barnstable.ma.us

R.W. "Bud" Breault, Jr., Airport Manager

Barnstable Municipal

Office: 508-775-2020

John T. Griffin, Jr., Chairman

Airport Commission:

Timothy R. Luzietti, Vice Chairman

Robert L. O'Brien, Clerk

Mary F. Smith, Commissioner

Stephen P. Cobb, Commissioner

Elizabeth Young, Commissioner

James DellaMorte, Commissioner November 10, 2017

Gerard M.R. Martin
Deputy Regional Director
Bureau of Waste Site Cleanup
Massachusetts Department of Environmental Protection
Southeast Regional Office
20 Riverside Drive
Lakeville, MA 02347

Re: Request for Information/Interim Deadline RTN 4-0026347

Dear Mr. Martin;

The following is in response to the Request for Information (RFI) pursuant to M.G.L. c 21E and 310 CMR 40.0000 et seq. dated October 27, 2017 sent to the Barnstable Municipal Airport. The attached response follows the outline of the information requests in Attachment A and the instructions for the response in Attachment B of the RFI.

Please let me know if you have any questions regarding the information provided.

Sincerely,

R.W. "Bud" Breault, Jr.

Airport Manager

Barnstable Municipal Airport

CC: Katie R. Servis, Assistant Airport Manager

Mark Ells, Town Manager, Barnstable Ruth Weil, Town Attorney, Barnstable

Anderson & Kreiger, LLP

Mark Nelson, Horsley Witten Group, Inc.

#### Information Provided in Response to October 27, 2017 Request for Information

The Airport provides the following responses to the questions contained in Attachment A of the Request for Information (RFI). The responses to each question are summarized below and expanded upon in four attachments provided by those involved in the Runway 15/33 reconstruction project, including:

- 11 page summary provided by Lawrence Lynch Corp. that provides details on the excavation process;
- Email from Jacobs Engineering that provides information on the phasing of the excavation process and supplements the information provided by Lawrence Lynch;
- April 25, 2017 letter from Green Seal Environmental to Lawrence Lynch describing the soil sampling and analysis conducted on the materials excavated as part of the runway reconstruction project; and
- November 8, 2017 letter from Green Seal Environmental that provides information in response to question 5 of Attachment A.
- 1. Using a site plan, please identify the areas from which soil was removed from the airport during the storm water construction activities. Please provide the following with respect to the soil removal:
  - a. The name of the person(s) and his/her/their affiliation who is/was managing the excavation, stockpiling and removal of the soil;

The runway reconstruction process was conducted at the request of the Airport by Lawrence Lynch Corp. following the design developed by Jacobs Engineering (Figure 1). The following contacts are provided:

Lawrence Lynch – Site Contractor

Frank Trubiano
John Santos
Chris Lynch
Lawrence Lynch Corp.
396 Gifford Street
Falmouth, MA 02540
508-548-1800

Green Seal Environmental, Inc. – LSP Services for Lawrence Lynch Richard P. Geisler, P.G., LSP Green Seal Environmental, Inc. 114 State Road, Building B Sagamore, MA 02562 (508) 888-6034 Jacobs Engineering, Inc. – Site Designer, Construction Oversight
Jason Homiak
Jacobs
Two Executive Park Drive, Suite 205
Bedford, NH 03110
(603) 518-1790

b. The date range for which all soil removal activities occurred. If the soil removal activities are on-going at the time of receipt of this Request for Information, please state such and indicate an estimated date of completion;

According to information provided by Lawrence Lynch (Attachment A) and Jacobs Engineering (Attachment B), the overall project began in March, 2017 and ended in Late September/early October 2017. Currently, there still approximately 3,000 to 5,000 cubic yards of excavated sand and gravel stored at the Airport, at the location of the former Mildred's Restaurant. There are no current plans to move this material. No further soil excavation is planned as the reconstruction project is complete.

c. The locations where soil was removed (depicted on a site plan);

Figure 1 identifies the specific areas where soil was excavated from unpaved alongside Runway 15/33. The area of excavation extends approximately 50 feet beyond the paved runway to each side. All topsoil within the area of excavation was stored on site and reused upon completion of final grading. Additional topsoil was imported to the Airport from off-site sources to finalize the landscaping of the areas adjacent to the reconstructed runway. The areas where offsite topsoil was used are summarized in Figure 2.

d. The volumes of soil that were removed from each location at the site;

As explained by Lawrence Lynch in Attachment A, approximately 100,000 to 110,000 cubic yards of soil was excavated and removed from the runway redevelopment area shown in Figure 1.

e. The storage locations (depicted on a site plan) for the soil piles, if applicable, prior to removal off-site, and the dates that the soil was stockpiled and then removed from the site. If soil was immediately loaded onto vehicles, please state such;

Attachments A and B summarize the sediment excavation and stockpiling process that was used throughout the project. A significant portion of the material was trucked directly to Cape Cod Aggregates, 1550 Phinneys Lane, Hyannis, 02630, where the majority of the material remains today. Other portions were stockpiled at two staging areas prior to delivery to Cape Cod Aggregates; adjacent to Gate C at the site of the

former Mildred's Restaurant, and at the western end of Runway 15/33, adjacent to Independence Drive. In total approximately 85,000 to 95,000 cubic yards of sediment was delivered to Cape Cod Aggregates. The remainder went to other locations, including the Lombard field site as explained in the response to questions 1g and 1h below.

f. The manner in which the stockpiled soil was stored (on poly, under poly, etc.);

Sand and gravel was stored on the ground with no liner above or below it. Green Seal Environmental tested the soil on behalf of Lawrence Lynch, and they reported that the soil did not contain hazardous materials above reportable concentrations based on the analyses they conducted (Attachment C).

- g. The dates and locations (specific addresses and depicted on a site plan) to where the soil was transported; and
- h. The volume of soil that was transported to each location.

Answers to questions g and h are provided together to clearly state how soil from the Airport was managed. The stockpiling and delivery of material to offsite locations is summarized in Attachment A.

Most of the sediment, approximately 85,000 to 95,000 cubic yards of material was delivered to Cape Cod Aggregates. Most of this material remains at Cape Cod Aggregates with no immediate plans for its reuse. The Horsley Witten Group (HW) met with Cape Cod Aggregates and learned that approximately 80,000 cubic yards of material remains on their property.

HW also researched the reported transport of soil to a ball field/parking lot construction site at the Lombard property in West Barnstable, Massachusetts which the Town is currently redeveloping. According to Town officials, material was delivered directly from the Airport to the site but not used in the construction process. The material did not meet the grain size specifications for use in the project and was therefore rejected. HW contacted Greg Morris of GFM contractors to learn where the soil from the airport was taken when it left the Lombard Site. Mr. Morris stated the five truckloads constituting all of the material from the Airport was combined with approximately 95 other truckloads of silt and clay from the ball field site and delivered to a P.A. Landers facility in Sandwich where it was deposited as fill because it was not suitable for processing and reuse at other sites. None of the material from the Airport remains at the Lombard site.

Please provide copies of any Bills of Lading and/or Manifests used for the soil transport and disposal. The airport is not aware of any Bills of Lading or Manifests used for soil transport. According to Lawrence Lynch (Attachment A) they did not use any bills of Lading or Manifests to track the sediment; this approach is typical where the soil did not test positive for any hazardous materials.

3. Please provide any analytical data that was generated as part of this soil removal project, including soil samples collected prior to any excavation, soil samples collected in excavated areas, soil sample collected from soil stockpiles and soil samples collected from the soil used as fill throughout the town

Attachment C provides the summary of the sediment analyses conducted by Green Seal Environmental for the material excavated at the Airport. Attachment D provides additional detail on the materials tested by Green Seal.

4. Please provide any information pertaining to any other current and/or future soil excavation/remediation activities at BMA. Specifically, provide information pertaining to any soil analytical data, at what portion of BMA the soil is/will be removed, and how the soil will be disposed/reused.

The Airport is considering the removal of PFAS impacted soil from two disposal sites where historic airport training and firefighting foam use has been identified. These are shown on Figure 3. The purpose of the removal will be to reduce potential leaching of PFAS compounds to groundwater. HW has conducted soil sampling in these areas as summarized in the Second Immediate Response Action Status Report submitted in November 2017 and the Phase 1 Report and Tier Classification document submitted to DEP on November 10, 2017. Further sampling in these two areas is needed to define the depth of contamination and to confirm the outer boundaries of the soil removal area adjacent to the existing sampling locations. Once the volume of soil to be removed is confirmed, the Airport will excavate this material and ship it to an appropriate location under a Bill of Lading. The Airport will coordinate this removal through an Imminent Response Action with DEP, and will work with DEP to identify an appropriate disposal location. It should be noted that these areas are inside of the Airport security fencing and not accessible by the public.

There are no other imminent plans for soil excavation at the Airport. In the near future, the design process for the redevelopment of the second Airport runway will begin to upgrade it to meet FAA design requirements. The ongoing work related to PFAS compounds will be used to identify how the excavated sediments will be managed.

5. MassDEP was provided with a copy of an April 25, 2017 letter from Green Seal Environmental to Lawrence Lynch Corporation which described soil stockpile sampling. The second paragraph of the letter states "...GSE divided the soil stockpiles into eight smaller areas identified as Area-1 through Area-8." MassDEP is requesting clarification of this statement and of the remainder of the letter.

- a. Does the information in this letter represent all the soil that has been or will be removed as part of the storm water construction activities along the runway systems or does the information in the letter represent a smaller subset of the soil that will be removed? If this letter represents a subset of the soil, please provide any subsequent soil analytical data generated for the soil removal activities.
- b. Please provide a site plan labeling the area from where the soil referenced in this letter was removed. If these locations are the same locations as requested above, please reference such in your response.

The November 8, 2017 letter from Green Seal Environmental (Attachment D) provides the information requested in questions 5a and 5b. Sediment stockpiles were tested both at the Airport and at the Cape Cod Aggregates facility.

#### **Certification of Submittal:**

"I certify under the penalties of law that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying the certification, and that, based upon my inquiry of those individuals immediately responsible for obtaining the information, the material information contained herein is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties, including but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information."

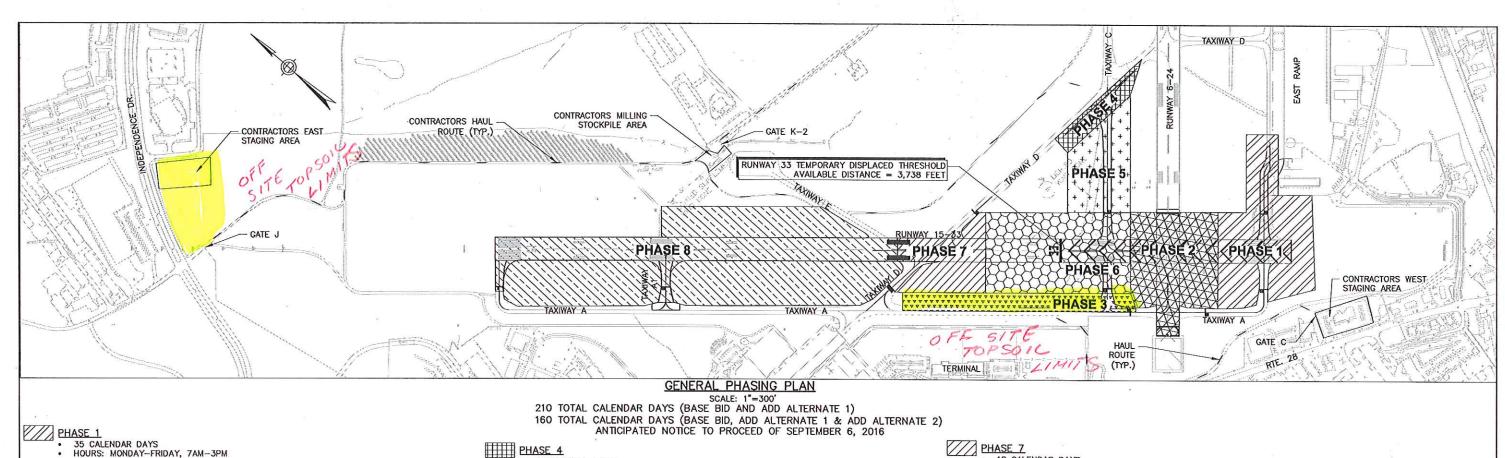
R.W. "Bud" Breault, Jr.

Airport Manager

Barnstable Municipal Airport

Date: 11/9/2017

## NOTES: -EXISTING GRADE 150' WIDE RUNWAY (TYP.) (NOT WITHIN FAA GRADING CRITERIA) 1. GRADING CRITERIA MEETS FAA ADVISORY CIRCULAR 150/5300-13A, LATEST EDITION. -PROPOSED GRADE (TYP.) 75' (TYP.) 75' (TYP.) ∕—1.5" DROPOFF (TYP.) |<del></del> 10' ► \_\_\_\_\_1.5% TYP 1.5% TYP\_\_\_\_ - P401 PLANT MIX BITUMINOUS - UNCLASSIFIED EXCAVATION PAVEMENT DEPTH VARIES (TYP.) PLACED IN APPROXIMATE 2" LIFTS 3" TOPSOIL-AND SEED MILLING DEPTH VARIES (TYP.) --PROPOSED GRADE (TYP.) - P-603 BITUMINOUS TACK (MEETS FAA GRADING CRITERIA) COAT (BETWEEN LIFTS AND ON MILLED SURFACE) **RUNWAY TYPICAL SECTION** EXISTING GRADE (NOT WITHIN FAA VARIES - SEE GRADING PLANS GRADING CRITERIA) - UNCLASSIFIED EXCAVATION 3" TOPSOIL AND -SEED (TYP.) - PROPOSED PAVEMENT BOX PROPOSED GRADE (MEETS FAA GRADING CRITERIA) **TAXIWAY TYPICAL SECTION** FIGURE 1 TOWN OF BARNSTABLE BARNSTABLE MUNICIPAL AIRPORT HYANNIS, MASSACHUSETTS SUBMITTED BY: \_AREAS OF EXCAVATION **TYPICAL SECTIONS** JACOBS **PROJECT PLAN JACOBS** DES. BY: JRH DWN. BY: CNP SK-1CHKD. BY: SJF SHEET NO. XX OF | SCALE: AS NOTED | DATE: 4/16 REVISIONS BY APP. DATE Jacobs - P:\BARNSTABLE AIRPORT\2015\E2X75400\700 CADD\740-WORK\sketches\TYP SECTIONS.dwg April 05, 2016



HOURS: MONDAY-FRIDAY, 7AM-3PM

PHASE 1 AIRFIELD IMPACTS

-TAXIWAY B CLOSED BETWEEN RUNWAY 15-33 AND EAST RAMP -RUNWAY 33 CLOSED BETWEEN RUNWAY 6-24 AND RUNWAY 33 APPROACH -DISPLACED THRESHOLD INSTALLED ON RUNWAY 15-33 AT TAXIWAY C

MAJOR ITEMS OF WORK IN PHASE 1 INCLUDE:

-RE-ALIGN AND RECONSTRUCT A PORTION OF TAXIWAY B

-MILL AND OVERLAY A PORTION OF RUNWAY 15-33 EAST OF RUNWAY 6-24
-INSTALL RUNWAY 33 TEMPORARY DISPLACED THRESHOLD

PHASE 2 4 CALENDAR DAYS

HOURS: MONDAY 10PM-FRIDAY 9AM (83 HOUR EXTENDED SHIFT)

PHASE 2 AIRFIELD IMPACTS

-RUNWAY 6-24 CLOSED -RUNWAY 33 CLOSED BETWEEN RUNWAY 6-24 AND RUNWAY 33 APPROACH

-DISPLACED THRESHOLD REMAINS ON RUNWAY 15-33 AT TAXIWAY C

-TAXIWAY A CLOSED BETWEEN TAXIWAY C AND RUNWAY 33 -TAXIWAY B CLOSED BETWEEN RUNWAY 15-33 AND EAST RAMP

MAJOR ITEMS OF WORK IN PHASE 2 INCLUDE:

-MILL AND OVERLAY RUNWAY 15-33 AND RUNWAY 6-24 INTERSECTION -INSTALL NEW RUNWAY 33 PAPI INFRASTRUCTURE

VVV PHASE 3

14 CALENDAR DAYS
 HOURS: MONDAY-FRIDAY, 7AM-3PM

-TAXIWAY A CLOSED BETWEEN TAXIWAY C AND RUNWAY 33 -RUNWAY 33 CLOSED BETWEEN RUNWAY 6-24 AND RUNWAY 33 APPROACH

MAJOR ITEMS OF WORK IN PHASE 3 INCLUDE:

-RE-ALIGN AND RECONSTRUCT A PORTION OF TAXIWAY C BETWEEN RUNWAY 15-33 AND TAXIWAY A -REMOVE EXISTING TAXIWAY C BETWEEN RUNWAY 15-33 AND TAXIWAY A -REPLACE EXISTING TAXIWAY A EDGE LIGHTS

4 CALENDAR DAYS

. HOURS: MONDAY 7AM - FRIDAY 3PM (104 HOUR EXTENDED SHIFT)

PHASE 4 AIRFIELD IMPACTS

-TAXIWAY C CLOSED BETWEEN TAXIWAY A AND TAXIWAY D

-TAXIWAY D CLOSED BETWEEN RUNWAY 15-33 AND RUNWAY 6-24

MAJOR ITEMS OF WORK IN PHASE 4 INCLUDE:

-RE-ALIGN AND RECONSTRUCT A PORTION OF TAXIWAY C (WITHIN TAXIWAY D TSA)

-REMOVE EXISTING TAXIWAY C WITHIN TAXIWAY D TSA

+++++ PHASE 5

30 CALENDAR DAYS HOURS: MONDAY-FRIDAY, 7AM-3PM WINTER SHUTDOWN ANTICIPATED

PHASE 5 AIRFIELD IMPACTS

-TAXIWAY C CLOSED BETWEEN TAXIWAY D AND RUNWAY 15-33

MAJOR ITEMS OF WORK IN PHASE 5 INCLUDE:

-RE-ALIGN AND RECONSTRUCT A PORTION OF TAXIWAY C BETWEEN RUNWAY 15-33 AND TAXIWAY D -REMOVE EXISTING TAXIWAY C BETWEEN RUNWAY 15-33 AND TAXIWAY D

PHASE 6

30 CALENDAR DAYS

15 CALENDAR DAYS (IF, ADD ALTERNATE #1 IS AWARDED)

HOURS: MONDAY-FRIDAY, 7AM-3PM
HOURS: MONDAY-FRIDAY, 3PM-11PM (IF ADD ALTERNATE #I IS AWARDED)

PHASE 6 AIRFIELD IMPACTS

-TAXIWAY C CLOSED BETWEEN TAXIWAY A AND TAXIWAY D -RUNWAY 15-33 CLOSED

MAJOR ITEMS OF WORK IN PHASE 6 INCLUDE:

-MILL AND OVERLAY A PORTION OF RUNWAY 15-33 -REMOVE EXISTING TAXIWAY C WITHIN RUNWAY 15-33 SAFETY AREA

-REAUGN AND CONSTRUCT A PORTION OF TAXIWAY C (WITHIN RUNWAY 15 RSA)
-INFIELD GRADING BETWEEN RUNWAY 15-33 AND TAXIWAY A

#### GENERAL PHASING NOTES

UNLESS OTHERWISE NOTED, ALL WORK SHOWN IN A DISTINCT PHASE SHALL BE 100% COMPLETED IN ITS ENTIRETY AND ALL WORK ACCEPTED BY THE ENGINEER BEFORE THE NEXT PHASE CAN BE STARTED. PHASES DESIGNATED TO BE WORKED ON CONCURRENTLY, AS INDICATED, SHALL BE COMPLETED AND ACCEPTED WITHIN THE ALLOCATED DURATION FOR THE PHASE PRIOR TO STARTING THE NEXT PHASE. PHASES 4 AND 5 CAN BE CONSTRUCTED CONCURRENTLY. PHASES 6 AND 8 CAN BE CONSTRUCTED CONCURRENTLY.

PRIOR TO APPLYING PAVEMENT MARKINGS, THE MARKING LAYOUT SHALL BE APPROVED BY THE ENGINEER. REMOVAL OF TEMPORARY AND EXISTING MARKINGS DURING THE VARIOUS CONSTRUCTION PHASES SHALL BE AS APPROVED/DIRECTED BY THE ENGINEER

 BARRICADES SHALL BE PLACED CONTINUOUSLY AROUND THE ENTIRE PERIMETER OF EACH ACTIVE CONSTRUCTION PHASE OR AS DIRECTED BY THE AIRPORT.

PHASE 7

18 CALENDAR DAYS

5 CALENDAR DAYS (IF, ADD ALTERNATE #1 IS AWARDED) HOURS: MONDAY-FRIDAY, 7AM-3PM

HOURS: MONDAY-FRIDAY, 3PM-11PM(IF, ADD ALTERNATE #1 IS AWARDED)

PHASE 7 AIRFIELD IMPACTS

-RUNWAY 15-33 CLOSED -TAXIWAY D CLOSED BETWEEN TAXIWAY A AND TAXIWAY C -TAXIWAY A BETWEEN TAXIWAY RUNWAY 15 AND TAXIWAY D

-TAXIWAY E

MAJOR ITEMS OF WORK IN PHASE 7 INCLUDE:

-MILL AND OVERLAY A PORTION OF RUNWAY 15-33

NAME 8

45 CALENDAR DAYS

23 CALENDAR DAYS (IF, ADD ALTERNATE #1 IS AWARDED)

HOURS: MONDAY-FRIDAY, 7AM-3PM

HOURS: MONDAY-FRIDAY, 3PM-11PM (IF, ADD ALTERNATE #1 IS AWARDED)

PHASE 8 AIRFIELD IMPACTS

-TAXIWAY A BETWEEN TAXIWAY RUNWAY 15 AND TAXIWAY D -RUNWAY 15-33 CLOSED

-TAXIWAY E

MAJOR ITEMS OF WORK IN PHASE 8 INCLUDE:

-MILL AND OVERLAY A PORTION OF RUNWAY 15-33

-RECONSTRUCT TAXIWAY A AND A1 STUBS WITHIN RUNWAY 15-33 RSA
-INFIELD GRADING BETWEEN RUNWAY 15-33 AND TAXIWAY A

PHASE 9

30 CALENDAR DAYS

HOURS: MONDAY-FRIDAY, 7AM-3PM (DAY WORK)

PHASE 9 AIRFIELD IMPACTS 10PM-6AM (NIGHT WORK)

-MISCELLANOUS CLOSURES (SEE DETAILED PHASING PLANS)
MAJOR ITEMS OF WORK IN PHASE 9 INCLUDE:

-GROVE AND PAINT RUNWAY 15-33 AND A PORTION OF RUNWAY 6
-INSTALL NEW BACK-UP GENERATOR INSIDE AIRFIELD VAULT -P-608 APPLICATION

SUBMITTED BY:

-SECOND APPLICATION OF PAVEMENT MARKINGS (45 DAYS) -REPAINT RUNWAY 6-24 (FULL LENGTH)

GRAPHIC SCALE **JACOBS** BY APP, DAT REVISIONS

FIGURE 2

TOWN OF BARNSTABLE

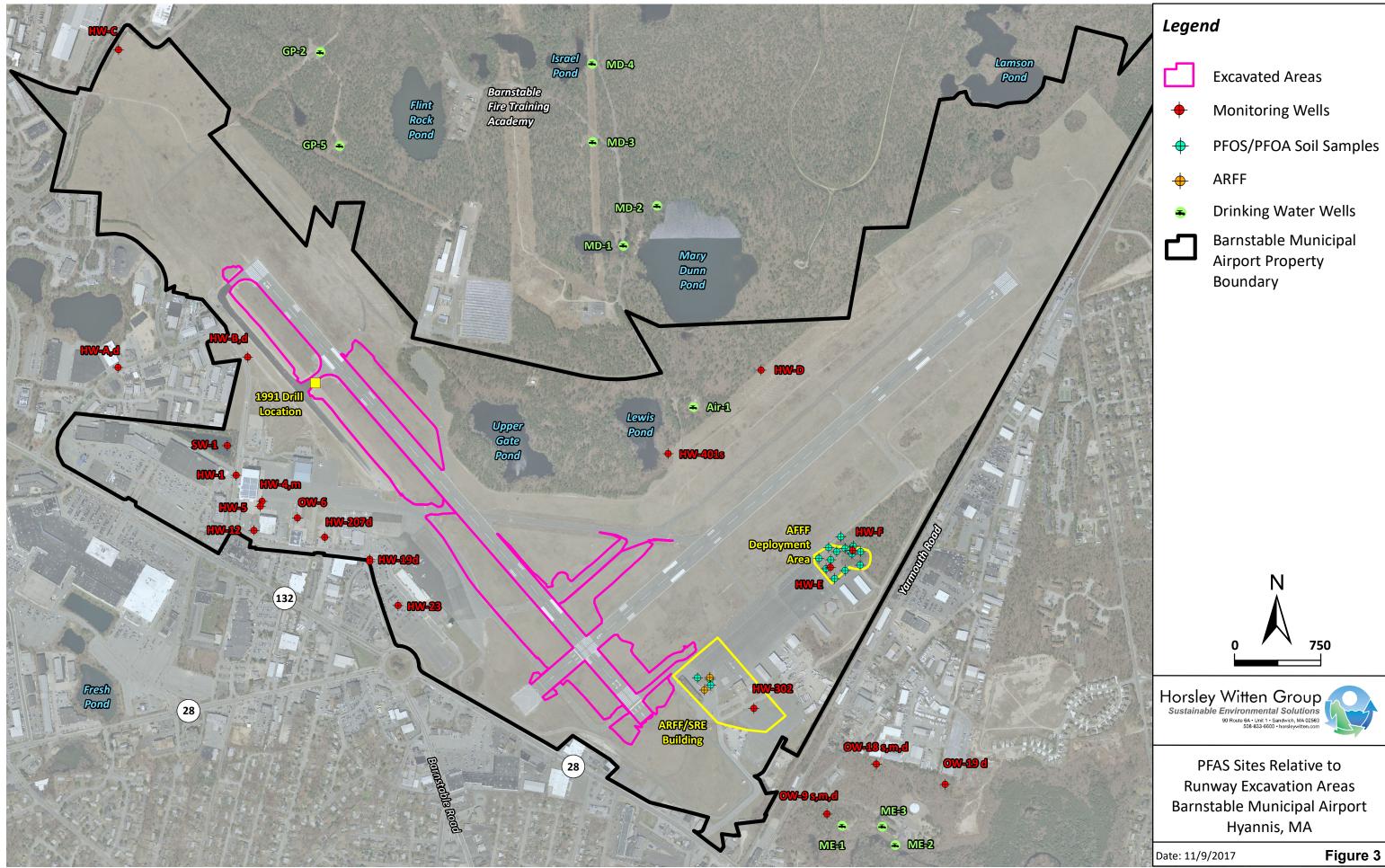
BARNSTABLE MUNICIPAL AIRPORT HYANNIS, MASSACHUSETTS

> **GENERAL PHASING PLAN AND NOTES**

JACOBS

DES. BY: JRH DWN. BY: CNP G - 003

SHEET NO. 4 of 120 SCALE: AS NOTED DATE: 4/16



# ATTACHMENT A Lawrence Lynch Summary

ITEM 1.a.

Lawrence Lynch Response:

Frank Trubiano, Project Manager – Lawrence Lynch Corp.

John Santos, Superintendent – Lawrence Lynch Corp

Christopher M. Lynch – Lawrence Lynch Corp.

ITEM 1.b.

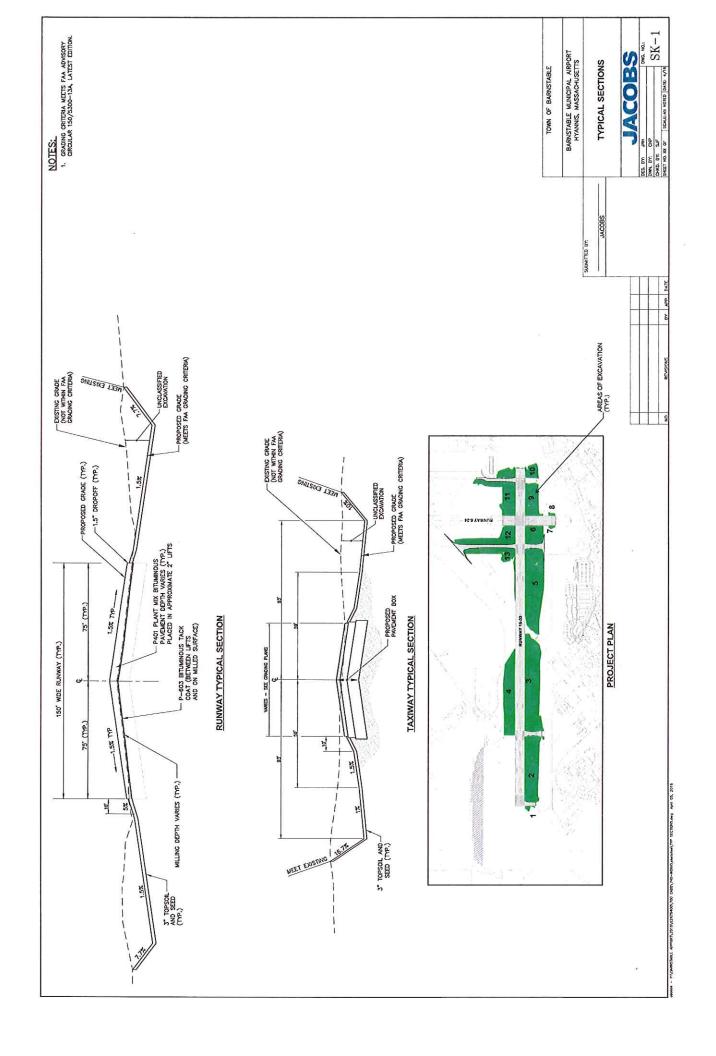
#### Lawrence Lynch Response:

The date range for which all soil removal activities occurred was approximately March 7, 2017 to September 30, 2017. All excavation is completed. The only remaining surplus excavated material is stockpiled on site at the West Staging Area (3,000 CY's - 5,000 CY's). Date of removal of the remaining material is TBD.

ITEM 1.c.

Lawrence Lynch Response:

Attached is a drawing titled Typical Sections prepared by Jacobs showing the areas shaded in green where soil was excavated & removed as part of the Runway 15-33 Reconstruction Project.



ITEM 1.d.

Lawrence Lynch Response:

Lawrence Lynch Corp.'s best estimate for the Total Volume of Soil removed from the site (Sketch 1.c.) is approximately 100,000 - 110,000 CY's.

ITEM 1.e.

#### Lawrence Lynch Response:

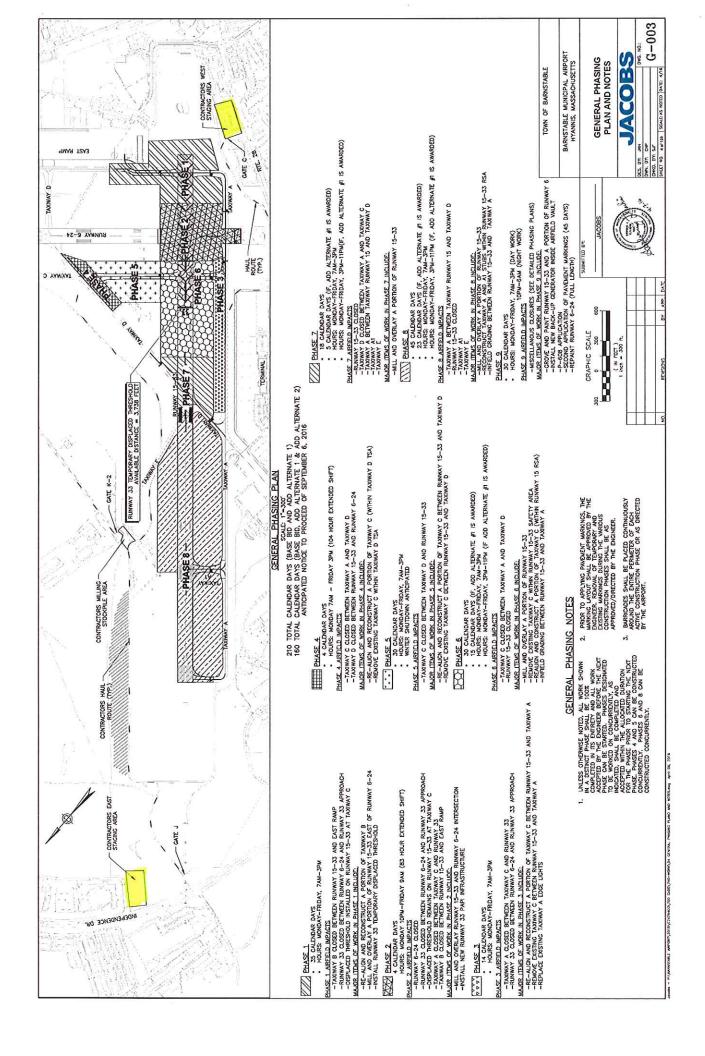
Attached is a drawing showing the location of on-site stockpiles of excavated material prior to the removal from site. They are labeled as Contractor's East Staging Area located on Airport property in the vicinity of Gate J and Contractor's West Staging Area located on Airport property at Gate C.

The East Staging Area was used for Stockpiling surplus excavated materials prior to removal from site from approximately May 15, 2017 to September 30, 2017. Currently there is no material remaining at this location.

The West Staging Area was used beginning March 1, 2017 and currently there is approximately 3,000 to 5,000 CY's of surplus excavated material being stored at this location.

From approximately March 7, 2017 to May 15, 2017 most of the surplus soils were loaded directly onto vehicles for disposal off site. From May 15, 2017 to August 31, 2017 surplus soils were loaded directly onto vehicles for disposal off site as well as Stockpiled as needed to support excavation.

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ITEM 1.f.

#### Lawrence Lynch Response:

The Stockpiled Soils at the East & West Staging Areas were stored on the existing ground surface. At the East Staging Area the surface was a grassed area at the West Staging Area the soil was stockpiled on an existing asphalt surface. No poly was used under or over the piles.

ITEM g.h.

# BARNSTABLE AIRPORT RW 15 – 33 SUMMARY OF DISPOSAL OF EXCESS EXCAVATED MATERIALS

#### DISPOSAL OF EXCESS EXCAVATED MATERIALS

Approximately 100,000 to 110,000 CY's of surplus excavated material was removed from the Project Site. The majority of this material was disposed at Cape Cod Aggregates (CCA), 1550 Phinney's Lane, Hyannis, MA 02630. The dates of removal are from approximately March 7, 2017 to September 30, 2017. The Estimated Volume of material delivered to CCA during this period was approximately 85,000 to 95,000 CY's. Most if not all of the material delivered to CCA remains on the property and some of the material has been run thru a crusher and stockpiled.

An additional quantity of approximately 10,000 - 15,000 CY's of material went to various other locations in small amounts and approximately 3,000 to 5,000 CY's remains stockpiled at the West Staging at the Airport.

ITEM 2.

Lawrence Lynch Response:

There were no Bills of Lading or Manifests used for the Soil Transport.

ITEM 3.

Lawrence Lynch Response:

See attached Test Results.

# ATTACHMENT B Jacobs Summary

**From:** Homiak, Jason [mailto:Jason.Homiak@jacobs.com]

Sent: Wednesday, November 8, 2017 4:13 PM

To: Mark Nelson

Cc: Breault, Roland; Chamberlain, Dave; Servis, Katie

Subject: RE: Questions for RFI Response

Hello Mark,

Yes, there were breaks in the soil excavation. Generally grading and drainage installation created the majority of "surplus excavation" and the Contractor performed these activities towards the beginning of each phase of construction. The following is a general summary of the majority of soil excavation and removal based upon our observations. The date(s) when the Contractor removed the temporary stockpiles (i.e. from the Mildred Lot near Gate C and from Gate J) were not documented but appeared to be when trucking was available.

Phase 1 work area: Soil was excavated from the work area 3/20 through 4/7. We believe most of the excavated soil from this phase was taken off-site and/or stockpiled in the "Mildred" lot near Gate C.

(RWY Intersection): Soil was excavated from the work area 5/1 through 5/4. We believe most of the excavated soil from this phase was taken off-site and/or stockpiled in the "Mildred" lot near Gate C.

Combined Phase work area: Soil was excavated from the work area 5/10 through 7/20. We believe most of the excavated soil from this phase was taken off-site and/or stockpiled inside the fence near Gate J.

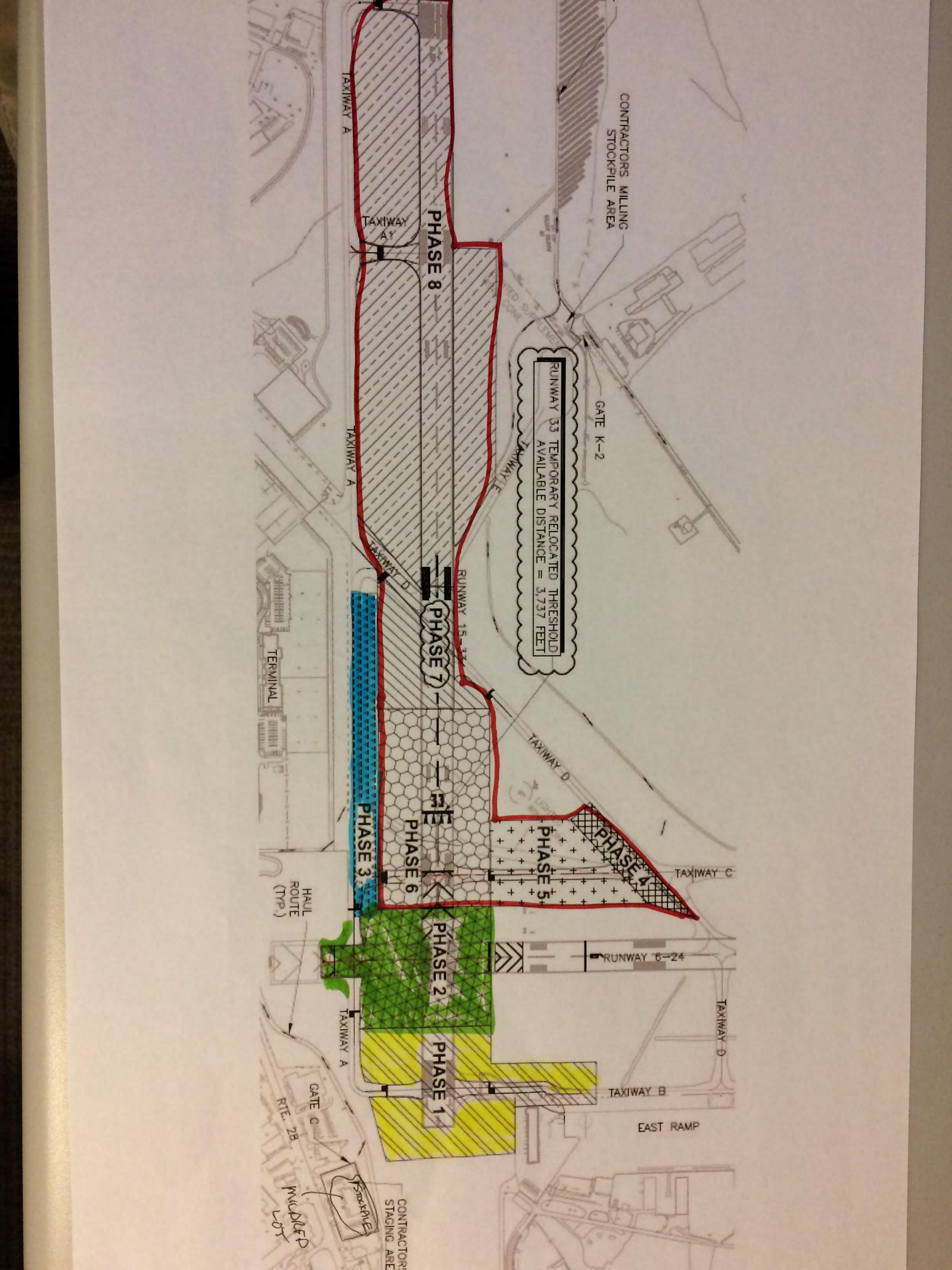
Phase 3 work area (Taxiway C/Taxiway A intersection): Soil was excavated from 8/31 through 9/1. We believe most of the excavation from this phase was taken off-site and/or stockpiled in the "Mildred" lot near Gate C.

Phase 9: No soil excavation.

The referenced phases are shown on the attached drawing. Outside of the dates presented above Construction activities consisted of paving, electrical work, paint markings, topsoil, seeding, etc. which generated little to no surplus excavation.

Regards,
-Jason

Jason Homiak | Jacobs | Project Manager | Airports | 603.518.1790 | Jason. Homiak@jacobs.com | Two Executive Park Drive, Suite 205, Bedford, NH 03110 USA <a href="https://www.jacobs.com">www.jacobs.com</a>



## ATTACHMENT C Green Seal Environmental Letter April 25, 2017



April 25, 2017

Frank Trubiano Lawrence Lynch Corp. 396 Gifford Street Falmouth, MA 02540

RE: Soil Characterization and LSP Opinion Barnstable Municipal Airport Project RW15-33

Dear Mr. Trubiano,

Green Seal Environmental Inc. (GSE) has prepared this summary letter to document soil sampling activities completed at the Barnstable Municipal Airport (BMA) in Hyannis, Massachusetts on March 30, 2017. Lawrence Lynch is in the process of constructing storm water drainage structures along the runway systems at the BMA and, as a result, is generating soil spoils that cannot be reused on-site. The purpose of the soil sampling program is to confirm the absence of oil and hazardous material impacts above the most stringent Massachusetts Contingency Plan (MCP) Reportable Concentrations (RCs) for category S-1 soils (RCS-1) in the soil spoils which are being transported from the BMA to Cape Cod Aggregate (CCA) in Hyannis, Massachusetts for reuse.

In an effort to characterize the soils to be removed from the property, GSE divided the soil stockpiles into eight smaller separate areas identified as Area-1 through Area-8. Each area measured approximately 75 feet long by 75 feet wide. GSE collected a total of five discrete soil samples from each area (a total of 40 samples) using a posthole digger and hand auger. Each discrete soil sample was examined for evidence of a release of oil and/or hazardous materials (OHM) and field-screened for total organic vapor (TOVs) using a photoionization detector (PID).

The soil encountered in all the areas appeared to be dry brownish-yellow with varying amounts of sand and gravel. The soil appeared to be native and free of debris. During sampling on March 30, 2017, GSE did not observe visual or olfactory evidence of a release of OHM in the material. Furthermore, no detectable concentrations of TOVs were observed in any of the 40 discrete soil samples collected from the proposed excavation area.

Following EPA composite sampling protocol, the five discrete soil samples from each area were composited together. The composite soil samples were labeled "COMP-1" through "COMP-8" which corresponds to the area they were collected from. The composite samples were submitted to R.I. Analytical of Warwick, Rhode Island for the following analyses:

- Volatile Organic Compounds (VOCs) by EPA Method 8260;
- Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270;
- Total Petroleum Hydrocarbons (TPHs) by EPA Method 8100M;



- Resource Conservation and Recovery Act (RCRA) 8 Metals (arsenic, barium, cadmium, chromium, lead, mercury selenium and silver); and
- Polychlorinated Biphenyls (PCBs) by EPA Method 8082.

In an effort to minimize volatilization during the compositing process, the soil samples submitted for VOCs analysis were taken from equal amounts of soil from each discrete soil sample prior to compositing. The R.I. Analytical report (1703-06586) is attached.

The samples collected on March 30, 2017 showed maximum detectable concentrations of TPH at 59 milligrams per kilogram (mg/kg), methylene chloride at 0.014 mg/kg, barium at 13 mg/kg, chromium at 7.7 mg/kg, and lead at 6.5 mg/kg. As presented on Table 1 (attached), all the detectable concentrations were well below the MCP RCS-1 criteria. Based on the results of the analyses, Toxicity Characteristic Leachability Procedure (TCLP) analysis was not required for any of the analytes.

Based on my review of the attached data, it is my opinion as a Licensed Site Professional that the analyses performed are sufficient to adequately characterize the identity and concentrations of contaminants in the material proposed for reuse at CCA. Furthermore, it is my opinion that the soil characterized as part of this assessment is appropriate for reuse at CCA.

If you have any questions pertaining to the attached analytical data, please do not hesitate to contact me at 508-888-6034.

Sincerely,

GREEN SEAL ENVIRONMENTAL, INC.

Richard P. Ster Cer

Richard P. Geisler, P.G., L.S.P. V.P. of Environmental Services

ATTACHMENTS

#### Table 1 Summary of Soil Analytical Results Barnstable Municipal Airport Runway 15-33 Project Samples Collected on March 30, 2017

			Sample	s Collected on March	30, 2017				
Parameter/Sample ID:	COMP-1	COMP-2	COMP-3	COMP-4	COMP-5	COMP-6	COMP-7	COMP-8	MCP RCS-1
Total Petroleum Hydrocarbons (1	TPH) (mg/kg)								
TPH GC/FID	<10	<10	55	<10	17	14	22	59	1,000
Semi-Volatile Organic Compound	ls (SVOCs) (mg/kg)								
Acenaphthene	<0.35	<0.36	< 0.36	<0.36	<0.35	< 0.36	< 0.36	<0.36	4
Acenaphthylene	<0.35	<0.36	< 0.36	<0.36	<0.35	< 0.36	< 0.36	<0.36	1
Anthracene	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	1,000
Benzidine	<0.35	<0.36	<0.36	< 0.36	<0.35	< 0.36	<0.36	<0.36	10
Benzo(a)anthracene	<0.35	<0.36	< 0.36	<0.36	<0.35	< 0.36	< 0.36	<0.36	7
Benzo(b)fluoranthene	<0.35	<0.36	< 0.36	<0.36	<0.35	< 0.36	< 0.36	<0.36	7
Benzo(k)fluoranthene	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	70
Benzo(g,h,i)perylene	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	1,000
Benzo(a)pyrene	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	2
Bis(2-chloroethyl)ether	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	0.7
Bis(2-Chloroethoxy)methane	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	500
Bis(2-Chloroisopropyl)Ether	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	0.7
Bis(2-ethylhexyl)phthalate	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	90
4-Bromophenyl phenyl ether	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	100
Butylbenzyl phthalate	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	100
2-Chloronaphthalene	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	1,000
4-Chlorophenyl phenyl ether	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	1,000
Chrysene	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	70
Dibenzo(a,h)anthracene	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	<0.36	<0.36	0.7
Di-n-butyl phthalate	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	50
1,2-Dichlorobenzene	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	9
1,3-Dichlorobenzene	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	3
1,4-Dichlorobenzene	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	0.7
3,3'-Dichlorobenzidine	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	3
Diethyl phthalate	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	10
Dimethyl phthalate	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	0.7
2,4-Dinitrotoluene	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	0.7
2,6-Dinitrotoluene	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	100
Di-n-octyl phthalate	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	1,000
1,2-Diphenylhydrazine	<0.35	<0.36	<0.36	< 0.36	<0.35	<0.36	<0.36	<0.36	50
Fluoranthene	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	1,000
Fluorene	<0.35	<0.36	< 0.36	< 0.36	<0.35	< 0.36	< 0.36	<0.36	1,000
Hexachlorobenzene	<0.35	<0.36	<0.36	<0.36	<0.35	< 0.36	< 0.36	<0.36	0.7
Hexachlorobutadiene	<0.35	<0.36	<0.36	<0.36	<0.35	<0.36	<0.36	<0.36	30
Hexachlorocyclopentadiene	<0.35	<0.36	< 0.36	<0.36	<0.35	< 0.36	<0.36	<0.36	50
Hexachloroethane	<0.35	<0.36	< 0.36	<0.36	<0.35	< 0.36	<0.36	<0.36	0.7
Indeno(1,2,3-cd)pyrene	<0.35	<0.36	< 0.36	<0.36	<0.35	< 0.36	<0.36	<0.36	7
Isophorone	<0.35	<0.36	< 0.36	<0.36	<0.35	<0.36	<0.36	<0.36	100
2-Methylnaphthalene	< 0.35	<0.36	< 0.36	< 0.36	< 0.35	<0.36	<0.36	< 0.36	0.7

Table 1
Summary of Soil Analytical Results
Barnstable Municipal Airport Runway 15-33 Project
Samples Collected on March 30, 2017

Naphthaline				Sample	s Collected on March	30, 2017				
Nitroensemen	Parameter/Sample ID:	COMP-1	COMP-2	COMP-3	COMP-4	COMP-5	COMP-6	COMP-7	COMP-8	MCP RCS-1
Neitrosodimetrylpamine	Naphthalene	<0.35	<0.36	<0.36	<0.36	<0.35	<0.36	<0.36	< 0.36	4
Neltrosodiphenylamine	Nitrobenzene	<0.35	<0.36	<0.36	<0.36	<0.35	<0.36	<0.36	< 0.36	500
Neitrosoft-propylamine	N-nitrosodimethylamine	<0.35	<0.36	<0.36	< 0.36	<0.35	< 0.36	<0.36	< 0.36	50
Phenathrene	N-nitrosodiphenylamine	<0.35	<0.36	<0.36	<0.36	<0.35	<0.36	<0.36	< 0.36	100
Pyrene	N-nitrosodi-n-propylamine	<0.35	<0.36	<0.36	<0.36	<0.35	<0.36	<0.36	< 0.36	50
12.4-Trichlorobenzene	Phenanthrene	<0.35	<0.36	<0.36	<0.36	<0.35	< 0.36	<0.36	< 0.36	10
## Achinory-methylphenol   <0.35   <0.36   <0.36   <0.36   <0.36   <0.35   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.35   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.35   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.35   <0.36   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.36   <0.35   <0.36   <0.36   <0.36   <0.35   <0.36   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.36   <0.35   <0.36   <0.36   <0.36   <0.35   <0.36   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.35   <0.36   <0.36   <0.36   <0.35   <0.36   <0.36   <0.36   <0.35   <0.36   <0.36   <0.36   <0.35   <0.36   <0.36   <0.36   <0.35   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.36   <0.	Pyrene	<0.35	<0.36	<0.36	< 0.36	<0.35	<0.36	<0.36	< 0.36	1,000
2-Chiorophenol	1,2,4-Trichlorobenzene	<0.35	<0.36	<0.36	< 0.36	<0.35	<0.36	<0.36	< 0.36	2
2,4-Dichlorophenol         <0.35	4-Chloro-3-methylphenol	<0.35	<0.36	<0.36	< 0.36	<0.35	<0.36	<0.36	< 0.36	1,000
24-Dimethylphenol	2-Chlorophenol	<0.35	<0.36	<0.36	< 0.36	<0.35	<0.36	<0.36	< 0.36	0.7
2-Methyl-4,6-dinitrophenol	2,4-Dichlorophenol	<0.35	<0.36	<0.36	< 0.36	<0.35	<0.36	<0.36	< 0.36	0.7
2,4 Dinitrophenol	2,4-Dimethylphenol	<0.35	<0.36	<0.36	< 0.36	<0.35	<0.36	<0.36	< 0.36	0.7
2-Nitrophenol	2-Methyl-4,6-dinitrophenol	<0.35	<0.36	<0.36	< 0.36	<0.35	<0.36	<0.36	< 0.36	50
Anitrophenol   Co.35   Co.36   Co.36   Co.36   Co.35   Co.36   Co.35   Co.36	2,4-Dinitrophenol	<0.35	<0.36	<0.36	< 0.36	<0.35	<0.36	<0.36	< 0.36	3
Pentachlorophenol	2-Nitrophenol	<0.35	<0.36	<0.36	<0.36	<0.35	<0.36	<0.36	< 0.36	100
Phenol	4-Nitrophenol	<0.35	<0.36	<0.36	< 0.36	<0.35	<0.36	<0.36	< 0.36	100
2,4,5-Trichlorophenol         <0.35	Pentachlorophenol	<0.35	<0.36	<0.36	< 0.36	<0.35	<0.36	<0.36	< 0.36	3
2,4,6-Trichlorophenol         <0.35	Phenol	<0.35	<0.36	<0.36	< 0.36	<0.35	<0.36	<0.36	< 0.36	1
4-Chloroaniline	2,4,5-Trichlorophenol	<0.35	<0.36	<0.36	<0.36	<0.35	<0.36	<0.36	< 0.36	4
Dibenzofuran   Co.35   Co.36   Co.36   Co.36   Co.35   Co.36	2,4,6-Trichlorophenol	<0.35	<0.36	<0.36	<0.36	<0.35	<0.36	<0.36	< 0.36	0.7
2-Methyl Phenol	4-Chloroaniline	<0.35	<0.36	<0.36	<0.36	<0.35	<0.36	<0.36	< 0.36	1
3 & 4-Methylphenols         <0.35	Dibenzofuran	<0.35	<0.36	<0.36	< 0.36	<0.35	<0.36	<0.36	< 0.36	100
Aniline	2-Methyl Phenol	<0.35	<0.36	<0.36	<0.36	<0.35	<0.36	<0.36	< 0.36	500
Acetophenone         <0.35         <0.36         <0.36         <0.36         <0.35         <0.36         <0.36         <0.36         <0.35         <0.36         <0.36         <0.36         <0.35         <0.36         <0.36         <0.36         Inches (0.36)         <0.36         <0.36         <0.36         <0.36         Inches (0.36)         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.36         <0.27         <0.27         <0.26         <0.27         <0.26         <0.26         <0.27 <th< td=""><td>3 &amp; 4-Methylphenols</td><td>&lt;0.35</td><td>&lt;0.36</td><td>&lt;0.36</td><td>&lt;0.36</td><td>&lt;0.35</td><td>&lt;0.36</td><td>&lt;0.36</td><td>&lt; 0.36</td><td>500</td></th<>	3 & 4-Methylphenols	<0.35	<0.36	<0.36	<0.36	<0.35	<0.36	<0.36	< 0.36	500
Azobenzene <0.35	Aniline	<0.35	<0.36	<0.36	< 0.36	<0.35	<0.36	<0.36	< 0.36	1,000
Arsenic   C2.6   C2.7   C2.6   C2.7   C2.6   C2.7   C2.6   C2.7   C2.7   C2.6   C2.7	Acetophenone	<0.35	<0.36	<0.36	< 0.36	<0.35	<0.36	<0.36	< 0.36	1,000
Arsenic	Azobenzene	<0.35	<0.36	<0.36	<0.36	<0.35	< 0.36	<0.36	<0.36	NE
Barium   7.8	RCRA-8 Metals (mg/kg)									
Cadmium         <0.26         <0.27         <0.26         <0.27         <0.26         <0.27         <0.26         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.27         <0.18         <0.10         <0.10         <0.10         <0.10         <0.10         <0.10         <0.10         <0.10         <0.10         <0.10         <0.11         <0.11         <0.11         <0.11         <0.11         <0.11         <0.11         <	Arsenic	<2.6	<2.7	<2.6	<2.7	<2.6	<2.6	<2.7	<2.7	20
Chromium         4.8         6.9         7.7         6.7         3.4         6         7.4         7.1         1           Lead         3.7         5         5.6         6         3         6.5         5.1         5.2         2           Mercury         <0.091	Barium	7.8	11	13	12	6.5	11	12	12	1,000
Lead         3.7         5         5.6         6         3         6.5         5.1         5.2         2           Mercury         <0.091	Cadmium	<0.26	<0.27	<0.26	<0.27	<0.26	<0.26	<0.27	<0.27	70
Mercury         <0.091         <0.098         <0.10         <0.094         <0.10         <0.092         <0.10         <0.10         <0.10         <0.10         <0.10         <0.10         <0.10         <0.10         <0.10         <0.10         <0.10         <0.10         <0.11         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1	Chromium	4.8	6.9	7.7	6.7	3.4	6	7.4	7.1	100
Selenium         <5.3         <5.5         <5.3         <5.3         <5.2         <5.3         <5.4         <5.4         4           Silver         <1.0	Lead	3.7	5	5.6	6	3	6.5	5.1	5.2	200
Silver         <1.0         <1.1         <1.1         <1.1         <1.0         <1.1         <1.1         <1.1         1           Polychlorinated Biphenyls (PCBs) (mg/kg dry)           Arcolor-1016         <0.1	Mercury	<0.091	<0.098	<0.10	<0.094	<0.10	<0.092	<0.10	<0.10	20
Polychlorinated Biphenyls (PCBs) (mg/kg dry)           Aroclor-1016         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1 <td>Selenium</td> <td>&lt;5.3</td> <td>&lt;5.5</td> <td>&lt;5.3</td> <td>&lt;5.3</td> <td>&lt;5.2</td> <td>&lt;5.3</td> <td>&lt;5.4</td> <td>&lt;5.4</td> <td>400</td>	Selenium	<5.3	<5.5	<5.3	<5.3	<5.2	<5.3	<5.4	<5.4	400
Aroclor-1016         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1	Silver	<1.0	<1.1	<1.1	<1.1	<1.0	<1.1	<1.1	<1.1	100
Aroclor-1221         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1         <0.1	Polychlorinated Biphenyls (PCBs	) (mg/kg dry)		•		•		•		
Aroclor-1232 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1	Aroclor-1016	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1
	Aroclor-1221	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1
Aroclor-1242 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1	Aroclor-1232	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1
	Aroclor-1242	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1
Aroclor-1248 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1 <0.1	Aroclor-1248	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1

				Table 1					
			Summ	ary of Soil Analytical	Results				
				nicipal Airport Runwa					
Samples Collected on March 30, 2017									
Parameter/Sample ID:	COMP-1	COMP-2	COMP-3	COMP-4	COMP-5	COMP-6	COMP-7	COMP-8	MCP RCS-1
Aroclor-1254	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1
Aroclor-1260	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1
Aroclor-1262	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1
Aroclor-1268	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	1
Volatile Organic Compounds (VO	Cs) (mg/kg)								
Acetone	<0.039	<0.039	<0.041	<0.040	<0.041	<0.039	< 0.039	< 0.037	6
Tertiary Amyl Methyl Ether	<0.0039	< 0.0039	<0.0041	<0.0040	< 0.0041	< 0.0039	<0.0039	< 0.0037	NE
Benzene	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	< 0.0039	< 0.0039	< 0.0037	2
Bromobenzene	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	100
Bromochloromethane	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	< 0.0039	<0.0039	< 0.0037	NE
Bromodichloromethane	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	< 0.0039	<0.0039	< 0.0037	0.1
Bromoform	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	< 0.0039	< 0.0039	< 0.0037	0.1
Bromomethane	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	0.5
Sec-butylbenzene	<0.0039	< 0.0039	<0.0041	<0.0040	< 0.0041	< 0.0039	<0.0039	< 0.0037	NE
n-Butylbenzene	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	NE
tert-Butylbenzene	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	100
Carbon Disulfide	<0.0077	<0.0079	<0.0083	<0.0079	<0.0082	<0.0078	<0.0078	<0.0075	100
Carbon Tetrachloride	<0.0039	< 0.0039	<0.0041	<0.0040	< 0.0041	< 0.0039	<0.0039	< 0.0037	10
Chlorobenzene	< 0.0039	< 0.0039	<0.0041	<0.0040	< 0.0041	< 0.0039	< 0.0039	< 0.0037	1
Dibromochloromethane	<0.0015	<0.0016	<0.0017	<0.0016	< 0.0016	<0.0016	<0.0016	<0.0015	0.005
Chloroethane	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	100
Chloroform	<0.0039	< 0.0039	<0.0041	<0.0040	< 0.0041	< 0.0039	<0.0039	< 0.0037	0.4
Chloromethane	<0.0039	< 0.0039	<0.0041	<0.0040	< 0.0041	< 0.0039	< 0.0039	< 0.0037	100
2-Chlorotoluene	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	< 0.0039	< 0.0039	< 0.0037	100
4-Chlorotoluene	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	NE
1,2-Dibromo-3-Chloropropane	<0.0039	< 0.0039	<0.0041	<0.0040	< 0.0041	< 0.0039	< 0.0039	< 0.0037	10
1,2-Dibromoethane(EDB)	< 0.0039	<0.0039	<0.0041	<0.0040	<0.0041	< 0.0039	< 0.0039	< 0.0037	0.1
Dibromomethane	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	500
1,3-Dichlorobenzene	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	<0.0037	3
1,2-Dichlorobenzene	< 0.0039	<0.0039	<0.0041	<0.0040	<0.0041	< 0.0039	< 0.0039	< 0.0037	9
·									

'									_
1,2-Dichlorobenzene	< 0.0039	< 0.0039	<0.0041	<0.0040	<0.0041	< 0.0039	< 0.0039	< 0.0037	9
1,4-Dichlorobenzene	<0.0039	< 0.0039	< 0.0041	<0.0040	<0.0041	< 0.0039	< 0.0039	< 0.0037	0.7
n-Propylbenzene	<0.0039	<0.0039	< 0.0041	<0.0040	<0.0041	< 0.0039	< 0.0039	< 0.0037	100
Dichlorodifluoromethane	<0.0039	<0.0039	< 0.0041	<0.0040	<0.0041	< 0.0039	< 0.0039	< 0.0037	1,000
1,1-Dichloroethane	< 0.0039	< 0.0039	< 0.0041	<0.0040	< 0.0041	< 0.0039	< 0.0039	< 0.0037	0.4
1,2-Dichloroethane	< 0.0039	< 0.0039	< 0.0041	<0.0040	< 0.0041	< 0.0039	< 0.0039	< 0.0037	0.1
1,1-Dichloroethene	< 0.0039	< 0.0039	< 0.0041	<0.0040	< 0.0041	< 0.0039	< 0.0039	< 0.0037	3
cis-1,2-Dichloroethene	<0.0039	< 0.0039	<0.0041	<0.0040	<0.0041	< 0.0039	< 0.0039	< 0.0037	0.3
trans-1,2-Dichloroethylene	< 0.0039	< 0.0039	< 0.0041	<0.0040	< 0.0041	< 0.0039	< 0.0039	< 0.0037	1
1,2-Dichloropropane	< 0.0039	< 0.0039	< 0.0041	<0.0040	< 0.0041	< 0.0039	< 0.0039	< 0.0037	0.1
1,3-Dichloropropane	< 0.0039	< 0.0039	< 0.0041	<0.0040	< 0.0041	< 0.0039	< 0.0039	< 0.0037	500
2,2-Dichloropropane	<0.0039	< 0.0039	<0.0041	<0.0040	<0.0041	< 0.0039	< 0.0039	< 0.0037	NE
1,1-Dichloropropene	< 0.0039	< 0.0039	< 0.0041	<0.0040	< 0.0041	< 0.0039	< 0.0039	< 0.0037	NE

Table 1 Summary of Soil Analytical Results Barnstable Municipal Airport Runway 15-33 Project Samples Collected on March 30, 2017

				denicated on march	,				
Parameter/Sample ID:	COMP-1	COMP-2	COMP-3	COMP-4	COMP-5	COMP-6	COMP-7	COMP-8	MCP RCS-1
cis-1,3-Dichloropropene	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	0.01
trans-1,3-Dichloropropylene	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	0.01
Diethyl ether	<0.039	< 0.039	<0.041	<0.040	<0.041	<0.039	< 0.039	<0.037	100
Diisopropyl ether (DIPE)	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	100
1,4-Dioxane	<0.077	<0.079	<0.083	<0.079	<0.082	<0.078	<0.078	<0.075	0.2
Ethyl Tertiary Butyl Ether	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	NE
Ethylbenzene	<0.0039	< 0.0039	<0.0041	<0.0040	<0.0041	<0.0039	< 0.0039	< 0.0037	40
Hexachlorobutadiene	<0.0039	< 0.0039	<0.0041	<0.0040	<0.0041	<0.0039	< 0.0039	< 0.0037	30
2-Hexanone	<0.039	<0.039	<0.041	<0.040	<0.041	<0.039	< 0.039	< 0.037	100
Isopropylbenzene	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	1,000
p-Isopropyltoluene	<0.0039	< 0.0039	<0.0041	<0.0040	<0.0041	<0.0039	< 0.0039	< 0.0037	100
2-Butanone(MEK)	<0.039	<0.039	<0.041	<0.040	<0.041	<0.039	<0.039	<0.037	4
4-Methyl-2-pentanone(MIBK)	<0.039	<0.039	<0.041	<0.040	<0.041	<0.039	<0.039	<0.037	0.4
MTBE	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	0.1
Methylene Chloride	<0.0077	<0.0079	0.01	<0.0079	0.014	<0.0078	<0.0078	0.0087	0.1
Naphthalene	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	4
1,1,2-Trichloroethane	< 0.0039	< 0.0039	<0.0041	<0.0040	<0.0041	<0.0039	< 0.0039	< 0.0037	0.1
Styrene	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	3
1,1,1,2-Tetrachloroethane	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	0.1
1,1,2,2-Tetrachloroethane	<0.0015	<0.0016	<0.0017	<0.0016	<0.0016	<0.0016	<0.0016	<0.0015	0.005
Tetrachloroethene	< 0.0039	< 0.0039	<0.0041	<0.0040	<0.0041	<0.0039	< 0.0039	< 0.0037	1
Tetrahydrofuran	<0.039	<0.039	<0.041	<0.040	<0.041	<0.039	<0.039	<0.037	500
Toluene	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	< 0.0039	< 0.0037	30
1,2,4-Trichlorobenzene	< 0.0039	< 0.0039	<0.0041	<0.0040	<0.0041	<0.0039	< 0.0039	< 0.0037	2
1,2,3-Trichlorobenzene	< 0.0039	< 0.0039	<0.0041	<0.0040	<0.0041	<0.0039	< 0.0039	< 0.0037	NE
1,1,1-Trichloroethane	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	30
Trichloroethene	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	< 0.0039	< 0.0037	0.3
Trichlorofluoromethane	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	< 0.0039	< 0.0037	1,000
1,2,3-Trichloropropane	< 0.0039	< 0.0039	<0.0041	<0.0040	<0.0041	<0.0039	< 0.0039	< 0.0037	100
1,2,4-Trimethylbenzene	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	1,000
1,3,5-Trimethylbenzene	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	10
Vinyl Chloride	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	< 0.0037	0.9
o-Xylene	<0.0039	<0.0039	<0.0041	<0.0040	<0.0041	<0.0039	<0.0039	<0.0037	400
m,p-Xylene	<0.0077	<0.0079	<0.0083	<0.0079	<0.0082	<0.0078	<0.0078	< 0.0075	400

#### NOTES:

mg/kg = milligrams per kilograms

< = Compound was not detected above the laboratory reporting limits. The laboratory reporting limits are provided in the table.

MCP RCS-1 = The applicable Massachusetts Contingency Plan (MCP) Reportable Concentrations (RCs) for category S-1 soils (RCS-1).



### LABORATORY REPORT

Green Seal Environmental, Inc. Attn: Mr. Rich Geisler 114 State Road - Unit B Sagamore Beach, MA 02562

Date Received: 3/31/17 **Date Reported:** 4/7/17

P.O. #:

Work Order #:

1703-06586

**DESCRIPTION:** PROJECT #LAWL-1701-0001 BMA-RW 15-33

Enclosed are the analytical results and Chain of Custody for your project referenced above. The sample(s) were analyzed by our Warwick, RI laboratory. When applicable, subcontracted results are noted and reports are enclosed in their entirety.

All samples were analyzed within the established guidelines of US EPA and Massachusetts Contingency Plan (MCP) approved methods with all requirements met, unless otherwise noted at the end of a given sample's analytical results or in a case narrative.

The Detection Limit is defined as the lowest level that can be reliably achieved during routine laboratory conditions.

These results only pertain to the samples submitted for this Work Order # and this report shall not be reproduced except in its entirety.

We certify that the following results are true and accurate to the best of our knowledge. If you have questions or need further assistance, please contact our Customer Service Department.

Approved by:

Yihai Ding

Technical Director

Laboratory Certification Numbers (as applicable to sample's origin state): RI LAI00033, MA M-RI015, CT PH-0508, ME RI00015, NH 2070, NY 11726

Page 2 of 60

Customer Name:

Green Seal Environmental, Inc.

Work Order #:

1703-06586

	MassD	EP Analytical Prote	ocol Certific	ation Form			
	R.I. Analytical Laborat PROJECT #LAWL-170	ories 01-0001 BMA-RW 15-3	Work Order # 3	: 1703-06586	RTN:		
This Form provides c	ertifications for the foll	owing data set: list Labo	oratory Sample I	D Number(s):			
17	03-06586-001 through	1703-06586-008					
Matrices: Gro	oundwater/Surface Water	er 🕱 Soil/Sedi	ment	Drinking Water	☐ Air	Othe	er
CAM Protocol (ch	eck all that apply below	r):					
8260 VOC CAM II A x	7470/7471 Hg CAM III B <b>x</b>	MassDEP VPH CAM IV A	8081 Pesti CAM V B	cides 7196 He CAM VI		assDEP AM IX A	
8270 SVOC CAM II B	7010 Metals CAM III C	Mass DEP EPH CAM IV B	8151 Herbicides CAM V C	8330 Explosives		O-15 VO AM IX B	
6010 Metals CAM III A	6020 Metals CAM III D	8082 PCB CAM V A x	9014 Total	6860 Perci CAM VIII E Cn			
Affirmative respon	ses to Questions A	through F are requir	ed for "Presu	mptive Certainty"	' status		
properly preserved (i	s received in a condit ncluding temperature	ion consistent with the in the field or labora	ose described ontory, and prep	on the Chain -of-C ared/analyzed with	Custody, nin method	Yes	
nolding times?  B Were the analyterotocol(s) followed		l associated QC requi	rements specif	ied in the selected	CAM	Yes	
C Were all require	ed corrective actions a	and analytical respons performance standard	e actions spec	ified in the selected	d CAM	Yes	
Does the laborat	ory report comply wi	th all the reporting re-	quirements spe	ecified in CAM VI	I A, "Quality	Yes	
E a. VPH, EPH as	nd APH methods only	for Acquisition and I y: Was each method o	onducted with		dification(s)?		N/A
		st of significant modifies the complete analy		d for each method?	)		N/A
F Were all applicat	ole CAM protocol QC	and performance sta ing all "No" responses	ndard non-con	formances identifi	ed and	Yes	177
Were the reporting that User Note: Data that ac	ng limits at or below a	nired for "Presumptive all CAM reporting lim status may not necessarily	its specified in	the selected CAM	f protocol(s)?	No	1
I Were all QC perf	ormance standards sp	pecified in the CAM p				No	1
		analyted list specified		d CAM protocol(s	s)?	No	1
the undersigned, att esponsible for obtain nd belief, is accurate	ing the information, ti	nd penalties of perjury he material contained i	that, based up in this analytica	on my personal inq al report is, to the b	uiry of those est of my know	/ledge	
Signature			Position:				
Printed Name: Yih	ai Ding		Date:	4/10/2017			

#### Case Narrative

Date: 4/7/2017

Green Seal Environmental, Inc.

Attn: Mr. Rich Geisler 114 State Road - Unit B Sagamore Beach, MA 02562

Project: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Work Order #: 1703-06586

The following exceptions were noted for this Work Order:

The method requested for TPH GC/FID is not listed in the table of contents for compendium of MCP analytical methods. Therefore, there is no guideline for presumptive certainty.

Volatile Organics by 8260

Question G - Not all MCP standard limits were met, however, the client requested S-1 limits were met.

Question H - MEK does not meet the 0.100 minimum response factor recommended in method 8260C. Compound quants adequately in the 10 ppb calibration point of curve. RF>0.05 allowing data to remain valid according to the QC requirements listed in table II A-1 of WSC-CAM-II A.

Question H - The Laboratory Control Sample / Laboratory Control Sample Duplicate (4/5/17) had analytes recover outside the 70%-130% QC acceptance limits. Up to 10% of the analytes are allowed to recover outside of QC limits. The specific outliers include Acetone(LCSD 140%), tert-Butylbenzene(LCSD 134%), 1,3-Dichlorobenzene(LCSD 132%), 1,2-Dichlorobenzene(LCSD 134%), 1,4-Dichlorobenzene(LCSD 134%), 2-Hexanone(LCD 134%), Hexachlorobutadiene(LSD 140%), Isopropylbenzene(LCSD 132%), p-Isopropyltoluene(LCSD 132%), 2-Butanone(MEK)(LCSD 154%), 4-Methyl-2-Pentanone(MIBK)(LCSD 142%), 1,1,1,2-Tetrachlorethane(LCSD 134%), Tetrachloroethene(134%,136%), 1,2,4-Trichlorobenzene(LCSD 132%), Trichlorofluoromethane(138%, 142%). These analytes were not detected in the associated samples.

Semi Volatile Organics by 8270

Question H - Laboratory Control Sample / Laboratory Control Sample duplicate (1//17) had analytes outside the 40%-140% for base-neutrals and 30%-130% for acid compounds QC acceptance limits. Up to 10% are allowed to exceed the criteria. The specific outliers include, Benzidine(36%, 22%), Aniline (LCSD 30%), 4-Chloroaniline(LCSD 39%). These analytes were not detected in the associated samples.

Question H - The RPD for Benzidine(47%), Aniline(62%), 4-Chloroaniline(38%) in the Laboratory Control

Sample / Laboratory Control Sample duplicate (4/7/17) recovered outside the 30% (soil) QC acceptance limits.

Total Metals by 6010

Question H - No Matrix Spike/Matrix Spike Duplicate was requested for the Soil/Sediment sample in this work order.

Question I - Per the client's request, only a subset of the MCP analyte list for SW-846 Method 6010 Total Metals is reported.

There were no additional exceptions or analytical issues to discuss concerning the testing requirements for the project.

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

001

Sample Description:

COMP-1

Sample Type:

COMPOSITE

Sample Date / Time:

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALY	ZED	ANALYST
ТРН							
TPH GC/FID	<10	11	mg/kg dry	SW-846 8100M	4/5/17	23:46	JEB
Surrogate			RANGE	SW-846 8100M	4/5/17	23:46	JEB
2-Fluorobiphenyl	70		40-140%	SW-846 8100M	4/5/17	23:46	JEB
Moisture	5.1		%	SM2540G 18-21ed	4/6/17	14:54	NS
Semi-Volatile Organic Comp.							
Acenaphthene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Acenaphthylene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Anthracene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Benzidine	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Benzo(a)anthracene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Benzo(b)fluoranthene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Benzo(k)fluoranthene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Benzo(g,h,i)perylene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Benzo(a)pyrene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Bis(2-chloroethyl)ether	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Bis(2-Chloroethoxy)methane	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Bis(2-Chloroisopropyl)Ether	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Bis(2-ethylhexyl)phthalate	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
4-Bromophenyl phenyl ether	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Butylbenzyl phthalate	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
2-Chloronaphthalene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
4-Chlorophenyl phenyl ether	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Chrysene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Dibenzo(a,h)anthracene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Di-n-butyl phthalate	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
1,2-Dichlorobenzene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
1,3-Dichlorobenzene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
1,4-Dichlorobenzene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
3,3'-Dichlorobenzidine	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Diethyl phthalate	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Dimethyl phthalate	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
2,4-Dinitrotoluene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
2,6-Dinitrotoluene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:001Sample Description:COMP-1Sample Type:COMPOSITESample Date / Time:3/30/2017

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Di-n-octyl phthalate	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
1,2-Diphenylhydrazine	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Fluoranthene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Fluorene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Hexachlorobenzene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Hexachlorobutadiene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Hexachlorocyclopentadiene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Hexachloroethane	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Indeno(1,2,3-cd)pyrene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Isophorone	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
2-MethyInaphthalene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Naphthalene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Nitrobenzene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
N-nitrosodimethylamine	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
N-nitrosodiphenylamine	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
N-nitrosodi-n-propylamine	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Phenanthrene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Pyrene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
1,2,4-Trichlorobenzene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
4-Chloro-3-methylphenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
2-Chlorophenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
2,4-Dichlorophenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
2,4-Dimethylphenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
2-Methyl-4,6-dinitrophenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
2,4-Dinitrophenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
2-Nitrophenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
4-Nitrophenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Pentachlorophenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Phenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
2,4,5-Trichlorophenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
2,4,6-Trichlorophenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
4-Chloroaniline	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Dibenzofuran	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
2-Methyl Phenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
3 & 4-Methylphenols	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
			•				

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

001

Sample Description:

COMP-1

Sample Type:

COMPOSITE

**Sample Date / Time :** 3/30/2017

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Aniline	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Acetophenone	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Azobenzene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	0:01	JEB
Surrogates			RANGE				
Phenol-d5	80		30-130%	SW-846 8270D	4/7/17	0:01	JEB
2-Fluorophenol	77		30-130%	SW-846 8270D	4/7/17	0:01	JEB
2,4,6-Tribromophenol	84		30-130%	SW-846 8270D	4/7/17	0:01	JEB
Nitrobenzene-d5	75		30-130%	SW-846 8270D	4/7/17	0:01	JEB
2-Fluorobiphenyl	75		30-130%	SW-846 8270D	4/7/17	0:01	JEB
P-Terphenyl-d14	83		30-130%	SW-846 8270D	4/7/17	0:01	JEB
Semi Extraction Date				SW-846 3546	4/5/17	16:35	SRM
Total metals							
Arsenic	<2.6	2.6	mg/kg dry	SW-846 6010C	4/7/17	13:41	RBR
Barium	7.8	0.53	mg/kg dry	SW-846 6010C	4/7/17	13:41	RBR
Cadmium	< 0.26	0.26	mg/kg dry	SW-846 6010C	4/7/17	13:41	RBR
Chromium	4.8	1.6	mg/kg dry	SW-846 6010C	4/7/17	13:41	RBR
Lead	3.7	2.1	mg/kg dry	SW-846 6010C	4/7/17	13:41	RBR
Mercury	< 0.091	0.091	mg/kg dry	SW-846 7471B	4/4/17	22:18	AJD
Selenium	<5.3	5.3	mg/kg dry	SW-846 6010C	4/7/17	13:41	RBR
Silver	<1.0	1.0	mg/kg dry	SW-846 6010C	4/7/17	13:41	RBR
ICP Digestion				SW-846 3050B	4/5/17	9:00	AGJ
Mercury Digestion				SW-846 7471B	4/4/17	21:30	AGJ
Percent Solids	94.9		%	SM2540G 18-21ed	4/6/17	14:54	NS
Extraction Date				SW-846 5035A	4/5/17	8:30	*CS
PCB							
Aroclor-1016	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	14:08	JBW
Aroclor-1221	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	14:08	JBW
Aroclor-1232	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	14:08	JBW
Aroclor-1242	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	14:08	JBW
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	14:08	JBW
Aroclor-1254	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	14:08	JBW
Aroclor-1260	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	14:08	JBW
Aroclor-1262	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	14:08	JBW
Aroclor-1268	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	14:08	JBW

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

001

Sample Description:

COMP-1

Sample Type:

COMPOSITE

Sample Date / Time :

PARAMETER Surrogate	SAMPLE RESULTS	DET. LIMIT	UNITS RANGE	METHOD	DATE ANALY	ZED	ANALYST
Tetrachloro-m-xylene (TCMX)	49		30-150%	SW-846 8082A	4/6/17	14:08	JBW
Decachlorobiphenyl	55		30-150%	SW-846 8082A	4/6/17	14:08	JBW
Extraction Date				SW-846 3546	4/5/17	21:54	SRM
Volatile Organic Compounds							
Acetone	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Tertiary Amyl Methyl Ether	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Benzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Bromobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Bromochloromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Bromodichloromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Bromoform	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Bromomethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Sec-butylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
n-Butylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
tert-Butylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Carbon Disulfide	< 0.0077	0.0077	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Carbon Tetrachloride	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Chlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Dibromochloromethane	< 0.0015	0.0015	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Chloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Chloroform	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Chloromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
2-Chlorotoluene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
4-Chlorotoluene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,2-Dibromo-3-Chloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,2-Dibromoethane(EDB)	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Dibromomethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,3-Dichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,2-Dichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,4-Dichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
n-Propylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Dichlorodifluoromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,1-Dichloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:001Sample Description:COMP-1Sample Type:COMPOSITESample Date / Time:3/30/2017

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
1,2-Dichloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,1-Dichloroethene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
cis-1,2-Dichloroethene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
trans-1,2-Dichloroethylene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,2-Dichloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,3-Dichloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
2,2-Dichloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,1-Dichloropropene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
cis-1,3-Dichloropropene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
trans-1,3-Dichloropropylene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Diethyl ether	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Diisopropyl Ether (DIPE)	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,4-Dioxane	< 0.077	0.077	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Ethyl Tertiary Butyl Ether	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Ethylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Hexachlorobutadiene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
2-Hexanone	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Isopropylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
p-Isopropyltoluene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
2-Butanone(MEK)	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
4-Methyl-2-pentanone(MIBK)	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
MTBE	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Methylene Chloride	< 0.0077	0.0077	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Naphthalene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,1,2-Trichloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Styrene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,1,1,2-Tetrachloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,1,2,2-Tetrachloroethane	< 0.0015	0.0015	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Tetrachloroethene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Tetrahydrofuran	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Toluene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,2,4-Trichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,2,3-Trichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,1,1-Trichloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Trichloroethene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

001

Sample Description:

COMP-1

Sample Type :

COMPOSITE

Sample Date / Time :

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Trichlorofluoromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,2,3-Trichloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,2,4-Trimethylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
1,3,5-Trimethylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Vinyl Chloride	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
o-Xylene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
m,p-Xylene	< 0.0077	0.0077	mg/kg dry	SW-846 8260C	4/5/17	12:36	WL
Surrogates			RANGE	SW-846 8260C	4/5/17	12:36	WL
Dibromofluoromethane	109		70-130%	SW-846 8260C	4/5/17	12:36	WL
Toluene-d8	93		70-130%	SW-846 8260C	4/5/17	12:36	WL
4-Bromofluorobenzene	93		70-130%	SW-846 8260C	4/5/17	12:36	WL
1,2 Dichloroethane-d4	117		70-130%	SW-846 8260C	4/5/17	12:36	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:002Sample Description:COMP-2Sample Type:COMPOSITESample Date / Time:3/30/2017

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
ТРН							
TPH GC/FID	<10	11	mg/kg dry	SW-846 8100M	4/6/17	0:23	JEB
Surrogate			RANGE	SW-846 8100M	4/6/17	0:23	JEB
2-Fluorobiphenyl	62		40-140%	SW-846 8100M	4/6/17	0:23	JEB
Moisture	8.5		%	SM2540G 18-21ed	4/6/17	14:54	NS
Semi-Volatile Organic Comp.							
Acenaphthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Acenaphthylene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Anthracene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Benzidine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Benzo(a)anthracene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Benzo(b)fluoranthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Benzo(k)fluoranthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Benzo(g,h,i)perylene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Benzo(a)pyrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Bis(2-chloroethyl)ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Bis(2-Chloroethoxy)methane	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Bis(2-Chloroisopropyl)Ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Bis(2-ethylhexyl)phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
4-Bromophenyl phenyl ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Butylbenzyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
2-Chloronaphthalene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
4-Chlorophenyl phenyl ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Chrysene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Dibenzo(a,h)anthracene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Di-n-butyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
1,2-Dichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
1,3-Dichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
1,4-Dichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
3,3'-Dichlorobenzidine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Diethyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Dimethyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
2,4-Dinitrotoluene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
2,6-Dinitrotoluene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:002Sample Description:COMP-2Sample Type:COMPOSITESample Date / Time:3/30/2017

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Di-n-octyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
1,2-Diphenylhydrazine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Fluoranthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Fluorene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Hexachlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Hexachlorobutadiene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Hexachlorocyclopentadiene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Hexachloroethane	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Indeno(1,2,3-cd)pyrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Isophorone	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
2-MethyInaphthalene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Naphthalene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Nitrobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
N-nitrosodimethylamine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
N-nitrosodiphenylamine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
N-nitrosodi-n-propylamine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Phenanthrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Pyrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
1,2,4-Trichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
4-Chloro-3-methylphenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
2-Chlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
2,4-Dichlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
2,4-Dimethylphenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
2-Methyl-4,6-dinitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
2,4-Dinitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
2-Nitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
4-Nitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Pentachlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Phenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
2,4,5-Trichlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
2,4,6-Trichlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
4-Chloroaniline	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Dibenzofuran	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
2-Methyl Phenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
3 & 4-Methylphenols	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

002

Sample Description:

COMP-2

Sample Type :

COMPOSITE

Sample Date / Time:

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Aniline	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Acetophenone	< 0.36	0.36	ıng/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Azobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/6/17	23:31	JEB
Surrogates			RANGE				
Phenol-d5	68		30-130%	SW-846 8270D	4/6/17	23:31	JEB
2-Fluorophenol	66		30-130%	SW-846 8270D	4/6/17	23:31	JEB
2,4,6-Tribromophenol	76		30-130%	SW-846 8270D	4/6/17	23:31	JEB
Nitrobenzene-d5	65		30-130%	SW-846 8270D	4/6/17	23:31	JEB
2-Fluorobiphenyl	65		30-130%	SW-846 8270D	4/6/17	23:31	JEB
P-Terphenyl-d14	75		30-130%	SW-846 8270D	4/6/17	23:31	JEB
Semi Extraction Date				SW-846 3546	4/5/17	16:35	SRM
Total metals							
Arsenic	<2.7	2.7	mg/kg dry	SW-846 6010C	4/7/17	13:54	RBR
Barium	11	0.55	mg/kg dry	SW-846 6010C	4/7/17	13:54	RBR
Cadmium	< 0.27	0.27	mg/kg dry	SW-846 6010C	4/7/17	13:54	RBR
Chromium	6.9	1.6	mg/kg dry	SW-846 6010C	4/7/17	13:54	RBR
Lead	5.0	2.2	mg/kg dry	SW-846 6010C	4/7/17	13:54	RBR
Mercury	< 0.098	0.098	mg/kg dry	SW-846 7471B	4/4/17	22:25	AJD
Selenium	<5.5	5.5	mg/kg dry	SW-846 6010C	4/7/17	13:54	RBR
Silver	<1.1	1.1	mg/kg dry	SW-846 6010C	4/7/17	13:54	RBR
ICP Digestion				SW-846 3050B	4/5/17	9:00	AGJ
Mercury Digestion				SW-846 7471B	4/4/17	21:30	AGJ
Percent Solids	91.5		%	SM2540G 18-21ed	4/6/17	14:54	NS
Extraction Date				SW-846 5035A	4/5/17	8:30	*CS
PCB							
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	15:05	JBW
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	15:05	JBW
Aroclor-1232	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	15:05	JBW
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	15:05	JBW
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	15:05	JBW
Aroclor-1254	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	15:05	JBW
Aroclor-1260	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	15:05	JBW
Aroclor-1262	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	15:05	JBW
Aroclor-1268	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	15:05	JBW

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:002Sample Description:COMP-2Sample Type:COMPOSITESample Date / Time:3/30/2017

PARAMETER Surrogate	SAMPLE RESULTS	DET. LIMIT	UNITS RANGE	метнор	DATE ANALY	ZED	ANALYST
Tetrachloro-m-xylene (TCMX)	47		30-150%	SW-846 8082A	4/6/17	15:05	JBW
Decachlorobiphenyl	45		30-150%	SW-846 8082A	4/6/17	15:05	JBW
Extraction Date				SW-846 3546	4/5/17	21:54	SRM
Volatile Organic Compounds							
Acetone	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Tertiary Amyl Methyl Ether	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Benzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Bromobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Bromochloromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Bromodichloromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Bromoform	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Bromomethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Sec-butylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
n-Butylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
tert-Butylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Carbon Disulfide	< 0.0079	0.0079	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Carbon Tetrachloride	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Chlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Dibromochloromethane	< 0.0016	0.0016	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Chloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Chloroform	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Chloromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
2-Chlorotoluene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
4-Chlorotoluene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,2-Dibromo-3-Chloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,2-Dibromoethane(EDB)	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Dibromomethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,3-Dichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,2-Dichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,4-Dichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
n-Propylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Dichlorodifluoromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,1-Dichloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:002Sample Description:COMP-2Sample Type:COMPOSITESample Date / Time:3/30/2017

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
1,2-Dichloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,1-Dichloroethene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
cis-1,2-Dichloroethene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
trans-1,2-Dichloroethylene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,2-Dichloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,3-Dichloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
2,2-Dichloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,1-Dichloropropene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
cis-1,3-Dichloropropene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
trans-1,3-Dichloropropylene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Diethyl ether	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Diisopropyl Ether (DIPE)	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,4-Dioxane	< 0.079	0.079	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Ethyl Tertiary Butyl Ether	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Ethylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Hexachlorobutadiene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
2-Hexanone	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Isopropylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
p-Isopropyltoluene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
2-Butanone(MEK)	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
4-Methyl-2-pentanone(MIBK)	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
MTBE	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Methylene Chloride	< 0.0079	0.0079	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Naphthalene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,1,2-Trichloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Styrene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,1,1,2-Tetrachloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,1,2,2-Tetrachloroethane	< 0.0016	0.0016	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Tetrachloroethene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Tetrahydrofuran	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Toluene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,2,4-Trichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,2,3-Trichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,1,1-Trichloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Trichloroethene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

002

Sample Description:

COMP-2

Sample Type :

COMPOSITE

Sample Date / Time :

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Trichlorofluoromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,2,3-Trichloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,2,4-Trimethylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
1,3,5-Trimethylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Vinyl Chloride	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
o-Xylene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
m,p-Xylene	< 0.0079	0.0079	mg/kg dry	SW-846 8260C	4/5/17	13:03	WL
Surrogates			RANGE	SW-846 8260C	4/5/17	13:03	WL
Dibromofluoromethane	110		70-130%	SW-846 8260C	4/5/17	13:03	WL
Toluene-d8	94		70-130%	SW-846 8260C	4/5/17	13:03	WL
4-Bromofluorobenzene	91		70-130%	SW-846 8260C	4/5/17	13:03	WL
1,2 Dichloroethane-d4	117		70-130%	SW-846 8260C	4/5/17	13:03	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

003

Sample Description:

COMP-3

Sample Type :

COMPOSITE

Sample Date / Time :

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALY	ZED	ANALYST
ТРН							
TPH GC/FID	55	11	mg/kg dry	SW-846 8100M	4/6/17	6:29	JEB
Surrogate			RANGE	SW-846 8100M	4/6/17	6:29	JEB
2-Fluorobiphenyl	80		40-140%	SW-846 8100M	4/6/17	6:29	JEB
Moisture	7.0		%	SM2540G 18-21ed	4/6/17	14:54	NS
Semi-Volatile Organic Comp.							
Acenaphthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Acenaphthylene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Anthracene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Benzidine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Benzo(a)anthracene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Benzo(b)fluoranthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Benzo(k)fluoranthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Benzo(g,h,i)perylene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Benzo(a)pyrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Bis(2-chloroethyl)ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Bis(2-Chloroethoxy)methane	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Bis(2-Chloroisopropyl)Ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Bis(2-ethylhexyl)phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
4-Bromophenyl phenyl ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Butylbenzyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
2-Chloronaphthalene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
4-Chlorophenyl phenyl ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Chrysene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Dibenzo(a,h)anthracene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Di-n-butyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
1,2-Dichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
1,3-Dichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
1,4-Dichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
3,3'-Dichlorobenzidine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Diethyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Dimethyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
2,4-Dinitrotoluene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
2,6-Dinitrotoluene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

003

Sample Description:

COMP-3

Sample Type :

COMPOSITE

Sample Date / Time :

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	<b>ANALY</b>	ZED	ANALYST
Di-n-octyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
1,2-Diphenylhydrazine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Fluoranthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Fluorene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Hexachlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Hexachlorobutadiene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Hexachlorocyclopentadiene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Hexachloroethane	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Indeno(1,2,3-cd)pyrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Isophorone	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
2-Methylnaphthalene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Naphthalene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Nitrobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
N-nitrosodimethylamine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
N-nitrosodiphenylamine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
N-nitrosodi-n-propylamine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Phenanthrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Pyrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
1,2,4-Trichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
4-Chloro-3-methylphenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
2-Chlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
2,4-Dichlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
2,4-Dimethylphenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
2-Methyl-4,6-dinitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
2,4-Dinitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
2-Nitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
4-Nitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Pentachlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Phenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
2,4,5-Trichlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
2,4,6-Trichlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
4-Chloroaniline	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Dibenzofuran	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
2-Methyl Phenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
3 & 4-Methylphenols	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:003Sample Description:COMP-3Sample Type:COMPOSITESample Date / Time:3/30/2017

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Aniline	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Acetophenone	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Azobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:52	JEB
Surrogates			RANGE				
Phenol-d5	83		30-130%	SW-846 8270D	4/7/17	2:52	JEB
2-Fluorophenol	79		30-130%	SW-846 8270D	4/7/17	2:52	JEB
2,4,6-Tribromophenol	88		30-130%	SW-846 8270D	4/7/17	2:52	JEB
Nitrobenzene-d5	76		30-130%	SW-846 8270D	4/7/17	2:52	JEB
2-Fluorobiphenyl	80		30-130%	SW-846 8270D	4/7/17	2:52	JEB
P-Terphenyl-d14	86		30-130%	SW-846 8270D	4/7/17	2:52	JEB
Semi Extraction Date				SW-846 3546	4/5/17	16:35	SRM
Total metals							
Arsenic	<2.6	2.6	mg/kg dry	SW-846 6010C	4/7/17	13:58	RBR
Barium	13	0.53	mg/kg dry	SW-846 6010C	4/7/17	13:58	RBR
Cadmium	< 0.26	0.26	mg/kg dry	SW-846 6010C	4/7/17	13:58	RBR
Chromium	7.7	1.6	mg/kg dry	SW-846 6010C	4/7/17	13:58	RBR
Lead	5.6	2.1	mg/kg dry	SW-846 6010C	4/7/17	13:58	RBR
Mercury	< 0.10	0.10	mg/kg dry	SW-846 7471B	4/4/17	22:26	AJD
Selenium	<5.3	5.3	mg/kg dry	SW-846 6010C	4/7/17	13:58	RBR
Silver	<1.1	1.1	mg/kg dry	SW-846 6010C	4/7/17	13:58	RBR
ICP Digestion				SW-846 3050B	4/5/17	9:00	AGJ
Mercury Digestion				SW-846 7471B	4/4/17	21:30	AGJ
Percent Solids	93.0		%	SM2540G 18-21ed	4/6/17	14:54	NS
Extraction Date				SW-846 5035A	4/5/17	8:30	*CS
PCB							
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	15:33	JBW
Aroclor-1221	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	15:33	JBW
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	15:33	JBW
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	15:33	JBW
Aroclor-1248	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	15:33	JBW
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	15:33	JBW
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	15:33	JBW
Aroclor-1262	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	15:33	JBW
Aroclor-1268	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	15:33	JBW

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

003

Sample Description:

COMP-3

Sample Type:

COMPOSITE

Sample Date / Time :

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Surrogate			RANGE				
Tetrachloro-m-xylene (TCMX)	43		30-150%	SW-846 8082A	4/6/17	15:33	JBW
Decachlorobiphenyl	50		30-150%	SW-846 8082A	4/6/17	15:33	JBW
Extraction Date				SW-846 3546	4/5/17	21:54	SRM
Volatile Organic Compounds							
Acetone	< 0.041	0.041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Tertiary Amyl Methyl Ether	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Benzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Bromobenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Bromochloromethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Bromodichloromethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Bromoform	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Bromomethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Sec-butylbenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
n-Butylbenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
tert-Butylbenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Carbon Disulfide	< 0.0083	0.0083	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Carbon Tetrachloride	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Chlorobenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Dibromochloromethane	< 0.0017	0.0017	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Chloroethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Chloroform	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Chloromethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
2-Chlorotoluene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
4-Chlorotoluene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,2-Dibromo-3-Chloropropane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,2-Dibromoethane(EDB)	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Dibromomethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,3-Dichlorobenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,2-Dichlorobenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,4-Dichlorobenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
n-Propylbenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Dichlorodifluoromethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,1-Dichloroethane	<0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

003

Sample Description:

COMP-3

Sample Type:

COMPOSITE

Sample Date / Time:

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
1,2-Dichloroethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,1-Dichloroethene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
cis-1,2-Dichloroethene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
trans-1,2-Dichloroethylene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,2-Dichloropropane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,3-Dichloropropane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
2,2-Dichloropropane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,1-Dichloropropene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
cis-1,3-Dichloropropene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
trans-1,3-Dichloropropylene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Diethyl ether	< 0.041	0.041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Diisopropyl Ether (DIPE)	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,4-Dioxane	< 0.083	0.083	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Ethyl Tertiary Butyl Ether	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Ethylbenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Hexachlorobutadiene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
2-Hexanone	< 0.041	0.041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
lsopropylbenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
p-Isopropyltoluene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
2-Butanone(MEK)	< 0.041	0.041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
4-Methyl-2-pentanone(MIBK)	< 0.041	0.041	mg/kg dry	SW-846 8260C	4/5/17	13:31	$\mathbf{w}_{L}$
MTBE	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Methylene Chloride	0.010	0.0083	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Naphthalene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,1,2-Trichloroethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Styrene	<0.004 I	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,1,1,2-Tetrachloroethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,1,2,2-Tetrachloroethane	< 0.0017	0.0017	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Tetrachloroethene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Tetrahydrofuran	< 0.041	0.041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Toluene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,2,4-Trichlorobenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,2,3-Trichlorobenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,1,1-Trichloroethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Trichloroethene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

003

Sample Description:

COMP-3

Sample Type :

COMPOSITE

Sample Date / Time :

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Trichlorofluoromethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,2,3-Trichloropropane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,2,4-Trimethylbenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
1,3,5-Trimethylbenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Vinyl Chloride	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
o-Xylene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
m,p-Xylene	< 0.0083	0.0083	mg/kg dry	SW-846 8260C	4/5/17	13:31	WL
Surrogates			RANGE	SW-846 8260C	4/5/17	13:31	WL
Dibromofluoromethane	110		70-130%	SW-846 8260C	4/5/17	13:31	WL
Toluene-d8	93		70-130%	SW-846 8260C	4/5/17	13:31	WL
4-Bromofluorobenzene	90		70-130%	SW-846 8260C	4/5/17	13:31	WL
1,2 Dichloroethane-d4	117		70-130%	SW-846 8260C	4/5/17	13:31	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:004Sample Description:COMP-4Sample Type:COMPOSITESample Date / Time:3/30/2017

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALY	ZED.	ANALYST
TARAMETER	RESULIS	LIMITI	UNITS	METHOD	ANALI	LED	ANALISI
ТРН							
TPH GC/FID	<10	11	mg/kg dry	SW-846 8100M	4/6/17	0:59	JEB
Surrogate			RANGE	SW-846 8100M	4/6/17	0:59	JEB
2-Fluorobiphenyl	57		40-140%	SW-846 8100M	4/6/17	0:59	JEB
Moisture	8.6		%	SM2540G 18-21ed	4/6/17	14:54	NS
Semi-Volatile Organic Comp.							
Acenaphthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Acenaphthylene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Anthracene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Benzidine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Benzo(a)anthracene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Benzo(b)fluoranthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Benzo(k)fluoranthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Benzo(g,h,i)perylene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Benzo(a)pyrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Bis(2-chloroethyl)ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Bis(2-Chloroethoxy)methane	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Bis(2-Chloroisopropyl)Ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Bis(2-ethylhexyl)phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
4-Bromophenyl phenyl ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Butylbenzyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
2-Chloronaphthalene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
4-Chlorophenyl phenyl ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Chrysene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Dibenzo(a,h)anthracene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Di-n-butyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
1,2-Dichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
1,3-Dichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
1,4-Dichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
3,3'-Dichlorobenzidine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Diethyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Dimethyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
2,4-Dinitrotoluene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
2,6-Dinitrotoluene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:004Sample Description:COMP-4Sample Type:COMPOSITESample Date / Time:3/30/2017

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Di-n-octyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
1,2-Diphenylhydrazine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Fluoranthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Fluorene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Hexachlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Hexachlorobutadiene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Hexachlorocyclopentadiene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Hexachloroethane	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Indeno(1,2,3-cd)pyrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
lsophorone	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
2-Methylnaphthalene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Naphthalene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Nitrobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
N-nitrosodimethylamine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
N-nitrosodiphenylamine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
N-nitrosodi-n-propylamine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Phenanthrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Pyrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
1,2,4-Trichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
4-Chloro-3-methylphenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
2-Chlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
2,4-Dichlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
2,4-Dimethylphenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
2-Methyl-4,6-dinitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
2,4-Dinitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
2-Nitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
4-Nitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Pentachlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Phenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
2,4,5-Trichlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
2,4,6-Trichlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
4-Chloroaniline	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Dibenzofuran	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
2-Methyl Phenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
3 & 4-Methylphenols	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

004

Sample Description:

COMP-4

Sample Type:

COMPOSITE

Sample Date / Time: 3/30/2017

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Aniline	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Acetophenone	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Azobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	0:57	JEB
Surrogates			RANGE				
Phenol-d5	82		30-130%	SW-846 8270D	4/7/17	0:57	JEB
2-Fluorophenol	78		30-130%	SW-846 8270D	4/7/17	0:57	JEB
2,4,6-Tribromophenol	84		30-130%	SW-846 8270D	4/7/17	0:57	JEB
Nitrobenzene-d5	76		30-130%	SW-846 8270D	4/7/17	0:57	JEB
2-Fluorobiphenyl	77		30-130%	SW-846 8270D	4/7/17	0:57	JEB
P-Terphenyl-d14	84		30-130%	SW-846 8270D	4/7/17	0:57	JEB
Semi Extraction Date				SW-846 3546	4/5/17	16:35	SRM
Total metals							
Arsenic	<2.7	2.7	mg/kg dry	SW-846 6010C	4/7/17	14:02	RBR
Barium	12	0.53	mg/kg dry	SW-846 6010C	4/7/17	14:02	RBR
Cadmium	< 0.27	0.27	mg/kg dry	SW-846 6010C	4/7/17	14:02	RBR
Chromium	6.7	1.6	mg/kg dry	SW-846 6010C	4/7/17	14:02	RBR
Lead	6.0	2.1	mg/kg dry	SW-846 6010C	4/7/17	14:02	RBR
Mercury	< 0.094	0.094	mg/kg dry	SW-846 7471B	4/4/17	22:27	AJD
Selenium	<5.3	5.3	mg/kg dry	SW-846 6010C	4/7/17	14:02	RBR
Silver	<1.1	1.1	mg/kg dry	SW-846 6010C	4/7/17	14:02	RBR
ICP Digestion				SW-846 3050B	4/5/17	9:00	AGJ
Mercury Digestion				SW-846 7471B	4/4/17	21:30	AGJ
Percent Solids	91.4		%	SM2540G 18-21ed	4/6/17	14:54	NS
Extraction Date				SW-846 5035A	4/5/17	8:30	*CS
PCB							
Aroclor-1016	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	16:01	JBW
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	16:01	JBW
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	16:01	JBW
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	16:01	JBW
Aroclor-1248	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	16:01	JBW
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	16:01	JBW
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	16:01	JBW
Aroclor-1262	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	16:01	JBW
Aroclor-1268	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	16:01	JBW

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

004

Sample Description:

COMP-4

Sample Type :

COMPOSITE

Sample Date / Time :

	SAMPLE	DET.			DATE		
PARAMETER Surrogate	RESULTS	LIMIT	UNITS RANGE	METHOD	ANALY	ZED	ANALYST
Tetrachloro-m-xylene (TCMX)	69		30-150%	SW-846 8082A	4/6/17	16:01	JBW
Decachlorobiphenyl	78		30-150%	SW-846 8082A	4/6/17	16:01	JBW
Extraction Date			20 12070	SW-846 3546	4/5/17	21:54	SRM
Volatile Organic Compounds							
Acetone	< 0.040	0.040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Tertiary Amyl Methyl Ether	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Benzene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Bromobenzene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Bromochloromethane	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Bromodichloromethane	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Bromoform	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Bromomethane	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Sec-butylbenzene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
n-Butylbenzene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
tert-Butylbenzene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Carbon Disulfide	< 0.0079	0.0079	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Carbon Tetrachloride	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Chlorobenzene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Dibromochloromethane	< 0.0016	0.0016	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Chloroethane	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Chloroform	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Chloromethane	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
2-Chlorotoluene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
4-Chlorotoluene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,2-Dibromo-3-Chloropropane	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,2-Dibromoethane(EDB)	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Dibromomethane	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,3-Dichlorobenzene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,2-Dichlorobenzene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,4-Dichlorobenzene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
n-Propylbenzene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Dichlorodifluoromethane	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,1-Dichloroethane	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

004

Sample Description:

COMP-4

Sample Type :

COMPOSITE

Sample Date / Time :

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
1,2-Dichloroethane	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,1-Dichloroethene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
cis-1,2-Dichloroethene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
trans-1,2-Dichloroethylene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,2-Dichloropropane	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,3-Dichloropropane	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
2,2-Dichloropropane	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,1-Dichloropropene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
cis-1,3-Dichloropropene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
trans-1,3-Dichloropropylene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Diethyl ether	< 0.040	0.040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Diisopropyl Ether (DIPE)	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,4-Dioxane	< 0.079	0.079	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Ethyl Tertiary Butyl Ether	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Ethylbenzene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Hexachlorobutadiene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
2-Hexanone	< 0.040	0.040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Isopropylbenzene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
p-Isopropyltoluene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
2-Butanone(MEK)	< 0.040	0.040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
4-Methyl-2-pentanone(MIBK)	< 0.040	0.040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
MTBE	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Methylene Chloride	< 0.0079	0.0079	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Naphthalene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,1,2-Trichloroethane	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Styrene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,1,1,2-Tetrachloroethane	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,1,2,2-Tetrachloroethane	< 0.0016	0.0016	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Tetrachloroethene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Tetrahydrofuran	< 0.040	0.040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Toluene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,2,4-Trichlorobenzene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,2,3-Trichlorobenzene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,1,1-Trichloroethane	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Trichloroethene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

004

Sample Description:

COMP-4

Sample Type:

COMPOSITE

Sample Date / Time :

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Trichlorofluoromethane	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,2,3-Trichloropropane	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,2,4-Trimethylbenzene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
1,3,5-Trimethylbenzene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Vinyl Chloride	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
o-Xylene	< 0.0040	0.0040	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
m,p-Xylene	< 0.0079	0.0079	mg/kg dry	SW-846 8260C	4/5/17	13:58	WL
Surrogates			RANGE	SW-846 8260C	4/5/17	13:58	WL
Dibromofluoromethane	111		70-130%	SW-846 8260C	4/5/17	13:58	WL
Toluene-d8	94		70-130%	SW-846 8260C	4/5/17	13:58	WL
4-Bromofluorobenzene	89		70-130%	SW-846 8260C	4/5/17	13:58	WL
1,2 Dichloroethane-d4	121		70-130%	SW-846 8260C	4/5/17	13:58	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

005

Sample Description:

COMP-5

Sample Type:

COMPOSITE

Sample Date / Time :

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
ТРН							
TPH GC/FID	17	10	mg/kg dry	SW-846 8100M	4/6/17	1:36	JEB
Surrogate			RANGE	SW-846 8100M	4/6/17	1:36	JEB
2-Fluorobiphenyl	74		40-140%	SW-846 8100M	4/6/17	1:36	JEB
Moisture	4.6		%	SM2540G 18-21ed	4/6/17	14:54	NS
Semi-Volatile Organic Comp.							
Acenaphthene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Acenaphthylene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Anthracene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Benzidine	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Benzo(a)anthracene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Benzo(b)fluoranthene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Benzo(k)fluoranthene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Benzo(g,h,i)perylene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Benzo(a)pyrene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Bis(2-chloroethyl)ether	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Bis(2-Chloroethoxy)methane	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Bis(2-Chloroisopropyl)Ether	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Bis(2-ethylhexyl)phthalate	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
4-Bromophenyl phenyl ether	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Butylbenzyl phthalate	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
2-Chloronaphthalene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
4-Chlorophenyl phenyl ether	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Chrysene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Dibenzo(a,h)anthracene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Di-n-butyl phthalate	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
1,2-Dichlorobenzene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
1,3-Dichlorobenzene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
1,4-Dichlorobenzene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
3,3'-Dichlorobenzidine	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Diethyl phthalate	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Dimethyl phthalate	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
2,4-Dinitrotoluene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
2,6-Dinitrotoluene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

005

Sample Description:

COMP-5

Sample Type :

COMPOSITE

Sample Date / Time:

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Di-n-octyl phthalate	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
1,2-Diphenylhydrazine	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Fluoranthene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Fluorene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Hexachlorobenzene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Hexachlorobutadiene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Hexachlorocyclopentadiene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Hexachloroethane	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Indeno(1,2,3-cd)pyrene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Isophorone	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
2-Methylnaphthalene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Naphthalene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Nitrobenzene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
N-nitrosodimethylamine	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
N-nitrosodiphenylamine	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
N-nitrosodi-n-propylamine	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Phenanthrene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Pyrene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
1,2,4-Trichlorobenzene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
4-Chloro-3-methylphenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
2-Chlorophenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
2,4-Dichlorophenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
2,4-Dimethylphenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
2-Methyl-4,6-dinitrophenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
2,4-Dinitrophenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
2-Nitrophenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
4-Nitrophenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Pentachlorophenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Phenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
2,4,5-Trichlorophenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
2,4,6-Trichlorophenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
4-Chloroaniline	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Dibenzofuran	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
2-Methyl Phenol	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
3 & 4-Methylphenols	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

005

Sample Description:

COMP-5

Sample Type :

COMPOSITE

Sample Date / Time :

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Aniline	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Acetophenone	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Azobenzene	< 0.35	0.35	mg/kg dry	SW-846 8270D	4/7/17	4:18	JEB
Surrogates			RANGE				
Phenol-d5	85		30-130%	SW-846 8270D	4/7/17	4:18	JEB
2-Fluorophenol	82		30-130%	SW-846 8270D	4/7/17	4:18	JEB
2,4,6-Tribromophenol	92		30-130%	SW-846 8270D	4/7/17	4:18	JEB
Nitrobenzene-d5	79		30-130%	SW-846 8270D	4/7/17	4:18	JEB
2-Fluorobiphenyl	81		30-130%	SW-846 8270D	4/7/17	4:18	JEB
P-Terphenyl-d14	89		30-130%	SW-846 8270D	4/7/17	4:18	JEB
Semi Extraction Date				SW-846 3546	4/5/17	16:35	SRM
Total metals							
Arsenic	<2.6	2.6	mg/kg dry	SW-846 6010C	4/7/17	14:12	RBR
Barium	6.5	0.52	mg/kg dry	SW-846 6010C	4/7/17	14:12	RBR
Cadmium	< 0.26	0.26	mg/kg dry	SW-846 6010C	4/7/17	14:12	RBR
Chromium	3.4	1.6	mg/kg dry	SW-846 6010C	4/7/17	14:12	RBR
Lead	3.0	2.1	mg/kg dry	SW-846 6010C	4/7/17	14:12	RBR
Mercury	< 0.10	0.10	mg/kg dry	SW-846 7471B	4/4/17	22:29	AJD
Selenium	<5.2	5.2	mg/kg dry	SW-846 6010C	4/7/17	14:12	RBR
Silver	<1.0	1.0	mg/kg dry	SW-846 6010C	4/7/17	14:12	RBR
ICP Digestion				SW-846 3050B	4/5/17	9:00	AGJ
Mercury Digestion				SW-846 7471B	4/4/17	21:30	AGJ
Percent Solids	95.4		%	SM2540G 18-21ed	4/6/17	14:54	NS
Extraction Date				SW-846 5035A	4/5/17	8:30	*CS
PCB							
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	16:30	JBW
Aroclor-1221	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	16:30	JBW
Aroclor-1232	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	16:30	JBW
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	16:30	JBW
Aroclor-1248	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	16:30	JBW
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	16:30	JBW
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	16:30	JBW
Aroclor-1262	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	16:30	JBW
Aroclor-1268	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	16:30	JBW

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

005

Sample Description:

COMP-5

Sample Type:

COMPOSITE

Sample Date / Time :

PARAMETER Surrogate	rogate		UNITS RANGE	METHOD	DATE ANALYZED		ANALYST	
Tetrachloro-m-xylene (TCMX)	78		30-150%	SW-846 8082A	4/6/17	16:30	JBW	
Decachlorobiphenyl	84		30-150%	SW-846 8082A	4/6/17	16:30	JBW	
Extraction Date				SW-846 3546	4/5/17	21:54	SRM	
Volatile Organic Compounds								
Acetone	< 0.041	0.041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
Tertiary Amyl Methyl Ether	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
Benzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
Bromobenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
Bromochloromethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
Bromodichloromethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
Bromoform	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
Bromomethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
Sec-butylbenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
n-Butylbenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
tert-Butylbenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
Carbon Disulfide	< 0.0082	0.0082	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
Carbon Tetrachloride	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
Chlorobenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
Dibromochloromethane	< 0.0016	0.0016	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
Chloroethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
Chloroform	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
Chloromethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
2-Chlorotoluene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
4-Chlorotoluene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
1,2-Dibromo-3-Chloropropane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
1,2-Dibromoethane(EDB)	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
Dibromomethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
1,3-Dichlorobenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
1,2-Dichlorobenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
1,4-Dichlorobenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
n-Propylbenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
Dichlorodifluoromethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	
1,1-Dichloroethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL	

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

005

Sample Description:

COMP-5

Sample Type:

COMPOSITE

**Sample Date / Time :** 3/30/2017

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
1,2-Dichloroethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
1,1-Dichloroethene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
cis-1,2-Dichloroethene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
trans-1,2-Dichloroethylene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
1,2-Dichloropropane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
1,3-Dichloropropane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
2,2-Dichloropropane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
1,1-Dichloropropene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
cis-1,3-Dichloropropene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
trans-1,3-Dichloropropylene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
Diethyl ether	< 0.041	0.041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
Diisopropyl Ether (DIPE)	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
1,4-Dioxane	< 0.082	0.082	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
Ethyl Tertiary Butyl Ether	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
Ethylbenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
Hexachlorobutadiene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
2-Hexanone	< 0.041	0.041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
lsopropylbenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
p-Isopropyltoluene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
2-Butanone(MEK)	< 0.041	0.041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
4-Methyl-2-pentanone(MIBK)	< 0.041	0.041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
MTBE	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
Methylene Chloride	0.014	0.0082	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
Naphthalene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
1,1,2-Trichloroethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
Styrene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
1,1,1,2-Tetrachloroethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
1,1,2,2-Tetrachloroethane	< 0.0016	0.0016	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
Tetrachloroethene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
Tetrahydrofuran	< 0.041	0.041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
Toluene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
1,2,4-Trichlorobenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
1,2,3-Trichlorobenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
1,1,1-Trichloroethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
Trichloroethene	<0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

005

Sample Description:

COMP-5

Sample Type :

COMPOSITE

Sample Date / Time :

	<b>SAMPLE</b>	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Trichlorofluoromethane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
1,2,3-Trichloropropane	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
1,2,4-Trimethylbenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
1,3,5-Trimethylbenzene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
Vinyl Chloride	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
o-Xylene	< 0.0041	0.0041	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
m,p-Xylene	< 0.0082	0.0082	mg/kg dry	SW-846 8260C	4/5/17	14:26	WL
Surrogates			RANGE	SW-846 8260C	4/5/17	14:26	WL
Dibromofluoromethane	113		70-130%	SW-846 8260C	4/5/17	14:26	WL
Toluene-d8	93		70-130%	SW-846 8260C	4/5/17	14:26	WL
4-Bromofluorobenzene	91		70-130%	SW-846 8260C	4/5/17	14:26	WL
1,2 Dichloroethane-d4	123		70-130%	SW-846 8260C	4/5/17	14:26	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

006

Sample Description:

COMP-6

Sample Type:

COMPOSITE

Sample Date / Time :

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALY	ZED	ANALYST
ТРН							
TPH GC/FID	14	11	mg/kg dry	SW-846 8100M	4/6/17	2:13	JEB
Surrogate			RANGE	SW-846 8100M	4/6/17	2:13	JEB
2-Fluorobiphenyl	74		40-140%	SW-846 8100M	4/6/17	2:13	JEB
Moisture	6.6		%	SM2540G 18-21ed	4/6/17	14:54	NS
Semi-Volatile Organic Comp.							
Acenaphthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Acenaphthylene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Anthracene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Benzidine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Benzo(a)anthracene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Benzo(b)fluoranthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Benzo(k)fluoranthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Benzo(g,h,i)perylene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Benzo(a)pyrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Bis(2-chloroethyl)ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Bis(2-Chloroethoxy)methane	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Bis(2-Chloroisopropyl)Ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Bis(2-ethylhexyl)phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
4-Bromophenyl phenyl ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Butylbenzyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
2-Chloronaphthalene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
4-Chlorophenyl phenyl ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Chrysene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Dibenzo(a,h)anthracene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Di-n-butyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
1,2-Dichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
1,3-Dichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
1,4-Dichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
3,3'-Dichlorobenzidine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Diethyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Dimethyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
2,4-Dinitrotoluene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
2,6-Dinitrotoluene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

006

Sample Description:

COMP-6

Sample Type :

COMPOSITE

Sample Date / Time :

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Di-n-octyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
1,2-Diphenylhydrazine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Fluoranthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Fluorene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Hexachlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Hexachlorobutadiene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Hexachlorocyclopentadiene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Hexachloroethane	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Indeno(1,2,3-cd)pyrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Isophorone	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
2-Methylnaphthalene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Naphthalene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Nitrobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
N-nitrosodimethylamine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
N-nitrosodiphenylamine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
N-nitrosodi-n-propylamine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Phenanthrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Pyrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
1,2,4-Trichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
4-Chloro-3-methylphenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
2-Chlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
2,4-Dichlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
2,4-DimethyIphenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
2-Methyl-4,6-dinitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
2,4-Dinitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
2-Nitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
4-Nitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Pentachlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Phenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
2,4,5-Trichlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
2,4,6-Trichlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
4-Chloroaniline	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Dibenzofuran	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
2-Methyl Phenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
3 & 4-Methylphenols	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

006

Sample Description:

COMP-6

Sample Type:

COMPOSITE

Sample Date / Time :

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Aniline	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Acetophenone	< 0.36	0.36	ıng/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Azobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:26	JEB
Surrogates			RANGE				
Phenol-d5	80		30-130%	SW-846 8270D	4/7/17	1:26	JEB
2-Fluorophenol	77		30-130%	SW-846 8270D	4/7/17	1:26	JEB
2,4,6-Tribromophenol	85		30-130%	SW-846 8270D	4/7/17	1:26	JEB
Nitrobenzene-d5	75		30-130%	SW-846 8270D	4/7/17	1:26	JEB
2-Fluorobiphenyl	76		30-130%	SW-846 8270D	4/7/17	1:26	JEB
P-Terphenyl-d14	86		30-130%	SW-846 8270D	4/7/17	1:26	JEB
Semi Extraction Date				SW-846 3546	4/5/17	16:35	SRM
Total metals							
Arsenic	<2.6	2.6	mg/kg dry	SW-846 6010C	4/7/17	14:17	RBR
Barium	11	0.53	mg/kg dry	SW-846 6010C	4/7/17	14:17	RBR
Cadmium	< 0.26	0.26	mg/kg dry	SW-846 6010C	4/7/17	14:17	RBR
Chromium	6.0	1.6	mg/kg dry	SW-846 6010C	4/7/17	14:17	RBR
Lead	6.5	2.1	mg/kg dry	SW-846 6010C	4/7/17	14:17	RBR
Mercury	< 0.092	0.092	mg/kg dry	SW-846 7471B	4/4/17	22:32	AJD
Selenium	<5.3	5.3	mg/kg dry	SW-846 6010C	4/7/17	14:17	RBR
Silver	<1.1	1.1	mg/kg dry	SW-846 6010C	4/7/17	14:17	RBR
ICP Digestion				SW-846 3050B	4/5/17	9:00	AGJ
Mercury Digestion				SW-846 7471B	4/4/17	21:30	AGJ
Percent Solids	93.4		%	SM2540G 18-21ed	4/6/17	14:54	NS
Extraction Date				SW-846 5035A	4/5/17	8:30	*CS
PCB							
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082A	4/7/17	10:14	JBW
Aroclor-1221	<0.1	0.1	mg/kg dry	SW-846 8082A	4/7/17	10:14	JBW
Aroclor-1232	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/7/17	10:14	JBW
Aroclor-1242	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/7/17	10:14	JBW
Aroclor-1248	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/7/17	10:14	JBW
Aroclor-1254	<0.1	0.1	mg/kg dry	SW-846 8082A	4/7/17	10:14	JBW
Aroclor-1260	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/7/17	10:14	JBW
Aroclor-1262	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/7/17	10:14	JBW
Aroclor-1268	<0.1	0.1	mg/kg dry	SW-846 8082A	4/7/17	10:14	JBW

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

006

Sample Description:

COMP-6

Sample Type :

COMPOSITE

Sample Date / Time:

PARAMETER Surrogate	RANGE		METHOD	DATE ANALYZED		ANALYST	
Tetrachloro-m-xylene (TCMX)	91		30-150%	SW-846 8082A	4/7/17	10:14	JBW
Decachlorobiphenyl	92		30-150%	SW-846 8082A	4/7/17	10:14	JBW
Extraction Date				SW-846 3546	4/5/17	21:54	SRM
Volatile Organic Compounds							
Acetone	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Tertiary Amyl Methyl Ether	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Benzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Bromobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Bromochloromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Bromodichloromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Bromoform	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Bromomethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Sec-butylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
n-Butylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
tert-Butylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Carbon Disulfide	< 0.0078	0.0078	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Carbon Tetrachloride	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Chlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Dibromochloromethane	< 0.0016	0.0016	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Chloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Chloroform	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Chloromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
2-Chlorotoluene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
4-Chlorotoluene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,2-Dibromo-3-Chloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,2-Dibromoethane(EDB)	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Dibromomethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,3-Dichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,2-Dichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,4-Dichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
n-Propylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Dichlorodifluoromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,1-Dichloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

006

Sample Description:

COMP-6

Sample Type:

COMPOSITE

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
1,2-Dichloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,1-Dichloroethene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
cis-1,2-Dichloroethene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
trans-1,2-Dichloroethylene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,2-Dichloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,3-Dichloropropane	< 0.0039	0.0039	ıng/kg dry	SW-846 8260C	4/5/17	14:53	WL
2,2-Dichloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,1-Dichloropropene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
cis-1,3-Dichloropropene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
trans-1,3-Dichloropropylene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Diethyl ether	< 0.039	0.039	mg/kg.dry	SW-846 8260C	4/5/17	14:53	WL
Diisopropyl Ether (DIPE)	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,4-Dioxane	< 0.078	0.078	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Ethyl Tertiary Butyl Ether	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Ethylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Hexachlorobutadiene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
2-Hexanone	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Isopropylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
p-Isopropyltoluene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
2-Butanone(MEK)	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
4-Methyl-2-pentanone(MIBK)	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
MTBE	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Methylene Chloride	< 0.0078	0.0078	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Naphthalene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,1,2-Trichloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Styrene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,1,1,2-Tetrachloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,1,2,2-Tetrachloroethane	< 0.0016	0.0016	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Tetrachloroethene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Tetrahydrofuran	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Toluene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,2,4-Trichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,2,3-Trichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,1,1-Trichloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Trichloroethene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

006

Sample Description:

COMP-6

Sample Type:

COMPOSITE

Sample Date / Time :

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ANALYZED	
Trichlorofluoromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	ANALYST WL
1,2,3-Trichloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,2,4-Trimethylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
1,3,5-Trimethylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Vinyl Chloride	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
o-Xylene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
m,p-Xylene	< 0.0078	0.0078	mg/kg dry	SW-846 8260C	4/5/17	14:53	WL
Surrogates			RANGE	SW-846 8260C	4/5/17	14:53	WL
Dibromofluoromethane	110		70-130%	SW-846 8260C	4/5/17	14:53	WL
Toluene-d8	89		70-130%	SW-846 8260C	4/5/17	14:53	WL
4-Bromofluorobenzene	88		70-130%	SW-846 8260C	4/5/17	14:53	WL
1,2 Dichloroethane-d4	123		70-130%	SW-846 8260C	4/5/17	14:53	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

007

Sample Description:

COMP-7

Sample Type:

COMPOSITE

Sample Date / Time :

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALY	ZED	ANALYST
ТРН							
TPH GC/FID	22	11	mg/kg dry	SW-846 8100M	4/6/17	2:49	JEB
Surrogate			RANGE	SW-846 8100M	4/6/17	2:49	JEB
2-Fluorobiphenyl	70		40-140%	SW-846 8100M	4/6/17	2:49	JEB
Moisture	7.8		%	SM2540G 18-21ed	4/6/17	14:54	NS
Semi-Volatile Organic Comp.							
Acenaphthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Acenaphthylene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Anthracene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Benzidine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Benzo(a)anthracene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Benzo(b)fluoranthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Benzo(k)fluoranthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Benzo(g,h,i)perylene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Benzo(a)pyrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Bis(2-chloroethyl)ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Bis(2-Chloroethoxy)methane	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Bis(2-Chloroisopropyl)Ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Bis(2-ethylhexyl)phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
4-Bromophenyl phenyl ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Butylbenzyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
2-Chloronaphthalene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
4-Chlorophenyl phenyl ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Chrysene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Dibenzo(a,h)anthracene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Di-n-butyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
1,2-Dichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
1,3-Dichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
1,4-Dichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
3,3'-Dichlorobenzidine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Diethyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Dimethyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
2,4-Dinitrotoluene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
2,6-Dinitrotoluene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

007

Sample Description:

COMP-7

Sample Type :

COMPOSITE

Sample Date / Time :

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Di-n-octyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
1,2-Diphenylhydrazine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Fluoranthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Fluorene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Hexachlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Hexachlorobutadiene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Hexachlorocyclopentadiene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Hexachloroethane	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Indeno(1,2,3-cd)pyrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Isophorone	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
2-Methylnaphthalene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Naphthalene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Nitrobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
N-nitrosodimethylamine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
N-nitrosodiphenylamine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
N-nitrosodi-n-propylamine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Phenanthrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Pyrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
1,2,4-Trichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
4-Chloro-3-methylphenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
2-Chlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
2,4-Dichlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
2,4-Dimethylphenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
2-Methyl-4,6-dinitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
2,4-Dinitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
2-Nitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
4-Nitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Pentachlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Phenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
2,4,5-Trichlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
2,4,6-Trichlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
4-Chloroaniline	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Dibenzofuran	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
2-Methyl Phenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
3 & 4-Methylphenols	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

007

Sample Description:

COMP-7

Sample Type:

COMPOSITE

Sample Date / Time:

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Aniline	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Acetophenone	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Azobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	1:55	JEB
Surrogates			RANGE				
Phenol-d5	80		30-130%	SW-846 8270D	4/7/17	1:55	JEB
2-Fluorophenol	77		30-130%	SW-846 8270D	4/7/17	1:55	JEB
2,4,6-Tribromophenol	87		30-130%	SW-846 8270D	4/7/17	1:55	JEB
Nitrobenzene-d5	72		30-130%	SW-846 8270D	4/7/17	1:55	JEB
2-Fluorobiphenyl	76		30-130%	SW-846 8270D	4/7/17	1:55	JEB
P-Terphenyl-d14	85		30-130%	SW-846 8270D	4/7/17	1:55	JEB
Semi Extraction Date				SW-846 3546	4/5/17	16:35	SRM
Total metals							
Arsenic	<2.7	2.7	mg/kg dry	SW-846 6010C	4/7/17	14:21	RBR
Barium	12	0.54	mg/kg dry	SW-846 6010C	4/7/17	14:21	RBR
Cadmium	< 0.27	0.27	mg/kg dry	SW-846 6010C	4/7/17	14:21	RBR
Chromium	7.4	1.6	mg/kg dry	SW-846 6010C	4/7/17	14:21	RBR
Lead	5.1	2.2	mg/kg dry	SW-846 6010C	4/7/17	14:21	RBR
Mercury	< 0.10	0.10	mg/kg dry	SW-846 7471B	4/4/17	22:33	AJD
Selenium	<5.4	5.4	mg/kg dry	SW-846 6010C	4/7/17	14:21	RBR
Silver	<1.1	1.1	mg/kg dry	SW-846 6010C	4/7/17	14:21	RBR
ICP Digestion				SW-846 3050B	4/5/17	9:00	AGJ
Mercury Digestion				SW-846 7471B	4/4/17	21:30	AGJ
Percent Solids	92.2		%	SM2540G 18-21ed	4/6/17	14:54	NS
Extraction Date				SW-846 5035A	4/5/17	8:30	*CS
PCB							
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	17:26	JBW
Aroclor-1221	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	17:26	JBW
Aroclor-1232	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	17:26	JBW
Aroclor-1242	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	17:26	JBW
Aroclor-1248	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	17:26	JBW
Aroclor-1254	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	17:26	JBW
Aroclor-1260	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	17:26	JBW
Aroclor-1262	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	17:26	JBW
Aroclor-1268	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	17:26	JBW

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

007

Sample Description:

COMP-7

Sample Type:

COMPOSITE

Sample Date / Time:

	SAMPLE	DET.			DATE		
PARAMETER Surrogate	RESULTS	LIMIT	UNITS RANGE	METHOD	ANALY	ZED	ANALYST
Tetrachloro-m-xylene (TCMX)	32		30-150%	SW-846 8082A	4/6/17	17:26	JBW
Decachlorobiphenyl	38		30-150%	SW-846 8082A	4/6/17	17:26	JBW
Extraction Date	30		30-13070	SW-846 3546	4/5/17	21:54	SRM
Volatile Organic Compounds							
Acetone	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Tertiary Amyl Methyl Ether	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Benzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Bromobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Bromochloromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Bromodichloromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Bromoform	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Bromomethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Sec-butylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
n-Butylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
tert-Butylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Carbon Disulfide	< 0.0078	0.0078	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Carbon Tetrachloride	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Chlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Dibromochloromethane	< 0.0016	0.0016	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Chloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Chloroform	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Chloromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
2-Chlorotoluene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
4-Chlorotoluene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,2-Dibromo-3-Chloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,2-Dibromoethane(EDB)	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Dibromomethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,3-Dichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,2-Dichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,4-Dichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
n-Propylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Dichlorodifluoromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,1-Dichloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

007

Sample Description:

COMP-7

Sample Type:

COMPOSITE

Sample Date / Time:

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
1,2-Dichloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,1-Dichloroethene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
cis-1,2-Dichloroethene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
trans-1,2-Dichloroethylene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,2-Dichloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,3-Dichloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
2,2-Dichloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,1-Dichloropropene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
cis-1,3-Dichloropropene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
trans-1,3-Dichloropropylene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Diethyl ether	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Diisopropyl Ether (DIPE)	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,4-Dioxane	< 0.078	0.078	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Ethyl Tertiary Butyl Ether	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Ethylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Hexachlorobutadiene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
2-Hexanone	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Isopropylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
p-Isopropyltoluene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
2-Butanone(MEK)	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
4-Methyl-2-pentanone(MIBK)	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
MTBE	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Methylene Chloride	< 0.0078	0.0078	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Naphthalene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,1,2-Trichloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Styrene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,1,1,2-Tetrachloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,1,2,2-Tetrachloroethane	< 0.0016	0.0016	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Tetrachloroethene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Tetrahydrofuran	< 0.039	0.039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Toluene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,2,4-Trichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,2,3-Trichlorobenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,1,1-Trichloroethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Trichloroethene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
			0 0 7	- · - · - · - · - · · · · · · · · · · ·	*/ 5/ 1 /	15.20	***

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:007Sample Description:COMP-7Sample Type:COMPOSITESample Date / Time:3/30/2017

	<b>SAMPLE</b>	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Trichlorofluoromethane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,2,3-Trichloropropane	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,2,4-Trimethylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
1,3,5-Trimethylbenzene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Vinyl Chloride	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
o-Xylene	< 0.0039	0.0039	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
m,p-Xylene	< 0.0078	0.0078	mg/kg dry	SW-846 8260C	4/5/17	15:20	WL
Surrogates			RANGE	SW-846 8260C	4/5/17	15:20	WL
Dibromofluoromethane	112		70-130%	SW-846 8260C	4/5/17	15:20	WL
Toluene-d8	93		70-130%	SW-846 8260C	4/5/17	15:20	WL
4-Bromofluorobenzene	89		70-130%	SW-846 8260C	4/5/17	15:20	WL
1,2 Dichloroethane-d4	117		70-130%	SW-846 8260C	4/5/17	15:20	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

800

Sample Description:

COMP-8

Sample Type:

COMPOSITE

**Sample Date / Time :** 3/30/2017

PARAMETER	SAMPLE RESULTS	DET. LIMIT	UNITS	METHOD	DATE ANALY	ZED	ANALYST
ТРН							
TPH GC/FID	59	11	mg/kg dry	SW-846 8100M	4/6/17	3:26	JEB
Surrogate	37	11	RANGE	SW-846 8100M	4/6/17	3:26	JEB
2-Fluorobiphenyl	64		40-140%	SW-846 8100M	4/6/17	3:26	JEB
Moisture	7.4		%	SM2540G 18-21ed	4/6/17	14:54	NS NS
			, 0	5/425 100 10 2100	17 07 1 7	11.51	145
Semi-Volatile Organic Comp.							
Acenaphthene	<0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Acenaphthylene	<0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Anthracene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Benzidine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Benzo(a)anthracene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Benzo(b)fluoranthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Benzo(k)fluoranthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Benzo(g,h,i)perylene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Benzo(a)pyrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Bis(2-chloroethyl)ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Bis(2-Chloroethoxy)methane	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Bis(2-Chloroisopropyl)Ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Bis(2-ethylhexyl)phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
4-Bromophenyl phenyl ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Butylbenzyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
2-Chloronaphthalene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
4-Chlorophenyl phenyl ether	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Chrysene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Dibenzo(a,h)anthracene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Di-n-butyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
1,2-Dichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
1,3-Dichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
1,4-Dichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
3,3'-Dichlorobenzidine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Diethyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Dimethyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
2,4-Dinitrotoluene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
2,6-Dinitrotoluene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

800

Sample Description:

COMP-8

Sample Type:

COMPOSITE

Sample Date / Time :

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Di-n-octyl phthalate	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
1,2-Diphenylhydrazine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Fluoranthene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Fluorene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Hexachlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Hexachlorobutadiene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Hexachlorocyclopentadiene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Hexachloroethane	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Indeno(1,2,3-cd)pyrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Isophorone	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
2-Methylnaphthalene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Naphthalene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Nitrobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
N-nitrosodimethylamine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
N-nitrosodiphenylamine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
N-nitrosodi-n-propylamine	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Phenanthrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Pyrene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
1,2,4-Trichlorobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
4-Chloro-3-methylphenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
2-Chlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
2,4-Dichlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
2,4-Dimethylphenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
2-Methyl-4,6-dinitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
2,4-Dinitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
2-Nitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
4-Nitrophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Pentachlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Phenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
2,4,5-Trichlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
2,4,6-Trichlorophenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
4-Chloroaniline	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Dibenzofuran	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
2-Methyl Phenol	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
3 & 4-Methylphenols	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

008

Sample Description:

COMP-8

Sample Type : Sample Date / Time : COMPOSITE 3/30/2017

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Aniline	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Acetophenone	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Azobenzene	< 0.36	0.36	mg/kg dry	SW-846 8270D	4/7/17	2:24	JEB
Surrogates			RANGE				
Phenol-d5	79		30-130%	SW-846 8270D	4/7/17	2:24	JEB
2-Fluorophenol	77		30-130%	SW-846 8270D	4/7/17	2:24	JEB
2,4,6-Tribromophenol	82		30-130%	SW-846 8270D	4/7/17	2:24	JEB
Nitrobenzene-d5	73		30-130%	SW-846 8270D	4/7/17	2:24	JEB
2-Fluorobiphenyl	74		30-130%	SW-846 8270D	4/7/17	2:24	JEB
P-Terphenyl-d14	82		30-130%	SW-846 8270D	4/7/17	2:24	JEB
Semi Extraction Date				SW-846 3546	4/5/17	16:35	SRM
Total metals							
Arsenic	<2.7	2.7	mg/kg dry	SW-846 6010C	4/7/17	14:25	RBR
Barium	12	0.54	mg/kg dry	SW-846 6010C	4/7/17	14:25	RBR
Cadmium	< 0.27	0.27	mg/kg dry	SW-846 6010C	4/7/17	14:25	RBR
Chromium	7.1	1.6	mg/kg dry	SW-846 6010C	4/7/17	14:25	RBR
Lead	5.2	2.1	mg/kg dry	SW-846 6010C	4/7/17	14:25	RBR
Mercury	< 0.10	0.10	mg/kg dry	SW-846 7471B	4/4/17	22:34	AJD
Selenium	<5.4	5.4	mg/kg dry	SW-846 6010C	4/7/17	14:25	RBR
Silver	<1.1	1.1	mg/kg dry	SW-846 6010C	4/7/17	14:25	RBR
ICP Digestion				SW-846 3050B	4/5/17	9:00	AGJ
Mercury Digestion				SW-846 7471B	4/4/17	21:30	AGJ
Percent Solids	92.6		%	SM2540G 18-21ed	4/6/17	14:54	NS
Extraction Date				SW-846 5035A	4/5/17	8:30	*CS
PCB							
Aroclor-1016	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	17:55	JBW
Aroclor-122 I	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	17:55	JBW
Aroclor-1232	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	17:55	JBW
Aroclor-1242	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	17:55	JBW
Aroclor-1248	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	17:55	JBW
Aroclor-1254	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	17:55	JBW
Aroclor-1260	< 0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	17:55	JBW
Aroclor-1262	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	17:55	JBW
Aroclor-1268	<0.1	0.1	mg/kg dry	SW-846 8082A	4/6/17	17:55	JBW

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

008

Sample Description:

COMP-8

Sample Type:

COMPOSITE

Sample Date / Time :

PARAMETER Surrogate	SAMPLE RESULTS	DET. LIMIT	UNITS RANGE	METHOD	DATE ANALY	ZED	ANALYST
Tetrachloro-m-xylene (TCMX)	56		30-150%	SW-846 8082A	4/6/17	17:55	JBW
Decachlorobiphenyl	71		30-150%	SW-846 8082A	4/6/17	17:55	JBW
Extraction Date				SW-846 3546	4/5/17	21:54	SRM
Volatile Organic Compounds							
Acetone	< 0.037	0.037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Tertiary Amyl Methyl Ether	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Benzene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Bromobenzene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Bromochloromethane	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Bromodichloromethane	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Bromoform	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Bromomethane	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Sec-butylbenzene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
n-Butylbenzene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
tert-Butylbenzene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Carbon Disulfide	< 0.0075	0.0075	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Carbon Tetrachloride	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Chlorobenzene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Dibromochloromethane	< 0.0015	0.0015	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Chloroethane	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Chloroform	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Chloromethane	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
2-Chlorotoluene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
4-Chlorotoluene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,2-Dibromo-3-Chloropropane	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,2-Dibromoethane(EDB)	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Dibromomethane	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,3-Dichlorobenzene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,2-Dichlorobenzene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,4-Dichlorobenzene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
n-Propylbenzene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Dichlorodifluoromethane	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,1-Dichloroethane	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

008

Sample Description:

COMP-8

Sample Type :

COMPOSITE

**Sample Date / Time :** 3/30/2017

	SAMPLE	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
1,2-Dichloroethane	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,1-Dichloroethene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
cis-1,2-Dichloroethene	< 0.0037	0.0037	ıng/kg dry	SW-846 8260C	4/5/17	18:40	WL
trans-1,2-Dichloroethylene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,2-Dichloropropane	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,3-Dichloropropane	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
2,2-Dichloropropane	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,1-Dichloropropene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
cis-1,3-Dichloropropene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
trans-1,3-Dichloropropylene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Diethyl ether	< 0.037	0.037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Diisopropyl Ether (DIPE)	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,4-Dioxane	< 0.075	0.075	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Ethyl Tertiary Butyl Ether	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Ethylbenzene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Hexachlorobutadiene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
2-Hexanone	< 0.037	0.037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Isopropylbenzene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
p-Isopropyltoluene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
2-Butanone(MEK)	< 0.037	0.037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
4-Methyl-2-pentanone(MIBK)	< 0.037	0.037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
MTBE	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Methylene Chloride	0.0087	0.0075	ıng/kg dry	SW-846 8260C	4/5/17	18:40	WL
Naphthalene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,1,2-Trichloroethane	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Styrene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,1,1,2-Tetrachloroethane	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,1,2,2-Tetrachloroethane	< 0.0015	0.0015	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Tetrachloroethene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Tetrahydrofuran	< 0.037	0.037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Toluene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,2,4-Trichlorobenzene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,2,3-Trichlorobenzene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,1,1-Trichloroethane	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Trichloroethene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL

Green Seal Environmental, Inc.

Work Order #: 1703-06586

Project Name: PROJECT #LAWL-1701-0001 BMA-RW 15-33

Sample Number:

008

Sample Description:

COMP-8

Sample Type:

COMPOSITE

Sample Date / Time :

	<b>SAMPLE</b>	DET.			DATE		
PARAMETER	RESULTS	LIMIT	UNITS	METHOD	ANALY	ZED	ANALYST
Trichlorofluoromethane	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,2,3-Trichloropropane	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,2,4-Trimethylbenzene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
1,3,5-Trimethylbenzene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Vinyl Chloride	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
o-Xylene	< 0.0037	0.0037	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
m,p-Xylene	< 0.0075	0.0075	mg/kg dry	SW-846 8260C	4/5/17	18:40	WL
Surrogates			RANGE	SW-846 8260C	4/5/17	18:40	WL
Dibromofluoromethane	115		70-130%	SW-846 8260C	4/5/17	18:40	WL
Toluene-d8	89		70-130%	SW-846 8260C	4/5/17	18:40	WL
4-Bromofluorobenzene	85		70-130%	SW-846 8260C	4/5/17	18:40	WL
1,2 Dichloroethane-d4	126		70-130%	SW-846 8260C	4/5/17	18:40	WL

#### -Method Blanks Results-

Parameter	Units	Results	Date Analyzed
PK-RCRAS1			
PK-RCRAS1			
Mercury	mg/kg dry	< 0.089	4/4/2017
Volatile Organics by Method 8260			
Acetone	mg/kg dry	< 0.050	4/5/2017
Tertiary Amyl Methyl Ether	mg/kg dry	< 0.0050	4/5/2017
Benzene	mg/kg dry	< 0.0050	4/5/2017
Bromobenzene	mg/kg dry	< 0.0050	4/5/2017
Bromochloromethane	mg/kg dry	< 0.0050	4/5/2017
Bromodichloromethane	mg/kg dry	< 0.0050	4/5/2017
Bromoform	mg/kg dry	< 0.0050	4/5/2017
Bromomethane	mg/kg dry	< 0.0050	4/5/2017
Sec-butylbenzene	mg/kg dry	< 0.0050	4/5/2017
n-Butylbenzene	mg/kg dry	< 0.0050	4/5/2017
tert-Butylbenzene	mg/kg dry	< 0.0050	4/5/2017
Carbon Disulfide	mg/kg dry	< 0.010	4/5/2017
Carbon Tetrachloride	mg/kg dry	< 0.0050	4/5/2017
Chlorobenzene	mg/kg dry	< 0.0050	4/5/2017
Dibromochloromethane	mg/kg dry	<0.0020	4/5/2017
Chloroethane	mg/kg dry	< 0.0050	4/5/2017
Chloroform	mg/kg dry	< 0.0050	4/5/2017
Chloromethane	mg/kg dry	< 0.0050	4/5/2017
2-Chlorotoluene	mg/kg dry	< 0.0050	4/5/2017
4-Chlorotoluene	mg/kg dry	< 0.0050	4/5/2017
1,2-Dibromo-3-Chloropropane	mg/kg dry	< 0.0050	4/5/2017
1,2-Dibromoethane(EDB)	mg/kg dry	< 0.0050	4/5/2017
Dibromomethane	mg/kg dry	<0.0050	4/5/2017
1,3-Dichlorobenzene	mg/kg dry	< 0.0050	4/5/2017
1,2-Dichlorobenzene	mg/kg dry	< 0.0050	4/5/2017
1,4-Dichlorobenzene	mg/kg dry	< 0.0050	4/5/2017
n-Propylbenzene	mg/kg dry	< 0.0050	4/5/2017
Dichlorodifluoromethane	mg/kg dry	< 0.0050	4/5/2017
1,1-Dichloroethane	mg/kg dry	< 0.0050	4/5/2017
1,2-Dichloroethane	mg/kg dry	< 0.0050	4/5/2017
1,1-Dichloroethene	mg/kg dry	< 0.0050	4/5/2017
cis-1,2-Dichloroethene	mg/kg dry	< 0.0050	4/5/2017
trans-1,2-Dichloroethylene	mg/kg dry	< 0.0050	4/5/2017
1,2-Dichloropropane	mg/kg dry	< 0.0050	4/5/2017
1,3-Dichloropropane	mg/kg dry	< 0.0050	4/5/2017
2,2-Dichloropropane	mg/kg dry	< 0.0050	4/5/2017
1,1-Dichloropropene	mg/kg dry	< 0.0050	4/5/2017
cis-1,3-Dichloropropene	mg/kg dry	< 0.0050	4/5/2017
trans-1,3-Dichloropropylene	mg/kg dry	< 0.0050	4/5/2017
Diethyl ether	mg/kg dry	< 0.050	4/5/2017
Diisopropyl ether (DIPE)	mg/kg dry	<0.0050	4/5/2017
1,4-Dioxane	mg/kg dry	<0.10	4/5/2017
Ethyl Tertiary Butyl Ether	mg/kg dry	<0.0050	4/5/2017
Ethylbenzene	mg/kg dry	<0.0050	4/5/2017

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Hexachlorobutadiene	mg/kg dry	< 0.0050	4/5/2017
2-Hexanone	mg/kg dry	< 0.050	4/5/2017
Isopropylbenzene	mg/kg dry	< 0.0050	4/5/2017
p-Isopropyltoluene	mg/kg dry	< 0.0050	4/5/2017
2-Butanone(MEK)	mg/kg dry	< 0.050	4/5/2017
4-Methyl-2-pentanone(MIBK)	mg/kg dry	< 0.050	4/5/2017
MTBE	mg/kg dry	< 0.0050	4/5/2017
Methylene Chloride	mg/kg dry	< 0.010	4/5/2017
Naphthalene	mg/kg dry	<0.0050	4/5/2017
1,1,2-Trichloroethane	mg/kg dry	<0.0050	4/5/2017
Styrene	mg/kg dry	< 0.0050	4/5/2017
1,1,1,2-Tetrachloroethane	mg/kg dry	<0.0050	4/5/2017
1,1,2,2-Tetrachloroethane	mg/kg dry	<0.0020	4/5/2017
Tetrachloroethene	mg/kg dry	<0.0050	4/5/2017
Tetrahydrofuran	mg/kg dry	< 0.050	4/5/2017
Toluene	mg/kg dry	<0.0050	4/5/2017
1,2,4-Trichlorobenzene	mg/kg dry	< 0.0050	4/5/2017
1,2,3-Trichlorobenzene	mg/kg dry	<0.0050	4/5/2017
1,1,1-Trichloroethane	mg/kg dry	< 0.0050	4/5/2017
Trichloroethene	mg/kg dry	< 0.0050	4/5/2017
Trichlorofluoromethane	mg/kg dry	< 0.0050	4/5/2017
1,2,3-Trichloropropane	mg/kg dry	< 0.0050	4/5/2017
1,2,4-Trimethylbenzene	mg/kg dry	<0.0050	4/5/2017
1,3,5-Trimethylbenzene	mg/kg dry	< 0.0050	4/5/2017
Vinyl Chloride	mg/kg dry	< 0.0050	4/5/2017
o-Xylene	mg/kg dry	<0.0050	4/5/2017
m,p-Xylene	mg/kg dry	< 0.010	4/5/2017
Surrogates	RANGE		4/5/2017
Dibromofluoromethane	70-130%	104	4/5/2017
Toluene-d8	70-130%	92	4/5/2017
4-Bromofluorobenzene	70-130%	90	4/5/2017
1,2 Dichloroethane-d4	70-130%	106	4/5/2017
Total Petroleum Hydrocarbons by Method	18100		
TPH GC/FID	mg/kg dry	<10	4/5/2017
Surrogate	RANGE		4/5/2017
2-Fluorobiphenyl	40-140%	80	4/5/2017
Semi-Volatile Organics by Method 8270			
Acenaphthene	mg/kg dry	<0.33	4/6/2017
Acenaphthylene	mg/kg dry	<0.33	4/6/2017
Anthracene	mg/kg dry	<0.33	4/6/2017
Benzidine	mg/kg dry	<0.33	4/6/2017
Benzo(a)anthracene	mg/kg dry	<0.33	4/6/2017
Benzo(b)fluoranthene	mg/kg dry	<0.33	4/6/2017
Benzo(k)fluoranthene	mg/kg dry	<0.33	4/6/2017
Benzo(g,h,i)perylene	mg/kg dry	<0.33	4/6/2017
Benzo(a)pyrene	mg/kg dry	<0.33	4/6/2017
Bis(2-chloroethyl)ether	mg/kg dry	<0.33	4/6/2017
Bis(2-Chloroethoxy)methane	mg/kg dry	<0.33	4/6/2017
Bis(2-Chloroisopropyl)Ether	mg/kg dry	<0.33	4/6/2017
Bis(2-ethylhexyl)phthalate	mg/kg dry	<0.33	4/6/2017
4-Bromophenyl phenyl ether	mg/kg dry	<0.33	4/6/2017
Butylbenzyl phthalate	mg/kg dry	<0.33	4/6/2017
2-Chloronaphthalene	mg/kg dry	<0.33	4/6/2017
4-Chlorophenyl phenyl ether	mg/kg dry	<0.33	4/6/2017
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Chrysene	mg/kg dry	<0.33	4/6/2017
Dibenzo(a,h)anthracene	mg/kg dry	< 0.33	4/6/2017
Di-n-butyl phthalate	ing/kg dry	< 0.33	4/6/2017
1,2-Dichlorobenzene	ıng/kg dry	< 0.33	4/6/2017
1,3-Dichlorobenzene	mg/kg dry	<0.33	4/6/2017
1,4-Dichlorobenzene	mg/kg dry	<0.33	4/6/2017
3,3'-Dichlorobenzidine	mg/kg dry	<0.33	4/6/2017
Diethyl phthalate	mg/kg dry	<0.33	4/6/2017
Dimethyl phthalate	mg/kg dry	<0.33	4/6/2017
2,4-Dinitrotoluene	mg/kg dry	<0.33	4/6/2017
2,6-Dinitrotoluene	mg/kg dry	<0.33	4/6/2017
Di-n-octyl phthalate	mg/kg dry	<0.33	4/6/2017
1,2-Diphenylhydrazine	mg/kg dry	<0.33	4/6/2017
Fluoranthene	mg/kg dry	<0.33	4/6/2017
Fluorene	mg/kg dry	<0.33	4/6/2017
Hexachlorobenzene	ing/kg dry	<0.33	4/6/2017
Hexachlorobutadiene	mg/kg dry	<0.33	4/6/2017
Hexachlorocyclopentadiene	mg/kg dry	<0.33	4/6/2017
Hexachloroethane	mg/kg dry	<0.33	4/6/2017
Indeno(1,2,3-cd)pyrene	mg/kg dry	<0.33	4/6/2017
Isophorone	mg/kg dry	<0.33	
2-Methylnaphthalene	mg/kg dry	<0.33	4/6/2017
Naphthalene	mg/kg dry	<0.33	4/6/2017
Nitrobenzene	mg/kg dry	<0.33	4/6/2017
N-nitrosodimethylamine	mg/kg dry	<0.33	4/6/2017
N-nitrosodiphenylamine	mg/kg dry	<0.33	4/6/2017
N-nitrosodi-n-propylamine	mg/kg dry	<0.33	4/6/2017
Phenanthrene	mg/kg dry	<0.33	4/6/2017
Pyrene	mg/kg dry	<0.33	4/6/2017
1,2,4-Trichlorobenzene	mg/kg dry	<0.33	4/6/2017
4-Chloro-3-methylphenol	mg/kg dry	<0.33	4/6/2017
2-Chlorophenol	mg/kg dry	<0.33	4/6/2017
2,4-Dichlorophenol	mg/kg dry	<0.33	4/6/2017
2,4-Dimethylphenol	mg/kg dry	<0.33	4/6/2017
2-Methyl-4,6-dinitrophenol	mg/kg dry	<0.33	4/6/2017
2,4-Dinitrophenol	mg/kg dry		4/6/2017
2-Nitrophenol	mg/kg dry	<0.33	4/6/2017
4-Nitrophenol	mg/kg dry	<0.33 <0.33	4/6/2017
Pentachlorophenol	mg/kg dry		4/6/2017
Phenol	mg/kg dry	<0.33	4/6/2017
2,4,5-Trichlorophenol	mg/kg dry	<0.33	4/6/2017
2,4,6-Trichlorophenol	mg/kg dry	<0.33	4/6/2017
4-Chloroaniline		<0.33	4/6/2017
Dibenzofuran	mg/kg dry	<0.33	4/6/2017
2-Methyl Phenol	mg/kg dry	<0.33	4/6/2017
3 & 4-Methylphenols	mg/kg dry mg/kg dry	<0.33	4/6/2017
Aniline	~ <b>~</b> ,	<0.33	4/6/2017
Acetophenone	mg/kg dry	<0.33	4/6/2017
Azobenzene	mg/kg dry	<0.33	4/6/2017
	mg/kg dry	<0.33	4/6/2017
Surrogates Phenol-d5	RANGE	~~	4/6/2017
	30-130%	77	4/6/2017
2-Fluorophenol	30-130%	76	4/6/2017
2,4,6-Tribromophenol Nitrobenzene-d5	30-130%	85	4/6/2017
	30-130%	75	4/6/2017
2-Fluorobiphenyl	30-130%	73	4/6/2017

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P-Terphenyl-d14	30-130%	88	4/6/2017	
СВ				
Aroclor-1016	mg/kg dry	<0.1	4/6/2017	
Aroclor-1221	ing/kg dry	<0.1	4/6/2017	
Aroclor-1232	mg/kg dry	<0.1	4/6/2017	
Aroclor-1242	mg/kg dry	<0.1	4/6/2017	
Aroclor-1248	mg/kg dry	< 0.1	4/6/2017	
Aroclor-1254	mg/kg dry	<0.1	4/6/2017	
Aroclor-1260	mg/kg dry	<0.1	4/6/2017	
Aroclor-1262	mg/kg dry	<0.1	4/6/2017	
Aroclor-1268	mg/kg dry	< 0.1	4/6/2017	
Surrogate	RANGE		4/6/2017	
Tetrachloro-m-xylene (TCMX)	30-150%	99	4/6/2017	
Decachlorobiphenyl	30-150%	99	4/6/2017	

Parameter	CRM Acceptance Limits	Spike Conc	LCS Conc	LCS % Rec	LCS Dup Conc	LCS DUP % Rec	% RPD	Date Analyzed
PCB - Solids								
Aroclor-1016		0.33	0.316	96	0.311	94	2	4/6/2017
Aroclor-1260		0.33	0.371	112	0.338	102	9	4/6/2017
Surrogate					0.000	102	,	4/0/2017
Tetrachloro-m-xylene (TCMX)			102		100			
Decachlorobiphenyl			118		104			
Total Petroleum Hydrocarb	ons by Method 8	100 - Soli	ds					
TPH GC/FID		66.7	49.9	75	50.9	76	2	4/6/2017
Surrogate							_	4/6/2017
2-Fluorobiphenyl			82		84			4/6/2017
Volatile Organics by Metho	d 8260							17 07 2017
Acetone		0.500	0.64	128	0.70	140	9	4/5/2017
Tertiary Amyl Methyl Ether		0.050	0.052	104	0.056	112	7	4/5/2017
Benzene		0.050	0.056	112	0.058	116	4	4/5/2017
Bromobenzene		0.050	0.050	100	0.054	108	8	4/5/2017
Bromochloromethane		0.050	0.049	98	0.053	106	8	4/5/2017
Bromodichloromethane		0.050	0.054	108	0.057	114	5	4/5/2017
Bromoform		0.050	0.060	120	0.066	. 132	10	4/5/2017
Bromomethane		0.050	0.064	128	0.066	132	3	4/5/2017
Sec-butylbenzene		0.050	0.062	124	0.066	132	6	4/5/2017
n-Butylbenzene		0.050	0.060	120	0.062	124	3	4/5/2017
tert-Butylbenzene		0.050	0.063	126	0.067	134	6	4/5/2017
Carbon Disulfide		0.050	0.058	116	0.058	116	0	4/5/2017
Carbon Tetrachloride		0.050	0.060	120	0.062	124	3	4/5/2017
Chlorobenzene		0.050	0.059	118	0.063	126	7	4/5/2017
Dibromochloromethane		0.050	0.055	110	0.060	120	9	4/5/2017
Chloroethane		0.050	0.054	108	0.056	112	4	4/5/2017
Chloroform		0.050	0.054	108	0.056	112	4	4/5/2017
Chloromethane		0.050	0.051	102	0.052	104	2	4/5/2017
2-Chlorotoluene		0.050	0.058	116	0.062	124	7	4/5/2017
4-Chlorotoluene		0.050	0.055	110	0.058	116	5	4/5/2017
1,2-Dibromo-3-Chloropropane		0.050	0.048	96	0.053	106	10	4/5/2017
1,2-Dibromoethane(EDB)		0.050	0.055	110	0.061	122	10	4/5/2017
Dibromomethane		0.050	0.055	110	0.060	120	9	4/5/2017
1,3-Dichlorobenzene		0.050	0.062	124	0.066	132	6	4/5/2017
1,2-Dichlorobenzene		0.050	0.062	124	0.067	134	8	4/5/2017
1,4-Dichlorobenzene		0.050	0.062	124	0.066	132	6	4/5/2017
n-Propylbenzene		0.050	0.059	118	0.062	124	5	
Dichlorodifluoromethane		0.050	0.049	98	0.051	102	4	4/5/2017 4/5/2017
1,1-Dichloroethane		0.050	0.051	102	0.054	102	6	4/5/2017
1,2-Dichloroethane		0.050	0.054	108	0.057	114	5	
1,1-Dichloroethene		0.050	0.052	104	0.054	108	4	4/5/2017
cis-1,2-Dichloroethene		0.050	0.057	114	0.060	120	5	4/5/2017
trans-1,2-Dichloroethylene		0.050	0.053	106	0.055	110	4	4/5/2017
1,2-Dichloropropane		0.050	0.050	100	0.053	106	6	4/5/2017 4/5/2017
1,3-Dichloropropane		0.050	0.052	104	0.057	114	9	
2,2-Dichloropropane		0.050	0.054	104	0.056	114	4	4/5/2017
1,1-Dichloropropene		0.050	0.057	114	0.058	112	2	4/5/2017
cis-1,3-Dichloropropene		0.050	0.052	104	0.055	110		4/5/2017
trans-1,3-Dichloropropylene		0.050	0.052	100	0.053	106	6 6	4/5/2017 4/5/2017

#### QA/QC Report

**WO** #: 1703-06586

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Parameter	CRM Acceptance Limits	Spike Conc	LCS Conc	LCS % Rec	LCS Dup Conc	LCS DUP % Rec	% RPD	Date Analyzed	
Volatile Organics by Method 8260 (cont'd)									
Diisopropyl ether (DIPE)	` ,	0.050	0.046	92	0.050	100	8	4/5/2017	
1,4-Dioxane		1.00	1.2	120	1.4	140	15	4/5/2017	
Ethyl Tertiary Butyl Ether		0.050	0.049	98	0.053	106	8	4/5/2017	
Ethylbenzene		0.050	0.058	116	0.061	122	5	4/5/2017	
Hexachlorobutadiene		0.050	0.065	130	0.070	140	7	4/5/2017	
2-Hexanone		0.500	0.61	122	0.67	134	9	4/5/2017	
Isopropylbenzene		0.050	0.063	126	0.066	132	5	4/5/2017	
p-Isopropyltoluene		0.050	0.061	122	0.066	132	8	4/5/2017	
2-Butanone(MEK)		0.500	0.70	140	0.77	154	10	4/5/2017	
4-Methyl-2-pentanone(MIBK)		0.500	0.64	128	0.71	142	10	4/5/2017	
MTBE		0.050	0.052	104	0.057	114	9	4/5/2017	
Methylene Chloride		0.050	0.046	92	0.049	98	6	4/5/2017	
Naphthalene		0.050	0.054	108	0.062	124	14	4/5/2017	
1,1,2-Trichloroethane		0.050	0.053	106	0.058	116	9	4/5/2017	
Styrene		0.050	0.057	I14	0.061	122	7	4/5/2017	
1,1,1,2-Tetrachloroethane		0.050	0.062	124	0.067	134	8	4/5/2017	
1,1,2,2-Tetrachloroethane		0.050	0.056	112	0.062	124	10	4/5/2017	
Tetrachloroethene		0.050	0.067	134	0.068	136	1	4/5/2017	
Tetrahydrofuran		0.50	0.52	104	0.57	114	9	4/5/2017	
Toluene		0.050	0.056	112	0.059	118	5	4/5/2017	
1,2,4-Trichlorobenzene		0.050	0.059	118	0.066	132	11	4/5/2017	
1,2,3-Trichlorobenzene		0.050	0.058	116	0.065	130	11	4/5/2017	
1,1,1-Trichloroethane		0.050	0.059	118	0.062	124	5	4/5/2017	
Trichloroethene		0.050	0.057	114	0.058	116	2	4/5/2017	
Trichlorofluoromethane		0.050	0.069	138	0.071	142	3	4/5/2017	
1,2,3-Trichloropropane		0.050	0.052	104	0.057	114	9	4/5/2017	
1,2,4-Trimethylbenzene		0.050	0.057	114	0.062	124	8	4/5/2017	
1,3,5-Trimethylbenzene		0.050	0.059	118	0.063	126	7	4/5/2017	
Vinyl Chloride		0.050	0.062	124	0.064	128	3	4/5/2017	
o-Xylene		0.050	0.061	122	0.065	130	6	4/5/2017	
m,p-Xylene		0.100	0.12	120	0.13	130	8	4/5/2017	
Surrogates							_		
Dibromofluoromethane			102		103			4/5/2017	
Toluene-d8			93		95			4/5/2017	
4-Bromofluorobenzene			87		89			4/5/2017	
1,2 Dichloroethane-d4			106		111			4/5/2017	
Semi-Volatile Organics by I	Method 8270 - Sol	ide							
Acenaphthene	TOTAL	3.3	2.7	82	2.7	82	0	4/7/2017	
Acenaphthylene		3.3	3.2	97	3.2	97	0	4/7/2017	
Anthracene		3.3	3.0	91	3.0	91	0	4/7/2017	
Benzidine		3.3	1.2	36	0.74	22	47	4/7/2017	
Benzo(a)anthracene		3.3	2.9	88	2.9	88	0	4/7/2017	
Benzo(b)fluoranthene		3.3	2.9	88	2.9	88	0		
Benzo(k)fluoranthene		3.3	2.9					4/7/2017	
Denzo(k)Huorantilelle		5.5	2.9	88	3.0	91	3	4/7/2017	

#### QA/QC Report

**WO** #: 1703-06586

Parameter	CRM Acceptance Limits	Spike Conc	LCS Conc	LCS % Rec	LCS Dup Conc	LCS DUP % Rec	% RPD	Date Analyzed
Semi-Volatile Organics by	Method 8270 - Sol	lids (cont	'a)					
Benzo(g,h,i)perylene	Wethod 02/0 - 50	3.3	2.7	82	2.7	82	0	4/7/2017
Benzo(a)pyrene		3.3	2.9	88	3.0	91	3	4/7/2017
Bis(2-chloroethyl)ether		3.3	2.6	79	2.5	76	4	4/7/2017
Bis(2-Chloroethoxy)methane		3.3	2.7	82	2.7	82	0	4/7/2017
Bis(2-Chloroisopropyl)Ether		3.3	2.6	79	2.6	79	0	4/7/2017
Bis(2-ethylhexyl)phthalate		3.3	2.8	85	2.9	88	4	4/7/2017
4-Bromophenyl phenyl ether		3.3	2.7	82	2.7	82	0	4/7/2017
Butylbenzyl phthalate		3.3	2.8	85	2.8	85	0	4/7/2017
2-Chloronaphthalene		3.3	2.9	88	2.8	85	4	4/7/2017
4-Chlorophenyl phenyl ether		3.3	2.6	79	2.6	79	0	4/7/2017
Chrysene		3.3	2.8	85	3.0	91	7	4/7/2017
Dibenzo(a,h)anthracene		3.3	2.9	88	2.9	88	0	4/7/2017
Di-n-butyl phthalate		3.3	2.8	85	2.8	85	0	4/7/2017
1,2-Dichlorobenzene		3.3	2.5	76	2.5	76	0	4/7/2017
1,3-Dichlorobenzene		3.3	2.5	76	2.4	73	4	4/7/2017
1,4-Dichlorobenzene		3.3	2.5	76	2.5	76	0	4/7/2017
3,3'-Dichlorobenzidine		3.3	1.9	58	1.7	52	11	4/7/2017
Diethyl phthalate		3.3	2.7	82	2.7	82	0	4/7/2017
Dimethyl phthalate		3.3	2.8	85	2.7	82	4	4/7/2017
2,4-Dinitrotoluene		3.3	3.1	94	3.2	97	3	4/7/2017
2,6-Dinitrotoluene		3.3	3.3	100	3.3	100	0	4/7/2017
Di-n-octyl phthalate		3.3	2.9	88	2.9	88	0	4/7/2017
1,2-Diphenylhydrazine		3.3	3.0	91	3.0	91	0	4/7/2017
Fluoranthene		3.3	2,9	88	3.0	91	3	4/7/2017
Fluorene		3.3	2.8	85	2.8	85	0	4/7/2017
Hexachlorobenzene		3.3	2.8	85	2.8	85	0	4/7/2017
Hexachlorobutadiene		3.3	2.6	79	2.6	79	0	4/7/2017
Hexachlorocyclopentadiene		3.3	4.0	121	3.9	118	3	4/7/2017
Hexachloroethane		3.3	2.6	79	2.5	76	4	4/7/2017
Indeno(1,2,3-cd)pyrene		3.3	2.9	88	2.9	88	0	4/7/2017
Isophorone		3.3	2.9	88	2.8	85	4	4/7/2017
2-Methylnaphthalene		3.3	3.0	91	3.0	91	0	4/7/2017
Naphthalene		3.3	2.5	76	2.6	79	4	4/7/2017
Nitrobenzene		3.3	2.8	85	2.8	85	0	4/7/2017
N-nitrosodimethylamine		3.3	2.6	79	2.6	79	0	4/7/2017
N-nitrosodiphenylamine		3.3	3.0	91	3.1	94	3	4/7/2017
N-nitrosodi-n-propylamine		3.3	2.7	82	2.7	82	0	4/7/2017
Phenanthrene		3.3	2.8	85	2.8	85	0	4/7/2017
Pyrene		3.3	2.9	88	3.0	91	3	4/7/2017
1,2,4-Trichlorobenzene		3.3	2.6	79	2.6	79	0	4/7/2017
4-Chloro-3-methylphenol		3.3	2.9	88	2.8	85	4	4/7/2017
2-Chlorophenol		3.3	2.8	85	2.7	82	4	4/7/2017
2,4-Dichlorophenol		3.3	2.8	85	2.8	85	0	4/7/2017
2,4-Dimethylphenol		3.3	2.9	88	2.9	88	0	4/7/2017

#### QA/QC Report

**WO** #: 1703-06586

Parameter	CRM Acceptance Limits	Spike Conc	LCS Conc	LCS % Rec	LCS Dup Conc	LCS DUP % Rec	% RPD	Date Analyzed
Semi-Volatile Organics by	Method 9270 Sal	ide (aant)	4)					
2-Methyl-4,6-dinitrophenol	MICHUU 02/0 ~ 501	3.3	<b>a)</b> 2.7	82	2.6	70		4171000
2,4-Dinitrophenol		3.3	2.7	82 79	2.6	79 70	4	4/7/2017
2-Nitrophenol		3.3	2.6	79 85	2.6 2.9	79 ••	0	4/7/2017
4-Nitrophenol		3.3	3.1	85 94	3.0	88	4	4/7/2017
Pentachlorophenol		3.3	3.1 2.6	9 <b>4</b> 79	3.0 2.7	91 82	3	4/7/2017
Phenol		3.3	2.6			82	4	4/7/2017
2,4,6-Trichlorophenol		3.3	2.8 2.9	85 80	2.8	85 85	0	4/7/2017
2,4,5-Trichlorophenol		3.3		88 82	2.8	85	4	4/7/2017
Dibenzofuran		3.3	2.7	82	2.7	82	0	4/7/2017
2-Methyl Phenol			2.9	88	2.8	85	4	4/7/2017
•		3.3	2.8	85	2.8	85	0	4/7/2017
3 & 4-Methylphenols		3.3	2.6	79	2.5	76	4	4/7/2017
Aniline		3.3	1.9	58	1.0	30	62	4/7/2017
Acetophenone		3.3	2.7	82	2.6	79	4	4/7/2017
Azobenzene		3.3	3.0	91	3.0	91	0	4/7/2017
4-Chloroaniline		3.3	1.9	58	1.3	39	38	4/7/2017
Surrogates								
Phenol-d5			87		85			
2-Fluorophenol			84		82			
2,4,6-Tribromophenol			93		93			
Nitrobenzene-d5			83		82			
2-Fluorobiphenyl			83		80			
P-Terphenyl-d14			87		88			
K-RCRAS1								
Mercury	52-149%	4.59	4.7	102	4.7	102	0	4/4/2017

ZEZNOAc Mamix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Soild, WP=Wlipe, O=	trip Blanks - emp		Circle if applicable: GW-1, GW-2, GW-3, (S-1,) S-2, S-3 M		All the color of the last	3/3//17 10	Relinquished By Signatures Date Time	Contact Person:	Telephone: 508-888-6034	City/ State / Zip: Sagamore Beach/MA/02562	_	.	Chent Information		15/30/11/1520 / Comp-/	**		3/30/17/15/15/Comp-6	5/30/17/1450 Comp-5	117 1450 (	3/30/17/1445 Comp-4	1-	3/30/17 1440 Comp-3		1430 Comp	30/17	_   ~	3/30/17 1425 Comp-1	E C	Data Time 1	800-937-2580 • Fax: 401-738-1970		CHAIN OF CUSTODY RECORD	P.I. ANALYTICAL Specialists in Environmental Services
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Containers: P=Poly, G=Glass, AG=Amber Glass, V=Vial, St=Sterile <u>Preservatives:</u> A=Ascorbic Acid, NH4=NH4Cl, H=HCl, M=MeOH, N=HNO3, NP=None, S=H2SO4, SB=NaHSO4, SH=NaOH, T=Na2S2O3, Z=ZnOAc Matrix Codes: GW=Groundwater, SW=Surface Water, WW=Wastewater, DW=Drinking Water, S=Soil, SL=Sludge, A=Air, B=Bulk/Solid, WP=Wipe, O=

Temp. Upon Receipt

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Workorder No: Shipped on ice

RIAL sampled; attach field hours

ATTACHMENT D Green Seal Environmental Letter November 8, 2017

November 8, 2017

Lawrence Lynch Corp. Attn. Frank Trubiano 396 Gifford Street Falmouth. MA 02540

Re: Response to MassDEP RFI #0003462

Barnstable Municipal Airport MassDEP RTN 4-26347

Dear Mr. Trubiano,

At your request and at the request of the Barnstable Municipal Airport, Green Seal Environmental Inc. (GSE) has prepared this response to Question #5 of the Massachusetts Department of Environmental Protection (MassDEP) Request for Information (RFI) 0003462 dated October 27, 2017. Specifically, MassDEP was provided with a copy of an April 25, 2017 letter from GSE that described the results of soil stockpile sampling completed on March 30, 2017.

Question #5: - MassDEP was provided with a copy of an April 25, 2017 letter from Green Seal Environmental to Lawrence Lynch Corporation which described soil stockpile sampling. The second paragraph of the letter states, "GSE divided the soil stockpiles into eight smaller areas identified as Area-1 through Area-8." MassDEP is requesting clarification of this statement and of the remainder of this letter.

**Question #5a.** – Does the information in this letter represent all the soil that has been or will be removed as part of the storm water construction activities along the runway systems or does the information in the letter represent a smaller subset of the soil that will be removed? If this letter represents a subset of the soil, please provide any subsequent soil analytical data generated from the soil removal activities.

#### Response to Question #5a. -

GSE was retained by Lawrence Lynch in March 2017 to characterize approximately 5,000 cubic yards of soil spoils generated from ongoing construction activities at the Barnstable Municipal Airport. At that time, it was GSE's understanding that some of these soils had already been transported to the Cape Cod Aggregate Corp. (CCA) facility in Barnstable, Massachusetts for unrestricted re-use.

In an effort to confirm the sampling and analytical requirements for CCA, Richard Geisler of GSE spoke with Dave Peterson of CCA who agreed that one sample per 1,000 tons would be sufficient to adequately characterize the soil for re-use. It was agreed that the soil would be tested for a comprehensive list of industry standard analytical parameters including:

- Volatile Organic Compounds (VOCs) by EPA Method 8260;
- Semi-Volatile Organic Compounds (SVOCs) by EPA Method 8270;

- Total Petroleum Hydrocarbons (TPHs) by EPA Method 8100M;
- Resource Conservation and Recovery Act (RCRA) 8 Metals (arsenic, barium, cadmium, chromium, lead, mercury selenium and silver); and
- Polychlorinated Biphenyls (PCBs) by EPA Method 8082.

Upon arrival at the airport on March 30, 2017, GSE observed three soil stockpiles located along Runway 33 inside Gate C and one larger soil stockpile located outside Gate C in an area called Mildred's Staging Area. GSE was told by Lawrence Lynch staff that the soil piles were generated as a result of storm water drainage upgrades currently underway at the airport.

The three soil stockpiles located inside Gate C were each estimated to be less than 1,000 tons and were designated as Areas-1 through 3. The larger soil stockpile located outside Gate C was estimated to be approximately 2,000 tons and was divided into two areas (Areas 4 and 5). The location of these stockpiles/areas are shown on the attached site sketch (Figure 1). The Area designations correspond with the composite soil sample designations in the April 25, 2017 letter.

Subsequent to completing the sampling at the airport, GSE conducted a site visit of the CCA facility at 1550 Phinneys Lane in Barnstable. GSE was shown the soil stockpile that originated from the airport. Due to the size of the pile (estimated at 3,000 tons), The soil stockpile was divided into three areas (Areas-6 through 8) and sampled. The location of these stockpiles/areas are shown on the attached plan (Figure 2). The Area designations correspond with the composite soil sample designations in the April 25, 2017 letter.

Upon submittal of the April 25, 2017 letter, GSE received no additional requests for soil sampling at the airport.

**Question #5b.** – Please provide a site plan labeling the area from where the soil referenced in this letter was removed. If these locations are the same as the locations as requested above, please reference such in your response.

#### Response to Question #5b. -

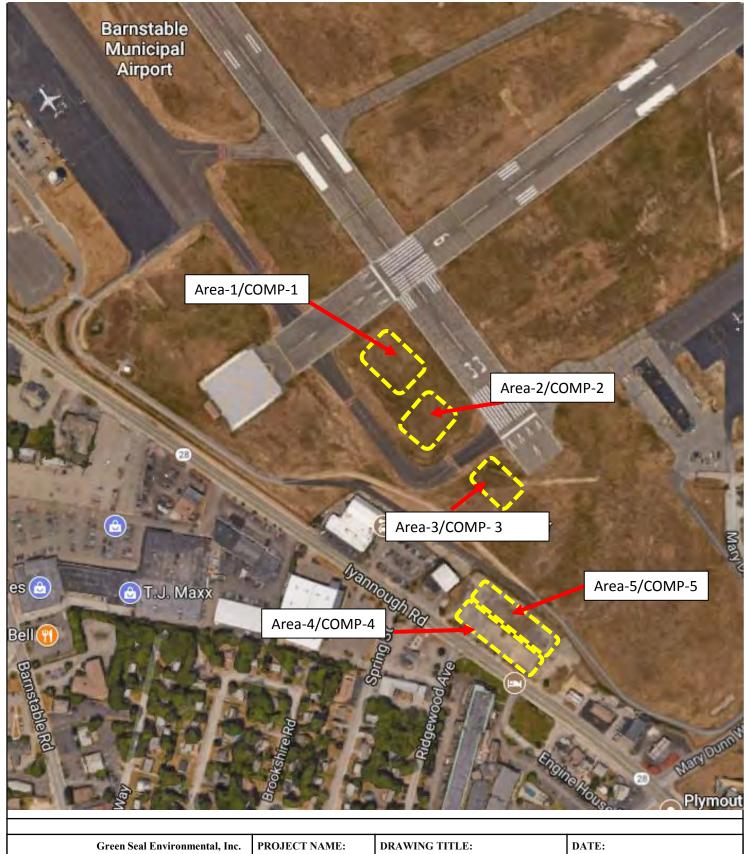
Our response to Question #5b is provided above and presented in Figures 1 and 2.

If you have any questions pertaining to our response, please do not hesitate to contact me at 508-888-6034.

Sincerely,

**GREEN SEAL ENVIRONMENTAL, INC.** 

Richard P. Geisler, P.G., L.S.P. V.P. of Environmental Services





114 State Road, Building B Sagamore Beach, MA 02562

Tel: (508) 888 - 6034 Fax: (508) 888 - 1506 www.gseenv.com

MassDEP RFI Response

LOCATION:

Gate C off Route 28

Mildred's Staging Area Hyannis, Massachusetts

Figure 1: Site Sketch

SITE COORDINATES:

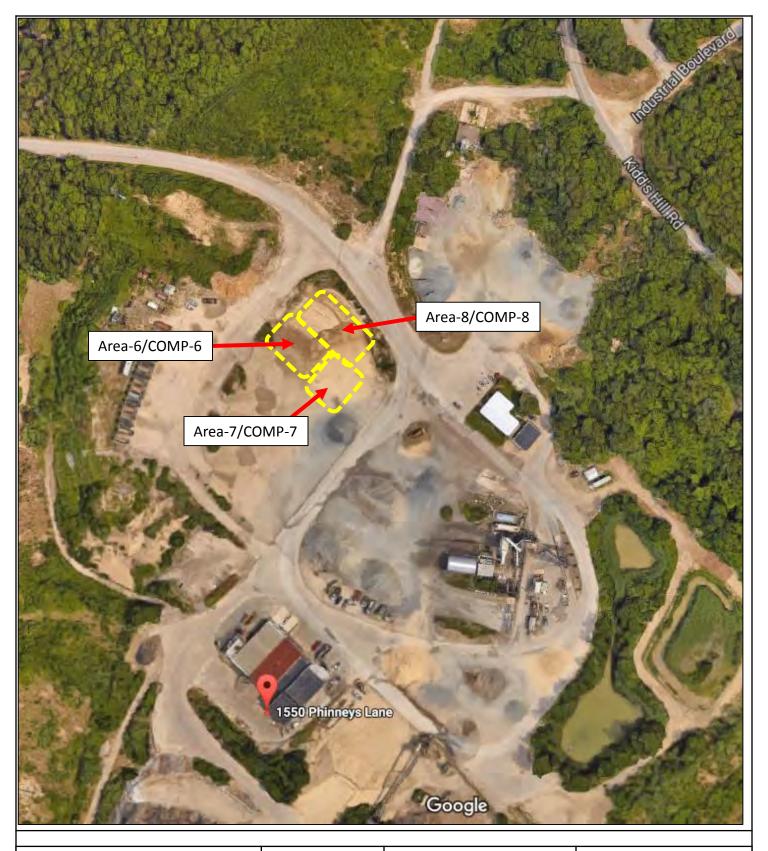
Barnstable Muni Airport Latitude: Longitude:

41.664191

70.280922

November 8, 2017

PROJECT ID: RTN: 4-26347





Green Seal Environmental, Inc. 114 State Road, Building B Sagamore Beach, MA 02562

Tel: (508) 888 - 6034 Fax: (508) 888 - 1506 www.gseenv.com

PROJECT NAME:

DRAWING TITLE:

Latitude:

Longitude:

DATE:

MassDEP RFI Response

Figure 2: Site Sketch

November 8, 2017

PROJECT ID:

LOCATION:

Cape Cod Aggregate

SITE COORDINATES:

41.683508

70.305271

RTN: 4-26347

1550 Phinneys Lane Barnstable, Massachusetts